SPECIAL CONDITIONS OF CONTRACT (SCC) &
Draft Contract Agreement

Volume-II

NIT NO. DLI/CON/776/652

Construction of Balance work of Two Lane Road on NH Specifications from Kaletwa to India Myanmar Border (Zorinpu) from Km 60.700 to Km 109.2 in Chin state of Myanmar on EPC mode
Contents

PART I

Preliminary

1 Definitions and Interpretation 17
1.1 Definitions 17
1.2 Interpretation 17
1.3 Measurements and arithmetic conventions 19
1.4 Priority of agreements and errors/discrepancies 19
1.5 Joint and several liability 19

PART II

Scope of Project

2 Scope of the Work 22
2.1 Scope of the Work 22

3 Obligations of the Sub-Contractor 23
3.1 Obligations of the Sub-Contractor 23
3.2 Obligations relating to sub-contracts and any other agreements 24
3.3 Employment of foreign nationals 25
3.4 Sub-Contractor’s personnel 26
3.5 Advertisement on Project Highway 26
3.6 Sub-Contractor's care of the Works 26
3.7 Electricity, water and other services 26
3.8 Unforeseeable difficulties 26
3.9 Engineering facilities 27

4 Obligations of the Employer 28
4.1 Obligations of the Employer 28
4.2 Maintenance obligations prior to the Appointed Date
4.3 Environmental Clearances

5 Representations and Warranties
5.1 Representations and warranties of the Sub-Contractor
5.2 Representations and warranties of the Employer
5.3 Disclosure

6 Disclaimer
6.1 Disclaimer

PART III
Construction

7 Performance Security
7.1 Performance Security
7.2 Extension of Performance Security
7.3 Appropriation of Performance Security
7.4 Release of Performance Security
7.5 Retention Money

8 Right of Way
8.1 The Site
8.2 Procurement of the Site
8.3 Damages for delay in handing over the Site
8.4 Site to be free from Encumbrances
8.5 Protection of Site from encroachments
8.6 Special/temporary Right of Way
8.7 Access to the Employer and the Authority’s Engineer
8.8 Geological and archaeological finds

9 Utilities and Trees
9.1 Existing utilities and roads
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.2</td>
<td>Shifting of obstructing utilities</td>
</tr>
<tr>
<td>9.3</td>
<td>New utilities</td>
</tr>
<tr>
<td>9.4</td>
<td>Felling of trees</td>
</tr>
<tr>
<td><strong>10</strong></td>
<td>Design and Construction of the Project Highway</td>
</tr>
<tr>
<td>10.1</td>
<td>Obligations prior to commencement of Works</td>
</tr>
<tr>
<td>10.2</td>
<td>Design and Drawings</td>
</tr>
<tr>
<td>10.3</td>
<td>Construction of the Project Highway</td>
</tr>
<tr>
<td>10.4</td>
<td>Maintenance during Construction Period</td>
</tr>
<tr>
<td>10.5</td>
<td>Extension of time for completion</td>
</tr>
<tr>
<td>10.6</td>
<td>Incomplete Works</td>
</tr>
<tr>
<td>10.7</td>
<td>Maintenance Manual</td>
</tr>
<tr>
<td><strong>11</strong></td>
<td>Quality Assurance, Monitoring and Supervision</td>
</tr>
<tr>
<td>11.1</td>
<td>Quality of Materials and workmanship</td>
</tr>
<tr>
<td>11.2</td>
<td>Quality control system</td>
</tr>
<tr>
<td>11.3</td>
<td>Methodology</td>
</tr>
<tr>
<td>11.4</td>
<td>Inspection and technical audit by the Authority/ Employer</td>
</tr>
<tr>
<td>11.5</td>
<td>External technical audit</td>
</tr>
<tr>
<td>11.6</td>
<td>Inspection of construction records</td>
</tr>
<tr>
<td>11.7</td>
<td>Monthly progress reports</td>
</tr>
<tr>
<td>11.8</td>
<td>Inspection</td>
</tr>
<tr>
<td>11.9</td>
<td>Samples</td>
</tr>
<tr>
<td>11.10</td>
<td>Tests</td>
</tr>
<tr>
<td>11.11</td>
<td>Examination of work before covering up</td>
</tr>
<tr>
<td>11.12</td>
<td>Rejection</td>
</tr>
<tr>
<td>11.13</td>
<td>Remedial work</td>
</tr>
<tr>
<td>11.14</td>
<td>Delays during construction</td>
</tr>
<tr>
<td>11.15</td>
<td>Quality control records and Documents</td>
</tr>
<tr>
<td>Section</td>
<td>Title</td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>11.16</td>
<td>Video recording</td>
</tr>
<tr>
<td>11.17</td>
<td>Suspension of unsafe Construction Work</td>
</tr>
<tr>
<td>12</td>
<td><strong>Completion Certificate</strong></td>
</tr>
<tr>
<td>12.1</td>
<td>Tests on completion</td>
</tr>
<tr>
<td>12.2</td>
<td>Provisional Certificate</td>
</tr>
<tr>
<td>12.3</td>
<td>Completion of remaining Works</td>
</tr>
<tr>
<td>12.4</td>
<td>Completion Certificate</td>
</tr>
<tr>
<td>12.5</td>
<td>Rescheduling of Tests</td>
</tr>
<tr>
<td>13</td>
<td><strong>Change of Scope</strong></td>
</tr>
<tr>
<td>13.1</td>
<td>Change of Scope</td>
</tr>
<tr>
<td>13.2</td>
<td>Procedure for Change of Scope</td>
</tr>
<tr>
<td>13.3</td>
<td>Payment for Change of Scope</td>
</tr>
<tr>
<td>13.4</td>
<td>Restrictions on Change of Scope</td>
</tr>
<tr>
<td>13.5</td>
<td>Power of the Authority to undertake works</td>
</tr>
<tr>
<td>14</td>
<td><strong>Maintenance</strong></td>
</tr>
<tr>
<td>14.1</td>
<td>Maintenance obligations of the Sub-Contractor</td>
</tr>
<tr>
<td>14.2</td>
<td>Deleted</td>
</tr>
<tr>
<td>14.3</td>
<td>Deleted</td>
</tr>
<tr>
<td>14.4</td>
<td>Deleted</td>
</tr>
<tr>
<td>14.5</td>
<td>Deleted</td>
</tr>
<tr>
<td>14.6</td>
<td>Deleted</td>
</tr>
<tr>
<td>14.7</td>
<td>Employer’s right to take remedial measures</td>
</tr>
<tr>
<td>14.8</td>
<td>Restoration of loss or damage to Project Highway</td>
</tr>
<tr>
<td>14.9</td>
<td>Overriding powers of the Employer</td>
</tr>
<tr>
<td>15</td>
<td>Deleted</td>
</tr>
<tr>
<td>16</td>
<td><strong>Traffic Regulation</strong></td>
</tr>
<tr>
<td>16.1</td>
<td>Traffic regulation by the Contractor</td>
</tr>
</tbody>
</table>
17  Defects Liability  71
17.1 Defects Liability Period  71
17.2 Remedying Defects  71
17.3 Cost of remedying Defects  71
17.4 Contractor’s failure to rectify Defects  71
17.5 Contractor to search cause  72
17.6 Extension of Defects Liability Period  72
18  Deleted  73

