

## Corrigendum-7

No.- NHIDCL/ Assam/Civil work/Dimapur Bypass (Assam Portion)/ 2017

Date: 27.10.2017

To,

All prospective bidders

Subject: Corrigendum regarding "Amendment in uploaded Schedule H & J" & "Bid Due Date" for the project "Construction of Dimapur Bypass (Assam Portion) of 4/6 lane pavement on EPC basis from existing Km 159.400 of NH-36 to existing Km 102.500 of NH-39 and upto end point of Assam portion [Design Km 118.050 to design Km 132.375] (length 14.325 Km) in the State of Assam under Phase-A of SARDP-NE

Sir,

1. The bid for the subject project was invited on 23/03/2017 with extended bid due date being 30/10/2017 (1100 Hrs).
2. Pursuant to Ministry vide circulars no. **RW/NH-39013/23/2015/NHDP-IVA** dated 16/08/2017 & **RW/NH-37010/4/2010/PIC-EAP (Printing)** dated 22/08/2017 have issued amendment to the model Schedule H & J which is also incorporated for the subject Project.
3. Further, The Bid due date is extended again and tabulated below:

S. No.	As Existing		As Modified	
1.	Bid submission End Date (online & hard copy)	30.10.2017 (1100 hrs)	Bid submission End Date (online & hard copy)	29.11.2017 (1100 hrs)
2.	Opening Date of Technical Bid	31.10.2017 (1100 hrs)	Opening Date of Technical Bid	30.11.2017 (1100 hrs)

4. All bidders are requested to follow the Amended Schedule H & J which is appended herewith.

  
Y.C Srivastava  
GM(T)

**Enclosure-**

- i) Amended Schedule H,
- ii) Amended Schedule J,
- iii) Ministry circulars no. **RW/NH-39013/23/2015/NHDP-IVA** dated 16/08/2017



**SCHEDULE - H**  
**(See Clauses 10.1.4 and 19.3)**  
**Contract Price Weightages**

1.1 The Contract Price for this Agreement is Rs. Cr./-

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 OF PAYMENT	PERCENTAGE WEIGHTAGE	PERCENTAGE WEIGHTAGE vis a vis OVERALL PROJECT
1	2	3	4	5
Road works including Culverts, widening and Repair of Culverts.	48.52%	<b>A- Widening and strengthening of existing road</b>		
		(1) Earthwork upto top of the Sub-grade including excavation in soil, soft rock and hard rock including clearing & grubbing with required site clearance etc.	0.00%	0.00%
		(2) Sub-Base Course.	0.00%	0.00%
		(3) Non Bituminous Base Course.	0.00%	0.00%
		(4) Bituminous Base Course	0.00%	0.00%
		(5) Wearing Coat.	0.00%	0.00%
		(6) Widening and repair of culverts	0.00%	0.00%
		<b>B.1- Reconstruction/New 4lane realignment/bypass (Flexible pavement)</b>		
		(1) Earthwork upto top of the Sub-grade including excavation in soil, soft rock and hard rock including clearing & grubbing with required site clearance etc.	0.00%	0.00%
		(2) Sub-Base Course.	0.00%	0.00%
		(3) Non Bituminous Base Course.	0.00%	0.00%
		(4) Bituminous Base Course	0.00%	0.00%
		(5) Wearing Coat.	0.00%	0.00%
		<b>B.2- Reconstruction/New 4lane realignment/bypass (Rigid pavement)</b>		
		(1) Earthwork upto top of the Sub-grade including excavation in soil, soft rock and hard rock including clearing & grubbing with required site clearance etc.	17.83%	8.65%
		(2) Sub-Base Course.	6.89%	3.34%
		(3) Dry Lean Concrete (DLC) Course	9.67%	4.69%
		(4) Pavement Quality Control (PQC) Course	40.96%	19.87%
		<b>C.1-Reconstruction /New Service road (Flexible Pavement)</b>		
		(1) Earthwork upto top of the Sub-grade including excavation in soil, soft rock and hard rock including clearing & grubbing with required site clearance etc.	0.00%	0.00%
		(2) Sub-Base Course.	0.00%	0.00%
		(3) Non Bituminous Base Course.	0.00%	0.00%
		(4) Bituminous Base Course	0.00%	0.00%
		(5) Wearing Coat.	0.00%	0.00%
		<b>C.2-Reconstruction /New Service road (Rigid Pavement)</b>		

