

**National Highways & Infrastructure Development Corporation Limited**

**Project Name:** Up-gradation to 2 lane with paved shoulders of Dulte - Champhai road (International Corridor) of NH-6 from Design Chainage Km 84.800 to km 111.580 (Package-III) in the State of Mizoram under Bharatmala Pariyojna on EPC mode.

**Contract Package No.:** NHIDCL/Mizoram/NH-06/IC/Package-III/2020-21

**Tender Id:** 2020\_NHIDC\_603074\_1

**Amendment No. 5**

Sl. No.	Reference /clause no./ Annexure	Existing Provision	Modified Provision (To be read as)
1.	NIT, Page no. 1 & RFP, Page no. 4 & 9	Estimated Project Cost exclusive of GST (Rs. In Crore) : <b>528.35</b>	Estimated Project Cost exclusive of GST (Rs. In Crore) : <b>463.04</b>
2.	Clause 5 of Section-7, Data Sheet of RFP, Page no. 49	Estimated Project Cost (Excl. GST) : <b>Rs. 528.35 Crore</b>	Estimated Project Cost (Excl. GST) : <b>Rs. 463.04 Crore</b>
3.	Clause 4 of Section-7, Data Sheet of RFP, Page no. 49	Threshold Technical Capacity (Refer Clause 2.2.2.2(i)) : <b>Rs. 528.35 Crore</b>	Threshold Technical Capacity (Refer Clause 2.2.2.2(i)) : <b>Rs. 463.04 Crore</b>
4.	Clause 2 of Section-7, Data Sheet of RFP, Page no. 48	Cost of BID/RFP document (Refer Clause No. 1.2.4) : <b>70800 including 18% GST</b>	Cost of BID/RFP document (Refer Clause No. 1.2.4) : <b>59000 including 18% GST</b>
5.	Annex-I of Schedule-B, Page no. 31	----	<b>5.6 One Time Improvement of existing road</b> The Contractor shall carry One Time Improvement of existing road from existing chainage Km 146.450 to Km 150.000 (Champhai Town) (3.55 Kms) by providing and laying of WMM (if required), DBM & BC (on full width of existing carriageway), improvement of shoulder & drain, installation of road safety items etc. within existing ROW as per specifications of IRC/MoRT&H.
6.	Schedule H, Page no. 89	<b>Modified Schedule-H</b> is enclosed as <b>Annexure-I</b> of this amendment.	

**Note:** The Estimated Project Cost put to tender has been modified by correcting some errors in the uploaded cost estimate. Those bidders who have already uploaded their bid are requested to amend the bid accordingly considering this amendment. After bid due date, no request from any bidders in this regard will be considered.

  
(Ashok Kumar Singh)  
General Manager (Technical)

## Schedule - H

(See Clauses 10.1 (iv) 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 for Payment	Percentage weightage to Particular item (col.2)
1	2	3	4
Road works including culverts, widening and repair of culverts.	70.41%	<b>A- Widening and reconstruction of existing road (Flexible Pavement)</b>	
		<b>B.1- Reconstruction/New 2-lane realignment/ bypass (Flexible Pavement)</b>	
		(1) Earthwork up to top of the sub-grade	
		i) Earthwork including Site Clearance, Excavation in all type of Soil, Ordinary Rock & Hard Rock	33.73%
		ii) Earthwork with scarifying existing Bituminous surface with preparation upto Sub-Grade Top	14.61%
		(2) Sub-base Course	8.97%
		(3) Non Bituminous Base Course	12.07%
		(4) Bituminous Base Course	7.57%
		(5) Wearing Coat	4.93%
		(6) Shoulder	0.63%
		<b>B.2- Reconstruction/New 2-lane realignment/ bypass (Rigid Pavement)</b>	
		<b>C.1 - Reconstruction/New Service Road (Flexible Pavement)</b>	
		<b>C.2 - Reconstruction/New Service Road (Rigid Pavement)</b>	