PART  IV

Financial Covenants

19  Payments  75
19.1 Contract Price  75
19.2 Advance Payment  76
19.3 Procedure for estimating the payment for the Works  78
19.4 Stage Payment Statement for Works  78
19.5 Stage Payment for Works  78
19.6 Deleted  79
19.7 Deleted  79
19.8 Deleted  79
19.9 Time of payment  79
19.10 Price adjustment for the Works  80
   Price Adjustment due to Increase or decrease in costs  80
   Price Adjustment due to Currency Fluctuations  85
19.11 Restrictions on price adjustment  85
19.12 Deleted  85
19.13 Final Payment Statement  85
19.14 Discharge  85
19.15 Final Payment Certificate 86
19.16 Deleted 86
19.17 Change in law 87
19.18 Correction of Interim Payment Certificates 87
19.19 Employer’s claims 87
19.20 Bonus for early completion 87

20 Insurance 88
20.1 Insurance for Works 88
20.2 Notice to the Employer 89
20.3 Evidence of Insurance Cover 89
20.4 Remedy for failure to insure 89
20.5 Waiver of subrogation 90
20.6 Sub-Contractor’s waiver 90
20.7 Cross liabilities 90
20.8 Accident or injury to workmen 90
20.9 Insurance against accident to workmen 91
20.10 Application of insurance proceeds 91
20.11 Compliance with policy conditions 96

Part V
Force Majeure and Termination
21 Force Majeure 93
21.1 Force Majeure 93
21.2 Non-Political Event 93
21.3 Indirect Political Event 94
21.4 Political Event 94
21.5 Duty to report Force Majeure Event 94
21.6 Effect of Force Majeure Event on the Agreement 95
21.7 Termination Notice for Force Majeure Event 96
21.8 Termination Payment for Force Majeure Event 96
21.9 Dispute resolution 97
21.10 Excuse from performance of obligations 97

22 Suspension of Sub-Contractor’s Rights 98
22.1 Suspension upon Sub-Contractor Default 98
22.2 Authority to act on behalf of Sub-Contractor 98
22.3 Revocation of Suspension 98
22.4 Termination 99

23 Termination 100
23.1 Termination for Sub-Contractor Default 100
23.2 Termination for Employer Default 102
23.3 Termination for Employer’s convenience 102
23.4 Requirements after Termination 103
23.5 Valuation of Unpaid Works 103
23.6 Termination Payment 103
23.7 Other rights and obligations of the Parties 105
23.8 Survival of rights 105

PART VI

Other Provisions

24 Assignment and Charges 107
24.1 Restrictions on assignment and charges 107
24.2 Hypothecation of Materials or Plant 107

25 Liability and Indemnity 108
25.1 General indemnity 108
25.2 Indemnity by the Sub-Contractor 108
25.3 Notice and contest of claims 109
25.4 Defence of claims 109
25.5 No consequential claims
25.6 Survival on Termination