		(1) Earthwork upto top of the Sub-grade including excavation in soil, soft rock and hard rock including clearing & grubbing with required site clearance etc. (2) Sub-Base Course. (3) Dry Lean Concrete (DLC) Course (4) Pavement Quality Control (PQC) Course <b>D-Re-construction and New culverts on existing road, realignment, bypasses.</b> (1) Culverts (Length > 6m)	1.10%  0.54% 0.56% 2.55%  19.91%	0.53%  0.26% 0.27% 1.24%  9.66%
Minor Bridges/Underpasses/Overpasses	15.89%	<b>A.1-Widening and Repair of Minor Bridges (length&gt;6m and &lt;60m)</b>  (1) Minor Bridges  <b>A.2-New Minor Bridges (length &gt;6m and &lt;60m)</b> (1) <b>Foundation + Sub Structure</b> : On completion of the foundation work including foundation for wing and return walls, abutments, piers upto the abutment/pier cap (2) <b>Super Structure</b> : On completion of the super structures in all respects including wearing coat, bearing, expansion joint, hand rail, crash barriers, road signs & marking, tests on completion etc. Complete in all respect. (3) <b>Approaches</b> : On completion of approaches including Retaining walls, stone pitching, protection works complete in all respect and fit for use. (4) <b>Guide Bunds and River Training Works</b> : On completion of Guide Bunds and river Training works complete in all respects. <b>B.1-Widening and Repair of underpasses/overpasses</b>	  0.00%  30.14%  9.59%  2.55%  0.00%	  0.00%  4.79%  1.52%  0.40%  0.00%

		(1) Underpasses / Overpasses	0.00%	0.00%
		<b>B.2-New Underpasses / Overpasses</b>		
		(1) <b>Foundation + Sub Structure</b> : On completion of the foundation work including foundation for wing and return walls, abutments, piers upto the abutment/pier cap	3.25%	0.52%
		(2) <b>Super Structure</b> : On completion of the super structures in all respects including wearing coat, bearing, expansion joint, hand rail, crash barriers, road signs & marking, 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 facility complete in all respects as specified as specified.	2.42%	0.38%
		(3) <b>Approaches</b> : On completion of approaches including Retaining walls/ Reinforced Earth walls, stone pitching, protection works complete in all respect and fit for use.	52.06%	8.27%
<b>Major Bridge (length &gt;60m works and ROB/RUB/elevated section/flyovers including voiducts, if any</b>	<b>25.56%</b>	<b>A.1-Widening and repairs of Major Bridges</b>		
		(1) Foundation	0.00%	0.00%
		(2) Sub-structure	0.00%	0.00%
		(3) Super-structure (including bearings)	0.00%	0.00%
		(4) Wearing Coat including expansion joints	0.00%	0.00%
		(5) Miscellaneous items like hand rails, crash barriers, road marking etc	0.00%	0.00%
		(6) wing wall/return walls	0.00%	0.00%
		(7) Guide Bunds, River Training works etc	0.00%	0.00%
		(8) Approaches (including Retaining walls, stone pitching and protection)	0.00%	0.00%
		<b>A.2-New Major Bridges</b>		
		(1) Foundation	34.63%	8.85%
		(2) Sub-structure	4.41%	1.13%
		(3) Super-structure (including bearings)	9.11%	2.33%
		(4) Wearing Coat including expansion joints	1.23%	0.31%
		(5) Miscellaneous items like hand rails, crash barriers, road marking etc	0.64%	0.16%
		(6) wing wall/return walls		0.00%
		(7) Guide Bunds, River Training works etc		0.00%
		(8) Approaches (including Retaining walls, stone pitching and protection)	0.93%	0.24%

Major Bridge (length >60m works and ROB/RUB/elevated section/flyovers including voiducts, if any)		<b>B.1-Widening and Repair of (a) ROB (b) RUB</b>		
		(1) Foundation	0.00%	0.00%
		(2) Sub-structure	0.00%	0.00%
		(3) Super-structure (including bearings)	0.00%	0.00%
		(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	0.00%	0.00%
		(5) Miscellaneous items like hand rails, crash barriers, road marking etc	0.00%	0.00%
		(6) wing wall/return walls	0.00%	0.00%
		(7) Approaches (including Retaining walls, stone pitching and protection work)	0.00%	0.00%
		<b>B.2-New ROB/RUB (a) ROB (b) RUB</b>		
		(1) Foundation	3.24%	0.83%
		(2) Sub-structure	1.79%	0.46%
		(3) Super-structure (including bearings)	5.51%	1.41%
		(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	0.27%	0.07%
		(5) Miscellaneous items like hand rails, crash barriers, road marking etc	0.16%	0.04%
		(6) wing wall/return walls		0.00%
		(7) Approaches (including Retaining walls/Reinforced earth wall, stone pitching and protection work)	11.43%	2.92%
		<b>C.1-Widening and repair of Elevated Section/Flyovers/Grade Separators</b>		
		(1) Foundation	0.00%	0.00%
		(2) Sub-structure	0.00%	0.00%
		(3) Super-structure (including bearings)	0.00%	0.00%
		(4) Wearing Coat including expansion joints	0.00%	0.00%
		(5) Miscellaneous items like hand rails, crash barriers, road marking etc	0.00%	0.00%
		(6) wing wall/return walls	0.00%	0.00%
		(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection work)	0.00%	0.00%

