

# Corrigendum No: 15

NHIDCL/Ar.Pr./Civil Works/Roing Hunli

Date: 06.02.2017

To,  
All the prospective bidders

Subject:- "Construction of 2 Lane road with paved shoulders from Km 16.00 of Roing Hunli section to Km 21.500 of Hunli-Anini Road (Greenfield alignment) (NH-313 )(Total length= 74.863 Km) in Arunachal Pradesh under Arunachal Pradesh package of SARDP-NE on Engineering Procurement and Construction (EPC) basis"-**Corrigendum in Schedule B & D.**

Sir,

Vide corrigendum dated 25.01.2017, modified RFP, DCA & Schedule A to P were uploaded corresponding to model documents issued by Ministry vide letter dated 16.01.2017 & 17.01.2017. Further corrigendum specific to Schedules B & D are tabulated below.

|  | As existing  | As modified           |        |  |  |   |
|--|--|-----------------------|--------|--|--|---|
| Clause 7.2 of Schedule B (i.e slope protection measures) | <p><b>Breast Wall and Retaining Wall</b></p> <p>Following measures shall be adopted:</p> <p>Slope protection along hill slope side shall be with breast wallswith PCC minimum M15 grade concrete.However, at the zones prone to sliding breast walls will be of sausage type (by stone-mesh gabions).Retaining wall has been considered at valley sides. The height of breast wallsis varying from 1.5 m to 3m as per site requirement and to be finalized by consultation with Authority Engineers. The breast wall of height 3m has been considered if the height of hill cut is more than 9m and in this circumstances 3m bermi with catch water drain is required to beprovided. The maximum ait slope at hill side is 550 (0.7H to IV).</p> <p>Embankment less than 3m in height shall be turfed as per MoRTH Specifications. Vetiver Plantation. Hydro Seeding and Hydro Mulching etc or similar works is to be done for slope protection and site mitigation measure upto a height of 12-15 m all along the slopes in each cutting locations except hard rock location which needs to be protected with appropriate applicable technologies, if required.</p> | <p><b>Deleted</b></p> |        |  |  |   |
| Clause 14 of Schedule B                                  | <p><b>SPECIAL REQUIREMENT FOR HILL ROADS</b></p> <p>14.1 All special features shall be provided as per Manual.</p> <p>14.2 The side slope shall be protected by using suitable slope protection measures all along the highway on Hill side and Valley side. The details of the minimum protection work as tabulated below</p> <table><tr><td></td><td>Height</td></tr><tr><td></td><td></td></tr></table>   |                       | Height |  |  | <p><b>SPECIAL REQUIREMENT FOR HILL ROADS</b></p> <p>In accordance with section 13 of the manual (IRC: SP:73-2015), IRC:SP:48-1998 and recommended practices for treatment of Embankment and Roadside slopes for erosion control (First Revision) IRC:56-2011 and relevant IRC codes.</p> <p><b>14.1 Slope Protection</b></p> <p>As the project involves cutting of existing hill slopes, it's imperative that slopes are stabilized for ensuring longevity of the</p> |
|  | Height   |                       |        |  |  |   |
|  |  |                       |        |  |  |   |

| Sr. | Protection Work | Up to 5m | 6 m  | 7 m  | 8 m  | 9 m | 10 m | 11 m | 12 m | Standard | Total (in m) |
|-----|-----------------|----------|------|------|------|-----|------|------|------|----------|--------------|
| 1   | RR Masonry      |          |      | 243  | 187  | 261 | 176  | 94   | 317  |          | 1278         |
| 2   | Gabion Wall     | 532      | 1198 | 1074 | 1590 | 40  | 0    | 0    | 0    |          | 18708        |
| 3   | Toe Wall        | 0        | 0    | 0    | 0    | 0   | 0    | 0    | 0    | 442      | 442          |
| 4   | Retaining Wall  | 8791     | 1437 | 1052 | 336  | 0   | 0    | 0    | 0    |          | 11616        |
| 5   | Breast wall     | 0        | 0    | 0    | 0    | 0   | 0    | 0    | 0    | 1751     | 17599        |

14.3 The chainage wise details of Protection works are given in Annexure II.

14.4 Contractor shall identify areas and provide the suitable protection measures to stabilize the entire landslide area along with the design for the review of the Authority Engineer. No change of scope shall be considered for it be dealt properly and adequate safety /Protection measures with proper design shall be provided.