26 Dispute Resolution

26.1 Dispute Resolution
26.2 Conciliation
26.3 Arbitration
26.4 Adjudication by Regulatory Employer, Tribunal or Commission

27 Miscellaneous

27.1 Governing law and jurisdiction
27.2 Waiver of immunity
27.3 Deleted
27.4 Waiver
27.5 Liability for review of Documents and Drawings
27.6 Exclusion of implied warranties etc.
27.7 Survival
27.8 Entire Agreement
27.9 Severability
27.10 No partnership
27.11 Third Parties
27.12 Successors and assigns
27.13 Notices
27.14 Language
27.15 Counterparts
27.16 Confidentiality
27.17 Copyright and Intellectual Property rights
27.18 Limitation of Liability

28 Definitions

DLI/CON/776/651
### Schedules

#### A  SITE OF THE PROJECT  130

1. The Site  130  
   - Annex-I: Site  131  
   - Annex-II: Dates for providing Right of Way  137  
   - Annex-III: Alignment Plans  138  
   - Annex-IV: Environment Clearances  139

#### B  Development of the Project Highway  140

1. Development of the Project Highway  140  
2. Rehabilitation and augmentation  140  
3. Specifications and Standards  140  
   - Annex-I: Description of Two-Laning  141

#### C  Project Facilities  168

1. Project Facilities  168  
2. Description of Project Facilities  168  
3. Facilities for Authority and Authority's Engineer/ Employer  170  
   - Annex-I: Minimum Requirement of Authority/ Authority Engineer's Office  171  
   - Annex-II: Minimum Requirement of Employer/ Authority/ Authority Engineer's Residential Accommodation  174  
   - Annex-III: Minimum Requirement of Laboratory equipment's & Operation thereof  175  
   - Annex-IV  179

#### D  Specifications and Standards  180

1. Construction  180  
2. Design Standards  180  
   - Annex-I: Specifications and Standards for Construction  181
E  Maintenance Requirements 182
   1. Maintenance Requirements 182
   2. Repair/rectification of Defects and deficiencies 182
   3. Other Defects and deficiencies 182
   4. Extension of time limit 182
   5. Emergency repairs/restoration 183
   6. Deleted 183
   7. Deleted 183
   8. Deleted 183
Annex-I: Repair/rectification of Defects and deficiencies 184
F  Applicable Permits 186
   1. Applicable Permits 186
G  Annex-I: Form of Bank Guarantee for Performance Security 187
     Annex-II: Form for Guarantee for Withdrawal of Retention Money 190
     Annex-III: Form of Guarantee for Advance payment 193
H  Contract Price Weightages 197
I  Drawings 202
   1. Drawings 202
   2. Additional drawings 202
Annex-I: List of Drawings 203
J  Project Completion Schedule 204
   1. Project Completion Schedule 204
   2. Project Milestone-I 204
   3. Project Milestone-II 204
   4. Project Milestone-III 204
   5. Project Milestone-IV 205
   6. Project Milestone-V 205
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.</td>
<td>Project Milestone-VI</td>
<td>205</td>
</tr>
<tr>
<td>8.</td>
<td>Scheduled Completion Date</td>
<td>205</td>
</tr>
<tr>
<td>9.</td>
<td>Extension of time</td>
<td>206</td>
</tr>
<tr>
<td>K</td>
<td>Tests on Completion</td>
<td>207</td>
</tr>
<tr>
<td></td>
<td>1. Schedule for Test</td>
<td>207</td>
</tr>
<tr>
<td></td>
<td>2. Tests</td>
<td>207</td>
</tr>
<tr>
<td></td>
<td>3. Agency for conducting Tests</td>
<td>208</td>
</tr>
<tr>
<td></td>
<td>4. Completion Certificate</td>
<td>208</td>
</tr>
<tr>
<td>L</td>
<td>Provisional/Completion Certificate</td>
<td>209</td>
</tr>
<tr>
<td>M</td>
<td>Deleted</td>
<td>211</td>
</tr>
<tr>
<td>N</td>
<td>Deleted</td>
<td>212</td>
</tr>
<tr>
<td>O</td>
<td>Forms of Payment Statements</td>
<td>213</td>
</tr>
<tr>
<td></td>
<td>1. Stage Payment Statement for Works</td>
<td>213</td>
</tr>
<tr>
<td></td>
<td>2. Deleted</td>
<td>214</td>
</tr>
<tr>
<td></td>
<td>3. Deleted</td>
<td>214</td>
</tr>
<tr>
<td>P</td>
<td>Insurance</td>
<td>215</td>
</tr>
<tr>
<td></td>
<td>1. Insurance during Construction Period</td>
<td>215</td>
</tr>
<tr>
<td></td>
<td>2. Insurance for Contractor's Defects Liability</td>
<td>215</td>
</tr>
<tr>
<td></td>
<td>3. Insurance against injury to persons and damage to property</td>
<td>215</td>
</tr>
<tr>
<td></td>
<td>4. Insurance to be in joint names</td>
<td>216</td>
</tr>
</tbody>
</table>
Part I

Preliminary
ENGINEERING, PROCUREMENT AND CONSTRUCTION AGREEMENT

THIS AGREEMENT is entered into on this the ……….. Day of ………, 20…..