		<b>C.2-New Elevated Section/Flyovers/Grade Separators</b>		
		(1) Foundation	2.13%	0.55%
		(2) Sub-structure	1.31%	0.34%
		(3) Super-structure (including bearings)	1.59%	0.41%
		(4) Wearing Coat including expansion joints	0.17%	0.04%
		(5) Miscellaneous items like hand rails, crash barriers, road marking etc	0.09%	0.02%
		(6) wing wall/return walls		0.00%
		(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection work)	21.36%	5.46%
<b>Other Works</b>	<b>10.03%</b>			
		(i)Toll Plaza	12.25%	1.23%
		(ii) Road side drain	3.58%	0.36%
		(iii) Road signs, marking, Km stones, Safety devices etc.	17.25%	1.73%
		(iv)Project facilities		
		(a) Bus bays	2.21%	0.22%
		(b) Truck lay-byes		0.00%
		(c,) Rest areas		0.00%
		(d) Others	1.83%	0.18%
		(v) Road side Plantation	5.47%	0.55%
		(vi) Repair of protection works other than approaches to the bridges elevated section/flyovers/grade separators and ROB/RUBs		0.00%
		(vii) Safety and traffic management during construction		0.00%
		(viii) Slope Protection Works as special requirement for hill road		
		(a) Hydro Seeding of Cut Slopes in Soil		0.00%
		(b) Seeding and Mulching with Jute net all along the perpetual slide locations		0.00%
		(c,) Catchwater Drain		0.00%
		(d) Gabion Structure on hill side/valley side of varying height between 1 to 6 metre depending upon the slope		0.00%
		(e) Breast wall	44.11%	4.43%
		(f) Sub Surface drain with perforated pipe for collection of seepage water to avoid sinking of pavement		0.00%
		(g) Parapet wall		0.00%
		(h) Toe wall	13.31%	1.34%
		<b>Total %</b>		<b>100.00%</b>

## 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
<b>A- Widening and strengthening of existing road</b> (1) Earthwork upto top of the Sub-grade including excavation in soil, soft rock and hard rock including clearing & grubbing with required site clearance etc.	0.00%	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 10 (ten) percent of the total length. Further, If existing road length (excluding bypasses, re-alignment, structure) is say 'L' Km and the unencumbered length along the existing road as handed over on the appointed date is 'L1' Km and the balance length i.e. 'L2' Km (L-L1) is to be handed over on a later date as per the memorandum signed under provision of clause 8.2.1 of the contract document, then the stage payment shall be worked out for the 'L1' Km length handed over on the appointed date. The stage payment for the remaining 'L2' Km shall be worked out on prorata basis from the date of handing over of such length.
(2) Sub-Base Course.	0.00%	
(3) Non Bituminous Base Course.	0.00%	
(4) Bituminous Base Course	0.00%	
(5) Wearing Coat.	0.00%	
(6) Widening and repair of culverts	0.00%	Cost of completed culverts shall be determined pro rate basis with respect to the total no. of culverts. The payment shall be made on the completion of atleast five culverts.
<b>B.1- Reconstruction/New 2lane realignment/bypass (Flexible pavement)</b> (1) Earthwork upto top of the Sub-grade including excavation in soil, soft rock and hard rock including clearing & grubbing with required site clearance etc.	0.00%	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. Further, Unit of Measurement is linear length of each bypass/realignment (excluding structures) and payment of each stage shall be made on prorata basis on completion of a stage in full length or 5 (five) Km length of each bypass/ re-alignment taken separately.
(2) Sub-Base Course.	0.00%	
(3) Non Bituminous Base Course.	0.00%	
(4) Bituminous Base Course	0.00%	
(5) Wearing Coat.	0.00%	



<b>B.2- Reconstruction/New 2lane realignment/bypass (Rigid pavement)</b>  (1) Earthwork upto top of the Sub-grade including excavation in soil, soft rock and hard rock including clearing & grubbing with required site clearance etc.	8.65%	Unit of measurement is liner length. Payment of each stage shall be made on pro rate basis on completion of a stage in full length or 5 (five) km. length, whichever is less. Further, Unit of Measurement is linear length of each bypass/realignment (excluding structures) and payment of each stage shall be made on prorata basis on completion of a stage in full length or 5 (five) Km length of each bypass/ re-alignment taken separately.
	(2) Sub-Base Course.	3.34%
	(3) Dry Lean Concrete (DLC) Course	4.69%
	(4) Pavement Quality Control (PQC) Course	19.87%
<b>C.1-Reconstruction /New Service road (Flexible Pavement)</b>  (1) Earthwork upto top of the Sub-grade including excavation in soil, soft rock and hard rock including clearing & grubbing with required site clearance etc.	0.00%	Unit of measurement is liner length. Payment of each stage shall be made on pro rate basis on completion of a stage in full length or 5 (five) km. length, whichever is less.
	(2) Sub-Base Course.	0.00%
	(3) Non Bituminous Base Course.	0.00%
	(4) Bituminous Base Course	0.00%
	(5) Wearing Coat.	0.00%
<b>C.2-Reconstruction /New Service road (Rigid Pavement)</b>  (1) Earthwork upto top of the Sub-grade including excavation in soil, soft rock and hard rock including clearing & grubbing with required site clearance etc.	0.53%	Unit of measurement is liner length. Payment of each stage shall be made on pro rate basis on completion of a stage in full length or 5 (five) km. length, whichever is less.
	(2) Sub-Base Course.	0.26%
	(3) Dry Lean Concrete (DLC) Course	0.27%
	(4) Pavement Quality Control (PQC) Course	1.24%
<b>D-Re-construction and New culverts on existing road, realignment, bypasses.</b>  (1) Culverts (Length > 6m)	9.66%	Cost of each culverts shall be determined on pro rate basis with respect to the total number of culverts. Payment shall be made on the completion of atleast five culverts.