14.5 Slide Mitigation: All hill slope having tendency for future slide needs to be arrested by special slope protection measures and plantation shall be carried out to arrest barren slope

slope and the road. Slope stability, erosion control and landslide correction shall be accomplished in accordance with IRC:SP:48-1998. Reference may be drawn from IRC: 56-2011  
The minimum quantity of protection works may be taken as below.

| Sr. | Protection Work   | Unit | Quantity |
|-----|---|------|----------|
| 1   | RR Masonry  | Rm   | 1278     |
| 2   | Gabion Wall   | Rm   | 18708    |
| 3   | Toe Wall  | Rm   | 442      |
| 4   | Retaining Wall  | Rm   | 11616    |
| 5   | Breast wall   | Rm   | 17599    |
| 6.  | Veiver Plantation. Hydro Seeding and Hydro Mulching etc including nets if required or similar works are to be done for slope protection and site mitigation measure upto a height of 12-15 m all along the road on barren slopes except hard rock location which needs to be protected with appropriate applicable technologies, if required. |      |          |

However, the Contractor would be responsible for accurate assessment of the actual requirement as per site situation & prepare designs for slope protection & stabilization as per the specifications & standards stipulated in schedule 'D' and submit the same to the AE for review through the proof consultant and implement it accordingly thereafter.

**Any increase in quantity over and above the tentative quantity as mentioned in the above table or through change in specifications will not be considered for payment as change of scope.** Therefore contractor shall make thorough investigation of the site and assess the requirement of slope protection and slide prone zones and other safety features on his own before submission of bid.



|                         |  |   |
|-------------------------|--|---|
| Clause 15 of Schedule B | <b>Change of Scope</b><br>The length of Structures and bridges specified here in above shall be treated as an approximate assessment. The actual lengths as required on the basis of detailed investigations shall be determined by the Contractor in accordance with the Specifications and Standards. Any variations in the lengths specified in this Schedule B shall not constitute a Change of Scope, save and except any variations in the length arising out of a change of scope expressly undertaken in accordance with the provisions of Article 13 of DCA.  | <b>CHANGE OF SCOPE</b><br>The length of Structures, bridges and slope protection works whatsoever in terms of retaining wall, breast wall, and gabion wall or under special requirement of hill slope specified hereinabove shall be treated as an approximate assessment The actual lengths as required on the basis of detailed investigations shall be determined by the Contractor in accordance with the Specifications and Standards. Any variations in the lengths and specifications specified in this Schedule-B shall not constitute a Change of Scope  |
| Annex-1 Schedule D      | <b>Specifications and Standards for Construction</b><br>1. Specifications and Standards<br>All materials, works and construction operations shall conform to the Two Lane Manual (IRC: SP 73 - 2015) of Specifications and Standards for Two Laning (IRC: SP: 73 - 2015), referred as the Two Lane Manual (IRC: SP: 73 - 2015), and MORTH Specifications for Road and Bridge Works. Where the specification for a work is not given. Good Industry Practice shall be adopted to the satisfaction of the Authority's Engineer.<br>2. <b>Deviations from the Specifications and Standards</b><br>2.1 The terms 'Concessionaire', 'Independent Engineer' and 'Concession Agreement' used in the Two Lane Manual (IRC: SP 73- 2015) shall be deemed to be substituted by the terms 'Contractor', 'Authority's Engineer' and 'Agreement* respectively.<br>2.2 NIL | <b>Specifications and Standards for Construction</b><br>1. <b>Specification and Standards</b><br>All materials, works and construction operations shall conform to the Two Lane Manual (IRC: SP (73 - 2015) of Specifications and Standards for Two Laning (IRC: SP: 73 - 2015), referred as the Two Lane Manual (IRC: SP: 73 - 2015), and MORTH Specifications for Road and Bridge Works, IRC: SP:48-1998 and IRC 56-2011. Where the specification for a work is not given, Good Industry Practice shall be adopted to the satisfaction of the Authority's Engineer.<br>2. <b>Deviations from the Specifications and Standards</b><br>The terms 'Concessionaire', 'Independent Engineer' and 'Concession Agreement' used in the Two Lane Manual (IRC: SP 73- 2015) shall be deemed to be substituted by the terms 'Contractor', 'Authority's Engineer' and 'Agreement' respectively. |

2. The Clause 16 (i.e Landscaping), Clause 17 (i.e Environment) & Clause 18 (i.e Fixed parameter for design) of Schedule B is deleted.
3. All other corrigendum's issued in respect of Schedule A to P, RFP, DCA if any shall be treated superseded by the corrigendum dated 25.01.2017 and the instant corrigendum.
4. The above corrigendum shall be part of Schedule B and Schedule D unless specifically stated otherwise.
- 5 Further, the bidding schedule is modified as below.

| As Existing                       |                      | As modified                                  |                      |
|-----------------------------------|----------------------|--|----------------------|
| Document Download / Sale End Date | 09-Feb-2017 04:00 PM | Document Download / Sale End Date            | 14-Feb-2017 05:00 PM |
| Bid Submission End Date           | 09-Feb-2017 04:00 PM | Bid Submission End Date (online & hard copy) | 15-Feb-2017 11:00 PM |
| Bid Opening Date                  | 09-Feb-2017 05:00 PM | Bid Opening Date                             | 16-Feb-2017 04:00 PM |

  
Y.C. Srivastava

GM(T)