BETWEEN

Engineering Projects (India) Limited, (A Government of India Enterprise), having its Corporate Office at Core-3, SCOPE Complex, 7, Lodhi Road, New Delhi 110003. (hereinafter referred to as the “Employer” which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and assigns) of One Part;

AND

{------------} means the selected bidder having its registered office at……………, (hereinafter referred to as the “Sub-Contractor” which expression shall, unless repugnant to the context or meaning thereof, include its successors and permitted assigns) of the Other Part.

WHEREAS:

(A) Ministry of External Affairs, Govt. of India (“Authority”) nodal agency for implementation of this project has selected EPI-C&C JV, as an Engineering, Procurement, and Construction (“EPC”) Contractor through its Request for Proposal No. IrconISL/1021/Tender/74/MEA-Kaladan-Road dated 24.02.2016 Government of India and Government of Myanmar had signed a Framework Agreement to develop the Kaladan Multi Modal Transit Project in Myanmar territory through India's grant assistance to Myanmar., and as part of this endeavour, the Authority has decided to undertake the project “Construction of Two Lane Road on NH Specifications from Paletwa to Zorinpui at India-Myanmar Border in Chin State of Myanmar having length of approx. 109.2 km.”

(B) EPI-C&C JV intends to construct Two Lane Road on NH Specifications from Paletwa to Zorinpui at India-Myanmar Border in Chin State of Myanmar having length of approx. 109.2 km through an Engineering, Procurement, Construction (“EPC”)

(C) EPIL, the Employer had accordingly invited proposals for execution of its own part in JV by its NIT DLI/CON/Myanmar/……. dated ……….. for identification of eligible and qualified bidders for EPC of the above work the selected bidder basis in accordance with the terms and conditions to be set forth in an agreement to be entered into. The Employer had also prescribed the technical and commercial terms and conditions and opened financial bids of eligible and qualified bidders.

(D) After evaluation of the bids received, the first party had accepted the bid of the selected bidder and issued its Letter of Acceptance No. …….. dated ……….. (Hereinafter called the “LOA”) to the ……………………………. Sub-Contractor for rehabilitation and augmentation of the above section at the contract price specified hereinafter, requiring the selected bidder to inter alia:
(i) deliver to the Employer a legal opinion from the legal counsel of the selected bidder with respect to the authority of the selected bidder to enter into this Agreement and the enforceability of the provisions thereof, within 10 (ten) days of the date of issue of LOA; and

(ii) Execute this Agreement within 15 (fifteen) days of the date of issue of LOA.

(E) The Sub-Contractor has fulfilled the requirements specified in Recital (D) above;

NOW THEREFORE in consideration of the foregoing and the respective covenants and agreements set forth in this Agreement, the sufficiency and adequacy of which is hereby acknowledged, the Employer hereby covenants to pay the Contractor, in consideration of the obligations specified herein, the Contract Price or such other sum as may become payable under the provisions of the Agreement at the times and in the manner specified by the Agreement and intending to be legally bound hereby, the Parties agree as follows:

The following documents attached hereto shall be deemed to form an integral part of this agreement:-

(a) Volume - I: The Agreement;
   Corrigendum to the Agreement;
   Addendum, if any, to Tender;
   Letter comprising the financial Bid;
   Letter of Acceptance;
   Power of Attorney;
   Legal Opinion;
   Any Other document to be specified

(b) Volume-II:
   Technical Bid
ARTICLE 1

DEFINITIONS AND INTERPRETATION

1.1 Definitions

The words and expressions beginning with capital letters and defined in this Agreement (including those in Article 28) shall, unless the context otherwise requires, have the meaning ascribed thereto herein, and the words and expressions defined in the Schedules and used therein shall have the meaning ascribed thereto in the Schedules.

1.2 Interpretation

1.2.1 In this Agreement, unless the context otherwise requires,

(a) references to any legislation or any provision thereof shall include amendment or re-enactment or consolidation of such legislation or any provision thereof so far as such amendment or re-enactment or consolidation applies or is capable of applying to any transaction entered into hereunder;

(b) references to laws of Myanmar or Myanmar law or regulation having the force of law shall include the laws, acts, ordinances, rules, regulations, bye laws or notifications which have the force of law in the territory of India/Myanmar and as from time to time may be amended, modified, supplemented, extended or re-enacted;

(c) references to a “person” and words denoting a natural person shall be construed as a reference to any individual, firm, company, corporation, society, trust, government, state or agency of a state or any association or partnership (whether or not having separate legal personality) of two or more of the above and shall include successors and assigns;

(d) the table of contents, headings or sub-headings in this Agreement are for convenience of reference only and shall not be used in, and shall not affect, the construction or interpretation of this Agreement;

(e) the words “include” and “including” are to be construed without limitation and shall be deemed to be followed by “without limitation” or “but not limited to” whether or not they are followed by such phrases;