@. 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 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 Bridge 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	PERCENTAGE WEIGHTAGE	PAYMENT PROCEDURE
<b>A.1-Widening and Repair of Minor Bridges (length&gt;6m and &lt;60m)</b>	0.00%	Cost of each minor bridge shall be determined on pro rate 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.
<b>A.2-New Minor Bridges (length &gt;6m and &lt;60m)</b>		
(i) <b>Foundation + Sub Structure</b> : On completion of the foundation work including foundation for wing and return walls, abutments, piers upto the abutment/pier cap	4.79%	(i) <b>Foundation + Sub Structure</b> : Cost of each minor bridge shall be determined on pro rate basis with respect to the total linear length(m) of the minor bridges. Payment against foundation+sub structure shall be made on pro rate 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 atleast two foundation 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.
(ii) <b>Super Structure</b> : On completion of the super structures in all respects including wearing coat, bearing, expansion joint, hand rail, crash barriers, road signs & marking, tests on completion etc. Complete in all respect.	1.52%	(ii) <b>Super Structure</b> : Payment shall be made on pro rate 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.
(iii) <b>Approaches</b> : On completion of approaches including Retaining walls, stone pitching, protection works complete in all respect and fit for use.	0.40%	(iii) <b>Approaches</b> : Payment shall be made on pro rate 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.
(iv) <b>Guide Bunds and River Training Works</b> : On completion of Guide Bunds and river Training works complete in all respects.	0.00%	(iv) <b>Guide Bunds and River Training Works</b> : Payment shall be made on pro rate basis on completion of a stage i.e completion of Guide Bunds and River Training Works in all respects as specified..
<b>B.1-Widening and Repair of underpasses/overpasses</b>	0.00%	Cost of each underpass/overpass shall be determined on pro rate basis with respect to the total linear length of the underpasses/overpasses. Payment shall be made on the completion of wideing & repair works of a underpass/overpass
<b>B.2-New Underpasses / Overpasses</b>		

(i) <b>Foundation + Sub Structure</b> : On completion of the foundation work including foundation for wing and return walls, abutments, piers upto the abutment/pier cap	0.52%	(i) <b>Foundation + Sub Structure</b> : Cost of each Underpass/Overpass shall be determined on pro rate basis with respect to the total linear length (m) of the Underpasses/Overpasses. Payment against foundation + sub structure shall be made on pro rate basis on completion of a stage i.e not less than 25% of the scope of foundation + sub structure of each underpasses/overpasses subject to completion of atleast two foundation along with sub structure upto abutment/pier cap level each underpass/overpass.  In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(ii) <b>Super Structure</b> : On completion of the super structures in all respects including wearing coat, bearing, expansion joint, hand rail, crash barriers, road signs & marking, 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 facility complete in all respects as specified as specified.	0.38%	(ii) <b>Super Structure</b> : Payment shall be made on pro rate 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.
(iii) <b>Approaches</b> : On completion of approaches including Retaining walls/ Reinforced Earth walls, stone pitching, protection works complete in all respect and fit for use.	8.27%	(iii) <b>Approaches</b> : Payment shall be made on pro rate basis on completion of stage i.e completion of approaches in all respect 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	PERCENTAGE WEIGHTAGE	PAYMENT PROCEDURE
A.1-Widening and repairs of Major Bridges		

(i) Foundation	0.00%	<p>(i) <b>Foundation</b> : Cost of each Major Bridge shall be determined on pro rate basis with respect to the total linear length (m) of the Major Bridge. Payment against foundation shall be made on pro rate 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 foundation 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>
(ii) Sub-structure	0.00%	(ii) <b>Sub Structure</b> : Payment against Sub Structure shall be made on pro rate basis on completion of a stage i.e not less than 25% of the scope of sub structure of the major bridge subject to completion of atleast two sub structure of abutment/piers upto abutment/pier cap level of the major bridge.
(iii) Super-structure (including bearings)	0.00%	(iii) <b>Super Structure</b> : Payment shall be made pro rate basis on completion of a stage i.e completion of super structure including bearing of atleast one span in all respect as specified.
(iv) Wearing Coat including expansion joints	0.00%	(iv) <b>Wearing Coat</b> : Payment shall be made on completion of wearing coat including expansion joint complete in all respects as specified.
(v) Miscellaneous items like hand rails, crash barriers, road marking etc	0.00%	(v) <b>Miscellaneous</b> : Payment shall be made on completion of miscellaneous work like hand rail, crash barriers, road marking etc. complete in all respects as specified.
(vi) wing wall/return walls	0.00%	(vi) <b>Wing walls/return walls</b> : Payment shall be made on completion of wing walls/return walls complete in all respects as specified.
(vii) Guide Bunds, River Training works etc	0.00%	(vii) <b>Guide Bunds, River Training works</b> : Payment shall be made on pro completion of all guide bunds/river training works etc. complete in all respects as specified.
(viii) Approaches (including Retaining walls, stone pitching and protection)	0.00%	(viii) <b>Approaches</b> : Payment shall be made on completion of bouth approaches including stone pitching, protection works, etc. complete in all respects as specified.
<b>A.2-New Major Bridges</b>		