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage to Particular item (col.2)
1	2	3	4
		<b>D - Reconstruction/New Culverts on existing road, realignment, bypasses</b>	
		Culverts (length <6m)	
		i) Box Culverts (2X2)	6.10%
		ii) Box Culverts (3X3)	4.22%
		iii) Box Culverts (4X4)	3.94%
		iv) Box Culverts (6X6)	0.00%
		v) HPC (1X1200 Dia)	3.23%
Minor Bridges	1.52%	<b>A.1 - Widening and Repair of Minor Bridges (Length &gt; 6m and &lt; 60m)</b>	
		<b>A.2 - New Minor Bridges (Length &gt; 6m and &lt; 60m)</b>	
		(1) Foundation +Sub-Structure	
		i) Earthwork including excavation for Structures in Soil, Ordinary Rock & Hard Rock with Embankment Preparation	2.73%
		ii) foundation work including foundations for wing and return walls, abutments, piers upto the abutment/pier cap excluding excavation	67.18%
		(2) Super-structure	29.65%
		(3) Approaches	0.44%
Major Bridge (length >60m.) works	2.00%	<b>A.1- Widening and repairs of Major Bridges</b>	
		<b>A.2 - New Major Bridges</b>	
		(1) Foundation	
		i) Earthwork including excavation for Structures in Soil, Ordinary Rock & Hard Rock with Embankment Preparation	2.12%
		ii) foundation work including foundations for wing and return walls, abutments, piers upto the abutment/pier cap excluding excavation	10.58%

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage to Particular item (col.2)
1	2	3	4
		(2) Sub-structure	38.31%
		(3) Super-structure	48.72%
		(4) Approaches (including Retaining walls, stone pitching and protection works)	0.27%
Other works	26.07%	(i) Toll Plaza	0.00%
		(ii) Road side drains	7.18%
		(iii) Road signs, markings, km stones, safety devices, etc.	11.08%
		(iv) Project facilities	
		(a) Bus Bays	0.46%
		(b) Truck lay-byes	0.49%
		(c) Rest areas	0.00%
		(d) others	
		1) Stone Masonry Retaining wall	14.30%
		2) Stone Masonry Breast wall (1.50m Height)	9.05%
		3) Stone Masonry Breast wall (3.00m Height)	46.70%
		4) RE Wall including Anchor Bolts	5.03%
		5) Stone Masonry Toe wall (1.00m Height)	0.21%
		6) Turfing with Sods	0.09%
		7) Junction Improvement	2.78%
		8) Utility Pipe Ducts	0.14%
		9) One time improvement of existing road	2.49%

1.3 Procedure of estimating the value of work done.

1.3.1 Road works including approaches to Minor bridges, Major Bridges and Structures (excluding service roads).

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 reconstruction of existing road (Flexible Pavement)</b>		
<b>B.1- Reconstruction/New 2 - lane realignment/ bypass (Flexible Pavement)</b>		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 <b>250m</b> .
(1) Earthwork up to top of the sub-grade		
i) Earthwork including Site Clearance, Excavation in all type of Soil, Ordinary Rock & Hard Rock	33.73%	
ii) Earthwork with scarifying existing Bituminous surface with preparation upto Sub-Grade Top	14.61%	
(2) Sub-base Course	8.97%	
(3) Non Bituminous Base Course	12.07%	
(4) Bituminous Base Course	7.57%	
(5) Wearing Coat	4.93%	
(6) Shoulder	0.63%	
<b>B.2- Reconstruction/New 2 - lane realignment/ bypass (Rigid Pavement)</b>		
<b>C.1 - Reconstruction/New Service Road (Flexible Pavement)</b>		
<b>C.2 - Reconstruction/New Service Road (Rigid Pavement)</b>		
<b>D - Reconstruction/New Culverts on existing road, realignment, bypasses</b>		Cost of completed culverts shall be determined pro rata basis with respect to the total no. of culverts. The payment shall be made on the completion of <b>each</b> culvert.
Culverts (length <6m)		
i) Box Culverts (2X2)	6.10%	

Stage of Payment	Percentage - weightage	Payment Procedure
ii) Box Culverts (3X3)	4.22%	
iii) Box Culverts (4X4)	3.94%	
iv) Box Culverts (6X6)	0.00%	
v) HPC (1X1200 Dia)	3.23%	

@ 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:

$$\text{Cost per km} = P \times \text{weightage for road work} \times \text{weightage for bituminous work} \times (1/L)$$

Where P = Contract Price

L = Total length in km

Similarly, the rates per km for stages (1), (2) and (4) above shall be worked out.