(f) references to “construction” or “building” include, unless the context otherwise requires, survey and investigation, design, developing, engineering, procurement, supply of plant, materials, equipment, labour, delivery, transportation, installation, processing, fabrication, testing, and commissioning of the Project Highway, including maintenance during the Construction Period, removing of defects, if any, and other activities incidental to the construction and “construct” or “build” shall be construed accordingly;

(g) references to “development” include, unless the context otherwise requires,
construction, renovation, refurbishing, augmentation, up-gradation and other activities incidental thereto during the Construction Period, and “develop” shall be construed accordingly;

(h) any reference to any period of time shall mean a reference to that according to Myanmar standard time {except for bidding};

(i) any reference to day shall mean a reference to a calendar day;

(j) references to a “business day” shall be construed as a reference to a day (other than a Sunday) on which banks in Yangon are generally open for business;

(k) any reference to month shall mean a reference to a calendar month as per the Gregorian calendar;

(l) references to any date, period or Project Milestone shall mean and include such date, period or Project Milestone as may be extended pursuant to this Agreement;

(m) any reference to any period commencing “from” a specified day or date and “till” or “until” a specified day or date shall include both such days or dates; provided that if the last day of any period computed under this Agreement is not a business day, then the period shall run until the end of the next business day;

(n) the words importing singular shall include plural and vice versa;

(o) references to any gender shall include the other and the neutral gender;

(p) “lakh” means a hundred thousand (100,000) and “crore” means ten million (10,000,000);

(q) “indebtedness” shall be construed so as to include any obligation (whether incurred as principal or surety) for the payment or repayment of money, whether present or future, actual or contingent;

(r) references to the “winding-up”, “dissolution”, “insolvency”, or “reorganisation” of a company or corporation shall be construed so as to include any equivalent or analogous proceedings under the law of the jurisdiction in which such company or corporation is incorporated or any jurisdiction in which such company or corporation carries on business including the seeking of liquidation, winding-up, reorganization, dissolution, arrangement, protection or relief of debtors;

(s) save and except as otherwise provided in this Agreement, any reference, at any time, to any agreement, deed, instrument, licence or document of any description shall be construed as reference to that agreement, deed, instrument, licence or other document as amended, varied, supplemented, modified or suspended at the time of such reference; provided that this Clause shall not operate so as to increase liabilities or obligations of the Employer hereunder or pursuant hereto in any manner whatsoever;
(t) any agreement, consent, approval, authorization, notice, communication, information or report required under or pursuant to this Agreement from or by any Party or the Employer’s Engineer shall be valid and effective only if it is in writing under the hand of a duly authorized representative of such Party or the Employer’s Engineer, as the case may be, in this behalf and not otherwise;

(u) the Schedules and Recitals to this Agreement form an integral part of this Agreement and will be in full force and effect as though they were expressly set out in the body of this Agreement;

(v) references to Recitals, Articles, Clauses, Sub-clauses or Schedules in this Agreement shall, except where the context otherwise requires, mean references to Recitals, Articles, Clauses, Sub-clauses and Schedules of or to this Agreement, and references to a Paragraph shall, subject to any contrary indication, be construed as a reference to a Paragraph of this Agreement or of the Schedule in which such reference appears;

(w) the damages payable by either Party to the other of them, as set forth in this Agreement, whether on per diem basis or otherwise, are mutually agreed genuine pre-estimated loss and damage likely to be suffered and incurred by the Party entitled to receive the same and are not by way of penalty (the “Damages”); and

(x) Time shall be of the essence in the performance of the Parties’ respective obligations. If any time period specified herein is extended for the reasons specified in the Agreement, such extended time shall also be of the essence.

1.2.2 Unless expressly provided otherwise in this Agreement, any Documentation required to be provided or furnished by the Sub-Contractor to the Employer shall be provided free of cost and in three copies, and if the Employer is required to return any such Documentation with its comments and/or approval, it shall be entitled to retain two copies thereof.

1.2.3 The rule of construction, if any, that a contract should be interpreted against the parties responsible for the drafting and preparation thereof, shall not apply.

1.2.4 Any word or expression used in this Agreement shall, unless otherwise defined or construed in this Agreement, bear its ordinary English meaning and, for these purposes, the General Clauses Act, 1897 shall not apply.

1.3 Measurements and arithmetic conventions

All measurements and calculations shall be in the metric system and calculations done to 2 (two) decimal places, with the third digit of 5 (five) or above being rounded up and below 5 (five) being rounded down.

1.4 Priority of agreements and errors/discrepancies

1.4.1 This Agreement, and all other agreements and documents forming part of or referred to in this Agreement are to be taken as mutually explanatory and, unless otherwise expressly provided elsewhere in this Agreement, the priority of this Agreement and other documents and agreements forming part hereof or referred to
herein shall, in the event of any conflict between them, be in the following order:

(a) This Agreement; and

(b) All other agreements and documents forming part hereof or referred to herein; i.e. this Agreement at (a) above shall prevail over the agreements and documents at (b).