(i) Foundation	8.85%	(i) <b>Foundation</b> : Cost of each Major Bridge shall be determined on pro rate basis with respect to the total linear length (m) of the Major Bridge. Payment against foundation shall be made on pro rate basis on completion of stage i.e not less than 25% of the scope of foundation of the major bridge subject to completion of atleast two 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.
(ii) Sub-structure	1.13%	(ii) <b>Sub Structure</b> : Payment against Sub-structure shall be made on pro rate basis on completion of a stage i.e not less than 25% of scope of sub structure of the major bridge subject to completion of atleast two sub structure of abutment/piers upto abtment/pier level of the major bridge.
(iii) Super-structure (including bearings)	2.33%	(iii) <b>Sup Structure</b> : Payment shall be made on pro rate basis on completion of a stage i.e completion of super structure including bearing of atleast one span in all respects as specified.
(iv) Wearing Coat including expansion joints	0.31%	(iv) <b>Wearing Coat</b> : Payment shall be made on completion of wearing coat including expansion joint complete in all respects as specified.
(v) Miscellaneous items like hand rails, crash barriers, road marking etc	0.16%	(v) <b>Miscellaneous</b> : Payment shall be made on completion of all miscellaneous work like hand rail, crash barriers, road marking etc. Complete in all respects as specified.
(vi) wing wall/return walls	0.00%	(vi) <b>Wing walls/Return walls</b> : Payment shall be made on completion of all wing walls/return walls complete in all respects as specified.
(vii) Guide Bunds, River Training works etc	0.00%	(vii) <b>Guide Bunds, River Training works</b> : Payment shall be made on completion of all guide bunds/river training works etc. complete in all respects as specified.
(viii) Approaches (including Retaining walls, stone pitching and protection)	0.24%	(viii) <b>Approaches</b> : Payment shall be made on completion of both approaches including stone pitching, protection works, etc complete in all respects as specified.
<b>B.1-Widening and Repair of (a) ROB (b) RUB</b>		

(i) Foundation	0.00%	<p>(i) <b>Foundation</b> : Cost of each ROB/RUB shall be determined on pro rate basis with respect to the total liner length (m) of the ROB/RUBs. Payment foundation shall be made on pro rate 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 foundation 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>
(ii) Sub-structure	0.00%	<p>(ii) <b>Sub Structure</b> : Payment against sub structure shall be made on pro rate basis on completion of a stage i.e not less than 25% of the scope of sub structure of the ROB/RUB subject to completion of atleast two sub structure of abutments/piers upto abutment/pier cap level of the ROB/RUB.</p>
(iii) Super-structure (including bearings)	0.00%	<p>(iii) <b>Super Structure</b> : Payment shall be made on pro rate basis on completion of a stage i.e completion of super structure including bearing of atleast one span in all respects as specified.</p>
(iv) 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 as specified	0.00%	<p>(iv) <b>Wearing Coat</b> : Payment shall be made on completion of (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 including drainage facility complete in all respects as specified as specified.</p>
(v) Miscellaneous items like hand rails, crash barriers, road marking etc	0.00%	<p>(v) <b>Miscellaneous</b> : Payment shall be made on completion of all miscellaneous work like hand rail, crash barriers, road marking etc. Complete in all respects as specified.</p>
(vi) wing wall/return walls	0.00%	<p>(vi) <b>Wing walls/return walls</b> : Payment shall be made on completion of all wing walls/return walls complete in all respects as specified.</p>
(vii) Approaches (including Retaining walls, stone pitching and protection work	0.00%	<p>(vii) <b>Approaches</b> : Payment shall be made on completion of both approaches including stone pitching, protection works, etc complete in all respectc as specified.</p>
<b>B.2-New ROB/RUB (a) ROB (b) RUB</b>		