### 1.3.2 Minor Bridge works-

Procedure for estimating the value of Minor Bridge works 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>		
<b>A.2 - New Minor Bridges (Length &gt; 6m and &lt; 60m)</b>		
(1) <b>Foundation +Sub-Structure:</b> On completion of the foundation and substructure work including foundations for wing and return walls, abutments, piers upto the abutment/pier cap.		<b>Foundation:</b> Cost of each Minor Bridge shall be determined on pro rata basis with respect to the total linear length (m) of the Minor Bridge. Payment against foundation and substructure shall be made on pro-rata basis on completion of <b>each</b> foundation and substructure of the Minor Bridge.  In case where load testing is required for foundation, the trigger of first
i) Earthwork including excavation for Structures in Soil, Ordinary Rock & Hard Rock with Embankment Preparation.	2.73%	



ii) foundation work including foundations for wing and return walls, abutments, piers upto the abutment/pier cap excluding excavation.	67.18%	payment shall include load testing also where specified.
(2) <b>Super-structure:</b> 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.	29.65%	<p><b>(ii) Super-structure:</b> 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.</p> <p>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.</p>
(3) <b>Approaches:</b> On completion of approaches including Retaining walls, stone pitching, protection works complete in all respect and fit for use.	0.44%	<p><b>(iii) Approaches:</b> 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.</p>

### 1.3.3 Major Bridges/Rail-road bridges

Procedure for estimating the value of Rail-road bridges works 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		
A.2 - New Major Bridges		
(1) Foundation		
i) Earthwork including excavation for Structures in Soil, Ordinary Rock & Hard Rock with Embankment Preparation	2.12%	<p><b>Foundation:</b> 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 each</p>

ii) foundation work including foundations for wing and return walls, abutments, piers upto the abutment/pier cap excluding excavation	10.58%	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) <b>Sub-structure:</b> On completion of abutments, piers upto the abutment/ pier cap	38.31%	<b>Sub-structure:</b> Payment against substructure shall be made on pro-rata basis on completion of <b>each</b> substructure of major bridge.
(3) <b>Super-structure</b> (including bearings) & Miscellaneous Items like Wearing Coat hand rails, crash barriers, road markings etc.	48.72%	<b>Super-structure:</b> Payment shall be made on pro-rata basis on completion of a stage i.e. completion of superstructure 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) <b>Approaches</b> (including Retaining walls, stone pitching and protection works etc)	0.27%	(viii) <b>Approaches:</b> Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects as specified.

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 work done shall be as stated in table 1.3.4:

**Table 1.3.4**

Stage of Payment	Percentage - weightage	Payment Procedure
(i) Toll Plaza	0.00%	
(ii) Road side drains	7.18%	Unit of measurement is linear in k.m Payment shall be made on pro rata basis



(iii) Road signs, markings, km stones, safety devices, ....	11.08%	on completion of a stage in a length on not less than <b>01 (one) Km.</b>
(iv) Project facilities		Payment shall be made on pro rata basis for completed facilities.
(a) Bus Bays	0.46%	
(b) Truck lay-byes	0.49%	
(c) Rest areas	0.00%	
(d) others		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 <b>250m.</b>
1) Stone Masonry Retaining wall	14.30%	
2) Stone Masonry Breast wall (1.50m Height)	9.05%	
3) Stone Masonry Breast wall (3.00m Height)	46.70%	
4) RE Wall including Anchor Bolts	5.03%	
5) Stone Masonry Toe wall (1.00m Height)	0.21%	
6) Turfing with Sods	0.09%	
7) Junction Improvement	2.78%	
8) Utility Pipe Ducts	0.14%	
9) One time improvement of existing road	2.49%	

## 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.