1.4.2 Subject to the provisions of Clause 1.4.1, in case of ambiguities or discrepancies within this Agreement, the following shall apply:

(a) between two or more Clauses of this Agreement, the provisions of a specific Clause relevant to the issue under consideration shall prevail over those in other Clauses;

(b) between the Clauses of this Agreement and the Schedules, the Clauses shall prevail and between Schedules and Annexes, the Schedules shall prevail;

(c) between any two Schedules, the Schedule relevant to the issue shall prevail;

(d) between the written description on the Drawings and the Specifications and Standards, the latter shall prevail;

(e) between the dimension scaled from the Drawing and its specific written dimension, the latter shall prevail; and

(f) between any value written in numerals and that in words, the latter shall prevail.

1.5 Joint and several liability

1.5.1 If the contractor has formed a consortium of two persons for implementing the project:

(a) these persons shall, without prejudice to the provisions of this agreement, be deemed to be Jointly and severally liable to the Authority for the performance of the Agreement; and

(b) The contractor shall ensure that no change in the composition of the consortium is Effected without the prior consent of the Authority.

1.5.2 Without prejudice to the joint and several liability of all the members of the consortium, the lead member shall represent all the members of the consortium and shall at all times be liable and responsible for discharging the functions and shall at all times be liable and responsible for discharging the functions and obligations of the contractor. The contractor shall ensure that each member of the consortium shall be bound by any decision, communication of the lead member. The Authority shall have the right to release payments soley to the lead member and shall not in any manner be responsible or liable for the inter se allocation of payments among members of the consortium.
Part II
Scope of Work
ARTICLE 2

SCOPE OF THE WORK

2.1 Scope of the Work

Under this Agreement, the scope of the work (the “Scope of the Work”) shall mean and include:

(a) construction of the Project Highway on the Site set forth in Schedule-A and as specified in Schedule-B together with provision of Project Facilities as specified in Schedule-C, and in conformity with the Specifications and Standards set forth in Schedule-D;

(b) Deleted.

(c) Performance and fulfillment of all other obligations of the Contractor in accordance with the provisions of this Agreement and matters incidental thereto or necessary for the performance of any or all of the obligations of the Sub-Contractor under this Agreement.
ARTICLE 3

OBLIGATIONS OF THE SUB-CONTRACTOR

3.1 Obligations of the Sub-Contractor

3.1.1 Subject to and on the terms and conditions of this Agreement, the Sub-Contractor shall undertake the survey, investigation, design, engineering, procurement and construction of the Project Highway and observe, fulfil, comply with and perform all its obligations set out in this Agreement or arising hereunder.

3.1.2 The Sub-Contractor shall comply with all Applicable Laws and Applicable Permits (including renewals as required) in the performance of its obligations under this Agreement.

3.1.3 Subject to the provisions of Clauses 3.1.1 and 3.1.2, the Sub-Contractor shall discharge its obligations in accordance with Good Industry Practice and as a reasonable and prudent person.

3.1.4 The Sub-Contractor shall remedy any and all loss or damage to the Project Highway from the Appointed Date until the end of the Construction Period at the Contractor’s cost, save and except to the extent that any such loss or damage shall have arisen from any default or neglect of the Authority.

3.1.5 The Sub-Contractor shall remedy any and all loss or damage to the Project Highway during the Defects Liability Period at the Sub-Contractor’s cost to the extent that such loss or damage shall have arisen out of the reasons specified in Clause 17.3.

3.1.6 Deleted.

3.1.7 The Sub-Contractor shall, at its own cost and expense, in addition to and not in derogation of its obligations elsewhere set out in this Agreement:

(a) make, or cause to be made, necessary applications to the relevant Government Instrumentalities with such particulars and details as may be required for obtaining Applicable Permits set forth in Schedule-F and obtain and keep in force and effect such Applicable Permits in conformity with the Applicable Laws;

(b) procure, as required, the appropriate proprietary rights, licences, agreements and permissions for Materials, methods, processes and systems used or incorporated into the Project Highway;
(c) make reasonable efforts to maintain harmony and good industrial relations among the personnel employed by it or its Sub-contractors in connection with the performance of its obligations under this Agreement;

(d) ensure and procure that its Sub-contractors comply with all Applicable Permits and Applicable Laws in the performance by them of any of the Contractor’s obligations under this Agreement;

(e) not do or omit to do any act, deed or thing which may in any manner be violative of any of the provisions of this Agreement;

(f) support, cooperate with and facilitate the Employer in the implementation and operation of the Project in accordance with the provisions of this Agreement;

(g) ensure that the Contractor and its Sub-contractors comply with the safety and welfare measures for labour in accordance with the Applicable Laws and Good Industry Practice;

(h) keep, on the Site, a copy of this Agreement, publications named in this Agreement, the Drawings, Documents relating to the Project, and Change of Scope Orders and other communications given under this Agreement. The Authority’s Engineer/ Employer and its authorised personnel shall have the right of access to all these documents at all reasonable times;

(i) cooperate with other contractors employed by the Employer and personnel of any public authority; and

(j) not interfere unnecessarily or improperly with the convenience of the public, or the access to and use and occupation of all roads and footpaths, irrespective of whether they are public or in the possession of the Authority or of others.

3.1.8 The Sub-Contractor shall undertake all necessary superintendence to plan, arrange, direct, manage, inspect and test the Works.