(i) Foundation	0.83%	(i) <b>Foundation</b> : Cost of each ROB/RUB shall be determined on pro rate basis with respect to the total liner length (m) of the ROB/RUBs. Payment foundation shall be made on pro rate 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 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.
(ii) Sub-structure	0.46%	(ii) <b>Sub Structure</b> : Payment against sub structure shall be made on pro rate basis on completion of a stage i.e not less than 25% of the scope of sub structure of the ROB/RUB subject to completion of atleast two sub structure of abutments/piers upto abutment/pier cap level of the ROB/RUB.
(iii) Super-structure (including bearings)	1.41%	(iii) <b>Super Structure</b> : Payment shall be made on pro rate basis on completion of a stage i.e completion of super structure including bearing of atleast one span in all respects as specified.
(iv) 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 as specified	0.07%	(iv) <b>Wearing Coat</b> : Payment shall be made on completion of (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 including drainage facility complete in all respects as specified as specified.
(v) Miscellaneous items like hand rails, crash barriers, road marking etc	0.04%	(v) <b>Miscellaneous</b> : Payment shall be made on completion of all miscellaneous work like hand rail, crash barriers, road marking etc. Complete in all respects as specified.
(vi) wing wall/return walls	0.00%	(vi) <b>Wing walls/return walls</b> : Payment shall be made on completion of all wing walls/return walls complete in all respects as specified.
(vii) Approaches (including Retaining walls, stone pitching and protection work	2.92%	(vii) <b>Approaches</b> : Payment shall be made on completion of both approaches including stone pitching, protection works, etc complete in all respect as specified.

<b>C.1-Widening and repair of Elevated Section/Flyovers/Grade Separators</b>		
(i) Foundation	0.00%	(i) <b>Foundation</b> : Cost of each structure shall be determined on pro rate basis with respect to the total liner length (m) of the structure Payment against foundation shall be made on pro rate basis on completion of a stage i.e not less than 25% of the scope of foundation of the structure subject to completion of atleast two 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.
(ii) Sub-structure	0.00%	(ii) <b>Sub Structure</b> : Payment against sub structure shall be made on pro rate basis on completion of a stage i.e not less than 25% of the scope of sub structure of the structure subject to completion of atleast two sub structure of abutments/piers upto abutment/pier cap level of the structure.
(iii) Super-structure (including bearings)	0.00%	(iii) <b>Super Structure</b> : Payment shall be made on pro rate basis on completion of a stage i.e completion of super structure including bearing of atleast one span in all respects as specified.
(iv) Wearing Coat including expansion joints	0.00%	(iv) <b>Wearing Coat</b> : Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified
(v) Miscellaneous items like hand rails, crash barriers, road marking etc	0.00%	(v) <b>Miscellaneous</b> : Payment shall be made on completion of all miscellaneous work like hand rail, crash barriers, road marking etc. Complete in all respects as specified.
(vi) wing wall/return walls	0.00%	(vi) <b>Wing walls/return walls</b> : Payment shall be made on completion of all wing walls/return walls complete in all respects as specified.
(vii) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection work)	0.00%	(vii) <b>Approaches</b> : Payment shall be made on completion of both approaches including stone pitching, protection works, etc complete in all respects as specified.
<b>C.2-New Elevated Section/Flyovers/Grade Separators</b>		



(i) Foundation	0.55%	<p>(i) <b>Foundation</b> : Cost of each structure shall be determined on pro rate basis with respect to the total liner length (m) of the structure Payment against foundation shall be made on pro rate basis on completion of a stage i.e not less than 25% of the scope of foundation of the structure subject to completion of atleast two foundation 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>
(ii) Sub-structure	0.34%	<p>(ii) <b>Sub Structure</b> : Payment against sub structure shall be made on pro rate basis on completion of a stage i.e not less than 25% of the scope of sub structure of the structure subject to completion of atleast two sub structure of abutments/piers upto abutment/pier cap level of the structure.</p>
(iii) Super-structure (including bearings)	0.41%	<p>(iii) <b>Super Structure</b> : Payment shall be made on pro rate basis on completion of a stage i.e completion of super structure including bearing of atleast one span in all respects as specified.</p>
(iv) Wearing Coat including expansion joints	0.04%	<p>(iv) <b>Wearing Coat</b> : Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified</p>
(v) Miscellaneous items like hand rails, crash barriers, road marking etc	0.02%	<p>(v) <b>Miscellaneous</b> : Payment shall be made on completion of all miscellaneous work like hand rail, crash barriers, road marking etc. Complete in all respects as specified.</p>
(vi) wing wall/return walls	0.00%	<p>(vi) <b>Wing walls/return walls</b> : Payment shall be made on completion of all wing walls/return walls complete in all respects as specified.</p>

(vii) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection work)	5.46%	(vii) <b>Approaches</b> : Payment shall be made on completion of both approaches including stone pitching, protection works, etc complete in all respects as specified.
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**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**

**Note: (2) The Schedule for exclusive tunnel project may be prepared as per site requirement before bidding with due approval of DG(RD)&SS, MoRT&H**

#### 1.3.4 Others works

Procedure for estimating the value of others works done shall be as stated in table 1.3.4:

**TABLE 1.3.4**

STAGE OF PAYMENT	PERCENTAGE WEIGHTAGE	PAYMENT PROCEDURE
(i) Toll Plaza	1.23%	Unit of measurement is each completed toll plaza. Payment of each toll plaza shall be made on pro rate basis with respect to the total of all toll plazas.
(ii) Road side drain	0.36%	Unit of measurement is linear length in Km. Payment shall be made on pro rate basis on completion of a stage in a length of not less than 10% (ten per cent) of the total length.
(iii) Road signs, marking, Km stones, Safety devices etc.	1.73%	
(iv) Project facilities		Payment shall be made on pro rate basis for completed facilities.
(a) Bus bays	0.22%	
(b) Truck lay-byes	0.00%	

(c.) Rest areas	0.00%	
(d) Others	0.18%	
(v) Road side Plantation	0.55%	Unit of measurment is linear length. Payment shall be made on pro rate basis on completion of a stage in a length of not less than 10% (ten per cent) of the total length.
(vi) Repair of protection works other than approaches to the bridges elevated section/flyovers/grade separators and ROBs/RUBs	0.00%	
(vii) Safety and traffic management during construction	0.00%	payment shall be made on pro rate basis every six month.
(viii) Slope Protection Works as special requirement for hill road	0.00%	Unit of measurment is linear length in Km. Payment shall be made on pro rate basis on completion of a stage in a length of not less than 10% (ten per cent) of the total length.
(a)Hydro Seeding of Cut Slopes in Soil	0.00%	
(b)Seeding and Mulching with Jute net all along the perpetual slide locations	0.00%	
(c.) Catchwater Drain	0.00%	
(d) Gabion Structure on hill side/valley side of varying height between 1 to 6 metre depending upon the slope	0.00%	
(e) Breast wall	4.43%	
(f) Sub Surface drain with perforated pipe for collection of seepage water to avoid sinking of pavement	0.00%	
(g) Parapet wall	0.00%	
(h) Toe wall	1.34%	

## 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 instalment in accordance with the provisions of Clause 19.7



**SCHEDULE - J**  
**(See Clause 10.3.2)****PROJECT COMPLETION SCHEDULE****1 Project Completion Schedule**

During Construction period, the Contractor shall comply with the requirements set forth in this Schedule-J for each of the Project Milestones and the Scheduled Completion Date. Within 15 (fifteen) days of the date of each Project Milestone, the Contractor shall notify the Authority of such compliance along with necessary particulars thereof. Further, Ministry circular No. RW/NH-39013/23/2015/NHDP-IVA dated-16.08.2017 shall constitute a part of Contract Agreement.

**2 Project Milestone-I**

- 2.1 Project Milestone-I shall occur on the date falling on the 180th (one hundred and eightieth) day from the Appointed Date (the "Project Milestone-I").
- 2.2 Prior to the occurrence of Project Milestone-I, the Contractor shall have commenced construction of the Project Highway and submitted to the Authority duly and validly prepared Stage Payment Statements for an amount not less than 10% (ten per cent) of the Contract Price.

**3 Project Milestone-II**

- 3.1 Project Milestone-II shall occur on the date falling on the 550th (Five hundred and fiftieth) day from the Appointed Date (the "Project Milestone-II").
- 3.2 Prior to the occurrence of Project Milestone-II, the Contractor shall have continued with construction of the Project Highway and submitted to the Authority duly and validly prepared Stage Payment Statements for an amount not less than 40% (Fourty per cent) of the Contract Price.

**4 Project Milestone-III**

- 4.1 Project Milestone-III shall occur on the date falling on the 915th (Nine hundred and fifteenth) day from the Appointed Date (the "Project Milestone- III").

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**"Construction of Dimapur Bypass (Assam Portion) of 4/6 lane pavement on EPC basis from existing Km 159.400 of NH-36 to existing Km 102.500 of NH-39 and upto end point of Assam portion [Design Km 118.050 to design Km 132.375] (length 14.325 Km) in the State of Assam under Phase-A of SARDP-NE"**

- 4.2 Prior to the occurrence of Project Milestone-III, the Contractor shall have continued with construction of the Project Highway and submitted to the Authority duly and validly prepared Stage Payment Statements for an amount not less than 80% (Eighty per cent) of the Contract Price.

**5 Scheduled Completion Date**

- 5.1 The Scheduled Completion Date shall occur on the 1095th (one thousand ninety fifth ) day from the Appointed Date.
- 5.2 On or before the Scheduled Completion Date, the Contractor shall have completed construction in accordance with this Agreement.

**6 Extension of time**

Upon extension of any or all of the aforesaid Project Milestones or the Scheduled Completion Date, as the case may be, under and in accordance with the provisions of this Agreement, the Project Completion Schedule shall be deemed to have been amended accordingly.



GOVERNMENT OF INDIA  
MINISTRY OF ROAD TRANSPORT & HIGHWAYS

Transport Bhawan,  
1, Parliament Street,  
New Delhi-110 001

No. RW/NH-39013/23/2015/NHDP-IVA

Dated 16<sup>th</sup> August, 2017

To

1. The Chief Secretaries of all State Governments/U.Ts.
2. The Principal Secretaries/Secretaries of all States/U.Ts. Public Works Department dealing with National Highways, other Centrally Sponsored Schemes and State Schemes.
3. The Engineers-in-Chief and Chief Engineers of Public Works Department of States/U.Ts dealing with National Highways, other Centrally Sponsored Schemes and State Schemes.
4. The Chairman, National Highways Authority of India, G-5&6, Sector-10, Dwarka, New Delhi - 110075.
5. The Director General (Border Roads), Seema Sadak Bhawan, Ring Road, New Delhi-110010.