3.2 **Obligations relating to sub-contracts and any other agreements**

3.2.1 The Contractor shall not sub-contract any Works in more than 70% (seventy per cent) of the total length of the Project Highway and shall carry out Works directly under its own supervision and through its own personnel in at least 30% (thirty per cent) of the total length of the Project Highway. Provided, however, that in respect of the Works carried out directly by the Contractor, it may enter into contracts for the supply and installation of Materials, Plant, equipment, road furniture, safety devices and labor, as the case may be, for such Works. For the avoidance of doubt, the Parties agree that the Contractor may sub-divide the aforesaid length of 30% (thirty per cent) in no more than 5 (five) sections of the Project Highway. The Parties expressly agree that all obligations and liabilities under this Agreement shall at all times remain with the Contractor. {The Parties also agree that obligation of the Contractor to carry out Works directly in at least 30% (thirty per cent) of the Project Highway shall be discharged solely by the Lead Member.}§
3.2.2 In the event any sub-contract for Works, it should mandatorily be from Indian/Myanmar registered companies. Further if the aggregate of such sub-contracts with any Sub-contractor, exceeds 5% (five percent) of the Contract Price, the Contractor shall communicate the name and particulars, including the relevant experience of the sub-contractor, to the Authority prior to entering into any such sub-contract. The Authority shall examine the particulars of the sub-contractor from the national security and public interest perspective and may require the Contractor, no later than 30 (thirty) business days from the date of receiving the communication from the Contractor, not to proceed with the sub-contract, and the Contractor shall comply therewith.

3.2.3 In the event any sub-contract referred to in Clause 3.2.2 relates to a sub-contractor who has, over the preceding 3 (three) years, not undertaken at least one work of a similar nature with a contract value exceeding 40% (forty per cent) of the value of the sub-contract to be awarded hereunder and received payments in respect thereof for an amount equal to at least such 40% (forty per cent), the Authority may, no later than 30 (thirty) business days from the date of receiving the communication from the Contractor, require the Contractor not to proceed with such sub-contract, and the Contractor shall comply therewith.

3.2.4 It is expressly agreed that the Contractor shall, at all times, be responsible and liable for all its obligations under this Agreement notwithstanding anything contained in the agreements with its Sub-contractors or any other agreement that may be entered into by the Contractor, and no default under any such agreement shall excuse the Contractor from its obligations or liability hereunder.

3.3 Employment of foreign nationals

The Sub-Contractor acknowledges, agrees and undertakes that employment of foreign personnel by the Sub-Contractor and/or its Sub-contractors and their sub-contractors shall be subject to grant of requisite regulatory permits and approvals including employment/residential visas and work permits, if any required, and the obligation to apply for and obtain the same shall and will always be of the Sub-Contractor. Notwithstanding anything to the contrary contained in this Agreement, refusal of or inability to obtain any such permits and approvals by the Sub-Contractor or any of its Sub-contractors or their sub-contractors shall not constitute Force Majeure Event, and shall not in any manner excuse the Sub-Contractor from the performance and discharge of its obligations and liabilities under this Agreement.

3.4 Sub-Contractor’s personnel

3.4.1 The Sub-Contractor shall ensure that the personnel engaged by it or by its Sub-contractors in the performance of its obligations under this Agreement are at all times appropriately qualified, skilled and experienced in their respective functions in conformity with Good Industry Practice.

3.4.2 The Authority’s Engineer / Employer may, for reasons to be specified in writing, direct the Sub-Contractor to remove any member of the Contractor’s or Sub-contractor’s personnel. Provided that any such direction issued by the Authority’s Engineer / Employer shall specify the reasons for the removal of such person.
3.4.3 The Sub-Contractor shall on receiving such a direction from the Authority’s Engineer order for the removal of such person or persons with immediate effect. It shall be the duty of the Contractor to ensure that such persons are evicted from the Site within 10 (ten) days of any such direction being issued in pursuance of Clause 3.4.2. The Sub-Contractor shall further ensure that such persons have no further connection with the Works or Maintenance under this Agreement. The Sub-Contractor shall then appoint (or cause to be appointed) a replacement.

3.5 Advertisement on Project Highway

The Project Highway or any part thereof shall not be used in any manner to advertise any commercial product or services.

3.6 Sub-Contractor's care of the Works

The Sub-Contractor shall bear full risk in and take full responsibility for the care of the Works, and of the Materials, goods and equipment for incorporation therein, from the Appointed Date until the date of Provisional Certificate (with respect to the Works completed prior to the issuance of the Provisional Certificate) and/or Completion Certificate (with respect to the Works referred to in the Punch List), save and except to the extent that any such loss or damage shall have arisen from any default or neglect of the Authority.

3.7 Electricity, water and other services

The Sub-Contractor shall be responsible for procuring of all power, water and other services that it may require. All associated works which are essential for execution of subject work deemed to be assessed and cost has been in built in the quoted rates, No extra payment for any associated works.

3.8 Unforeseeable difficulties

Except as otherwise stated in the Agreement:

(a) the Sub-Contractor accepts complete responsibility for having foreseen all difficulties and costs of successfully completing the Works;
(b) the Contract Price shall not be adjusted to take account of any unforeseen difficulties or costs; and

(c) the Scheduled Completion Date shall not be adjusted to take account of any unforeseen difficulties or costs.