**Subject: -** Clarifications on Schedule 'H' and Schedule 'J' of Model EPC Agreement due to non-handing over of entire encumbrance free project stretch.

References have been received from various contractors wherein it has been claimed that actual unencumbered length handed over at the time of 'appointed date' is much less than the total project length due to various hindrances, while payments are being made as per the payment milestones for the total project length as per Schedule 'H'. In cases where such claims regarding non-handing over of the encumbrance free working fronts are correct, it is affecting the cash flows of the contractors and subsequent project completion. The references received from the contractors have been considered and following clarifications are issued in terms of provision of EPC contract document:

Reference clause	Description	As per model document	Clarification
Schedule-H, clause 1.3.1A	Widening, strengthening and reconstruction of existing road. Payment procedure for Earthwork up to top of Sub-grade, Granular work (Sub-base and base), Shoulder, Bituminous works and 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 a length of not less than 10 (ten) percent of the total length.	If existing road length (excluding bypasses, re-alignment, structure) is say 'L' km and the unencumbered length along the existing road as handed over on the appointed date is 'L <sub>1</sub> ' km and the balance length i.e. 'L <sub>2</sub> ' km (L - L <sub>1</sub> ) is to be handed over on a later date as per the memorandum signed under provision of Clause 8.2.1 of the Contract Document, then the stage payment shall be worked out for the 'L <sub>1</sub> ' km length handed over on the appointed date. The stage payment for the remaining 'L <sub>2</sub> ' km length shall be worked out on prorata basis from the date of handing over of such length.
Schedule-H, clause 1.3.1B	New 2 lane re-alignment, bypasses. Payment procedure for Earthwork up to top of Sub-grade, Granular work (Sub-base and base), Shoulder, Bituminous works and 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.	Unit of measurement is linear length of each bypass/ re-alignment (excluding structures) and payment of each stage shall be made on prorata basis on completion of a stage in full length or 5 (five) km length of each bypass/ re-alignment taken separately.

*Handwritten signature*

Reference clause	Description	As per model document	Clarification
Schedule-J, project completion schedule.	Project Milestone-I, Project Milestone-II, Project Milestone-III	Occurrence of the Project Milestone-I, II and III is linked to stage payment statement for amount in percentage of the total contract price.	<p>If total project length is say 'L' km and the unencumbered length along existing road as handed over on the appointed date is 'L<sub>1</sub>' km (including bypasses, re-alignment, structure etc.) and balance length i.e. 'L<sub>2</sub>' km (L - L<sub>1</sub>) is to be handed over on a later date as per the memorandum signed under provision of Clause 8.2.1 of the Contract Document, then the Project Milestone-I, II and III shall be linked to stage payment statement for amount in percentage of the contract price worked out on prorata basis for the 'L<sub>1</sub>' km length handed over on the appointed date. After handing over of balance length, the subsequent Project Milestone shall be linked to stage payment statement for amount in percentage of the total contract price.</p> <p>For example:            If the date for Milestone-I and Milestone-II is 180<sup>th</sup> and 300<sup>th</sup> day from appointed date and balance 'L<sub>2</sub>' km length is handed over after 300<sup>th</sup> day from appointed date, then the stage payment statement required for achieving Milestone-I and Milestone-II should be linked to Contract Price worked out on prorata basis for the L<sub>1</sub> km length [i.e. for Contract Price x L<sub>1</sub> / L]. Subsequent Milestone i.e. Milestone-III will be linked to stage payment statement for amount in percentage of the total contract price. In no case, there shall be any change in the scheduled completion date unless extension of time has been granted by the Authority under Clause 10.3 and 10.5 of the contract agreement.</p>

2. In order for the above dispensation to come into operation, it is necessary that a suitable mechanism (like escrow account) is evolved between the parties to the effect that the payments released to the contractor under the above dispensation would be used for completion of the project in the first instance and shall be available to the Contractor only after meeting his project related commitments.

3. This issues with the approval of the Competent Authority.

Yours faithfully,

Nrendra Sharma 16.8.17

(Narendra Sharma)

Superintending Engineer (NHDP-IVA)

For Director General (Road Development) & Special Secretary



Copy to:

1. PS to Hon'ble Minister, (RTH&S)
2. PPS to Secretary, RT&H
3. PPS to DG(RD)&SS
4. All ADGs / JS(H) / JS(E&IC) / Chief Engineers
5. All Technical Officers in the Ministry of Road Transport & Highways
6. All ROs and ELOs of the MoRT&H
7. The Secretary General, Indian Roads Congress.
8. The Director, IAHE, Noida.
9. NIC for uploading the circular on the website.