3.9 Engineering Facilities

3.9.1 The Sub-Contractor is required to provide following facilities for Employer/authority Engineer staff at site as detailed in Schedule-C.

3.9.2 During construction of engineering facilities, the Contractor may provide rented/temporary office, accommodation or and a laboratory with all necessary testing equipment’s on-temporary / permanent basis up to completion of project for first three months. However if not provided in three months, penalty @ 0.01% of contract price shall be charge on monthly basis for period of delay.
ARTICLE 4

OBLIGATIONS OF THE EMPLOYER

4.1 Obligations of the Employer

4.1.1 The Employer shall, at its own cost and expense, undertake, comply with and perform all its obligations set out in this Agreement or arising hereunder.

4.1.2 The Employer shall be responsible for the correctness of the Scope of the Project, Project Facilities, Specifications and Standards and the criteria for testing of the completed Works.

4.1.3 The Employer shall provide to the Sub-Contractor:

(a) upon receiving the Performance Security under Clause 7.1.1, the Right of Way in accordance with the provisions of Clauses 8.2 and 8.3, within a period of 15 (fifteen) days from the date of this Agreement, on no less than 70% (Seventy per cent) of the total length of the Project Highway;
(b) environmental clearances are not required for project highway
(c) the Employer shall provide safety consultant and proof consultant (for the approval of design and drawings).
(d) If Employer provide the Survey data to Sub-Contractor for designing purpose approx. Expenditure @ 900 USD/Km to be recovered from bidder.

In addition to above expenditure towards Bush Clearance, Joint Memorandum and Tree cutting shall be recovered as per actual, if it will be done by Employer.

4.1.4 Delay in providing Right of way in accordance with the provisions of clause 4.1.3 shall entitle the contractor to damages in a sum calculated in accordance with the provisions of clause 10.5 of this agreement and time extension in accordance with the provisions of clause 10.5 of this agreement.

4.1.5 Notwithstanding anything to the contrary contained in this Agreement, the Parties expressly agree that the aggregate Damages payable under Clauses 4.1.4, 8.3 and 9.2 shall not exceed 1% (one per cent) of the Contract Price. For the avoidance of doubt, the Damages payable by the Employer under the aforesaid Clauses shall not be additive if they arise concurrently from more than one cause but relate to the same part of the Project Highway.

Both the parties agree that payment of these Damages shall be full and final settlement of all claims of the Sub-Contractor and such compensation shall be the sole remedy against delays of the Employer and both parties further agree this as final cure against delays of the Employer.

4.1.6 The Employer agrees to provide support to the Sub-Contractor and undertakes to observe, comply with and perform, subject to and in accordance with the provisions of this Agreement and the Applicable Laws, the following:
(a) upon written request from the Sub-Contractor, and subject to the Sub-
Contractor complying with Applicable Laws, provide reasonable support to
the Sub-Contractor in procuring Applicable Permits required from any
Government Instrumentality for implementation of the Project;
(b) upon written request from the Sub-Contractor, provide reasonable assistance
to the Sub-Contractor in obtaining access to all necessary infrastructure
facilities and utilities, including water and electricity at rates and on terms no
less favourable than those generally available to commercial customers
receiving substantially equivalent services;
(c) procure that no barriers that would have a material adverse effect on the
works are erected or placed on or about the Project Highway by any
Government Instrumentality or persons claiming through or under it, except
for reasons of Emergency, national security, law and order or collection of
inter-state taxes;
(d) not do or omit to do any act, deed or thing which may in any manner be
violative of any of the provisions of this Agreement;
(e) support, cooperate with and facilitate the Sub-Contractor in the
implementation of the Project in accordance with the provisions of this
Agreement; and
(f) upon written request from the Sub-Contractor and subject to the provisions
of Clause 3.3, provide reasonable assistance to the Sub-Contractor and any
expatriate personnel of the Sub-Contractor or its Sub-contractors to obtain
applicable visas and work permits for the purposes of discharge by the Sub-
Contractor or its Sub-contractors of their obligations under this Agreement
and the agreements with the Sub-contractors.

4.2 Maintenance obligations prior to the Appointed Date

Since the project is totally a green field project, no maintenance work shall be carried
out by Employer.

4.3 Environmental Clearances

The Employer represents and warrants that the environmental clearances are not
required to be obtained for construction of the Project by the Employer prior to the
date of issue of LOA.
ARTICLE 5

REPRESENTATIONS AND WARRANTIES

5.1 Representations and warranties of the Sub-Contractor

The Sub-Contractor represents and warrants to the Employer that:

(a) it is duly organised and validly existing under the laws of India, and has full power and authority to execute and perform its obligations under this Agreement and to carry out the transactions contemplated hereby;

(b) it has taken all necessary corporate and/or other actions under Applicable Laws to authorise the execution and delivery of this Agreement and to validly exercise its rights and perform its obligations under this Agreement;

(c) this Agreement constitutes its legal, valid and binding obligation, enforceable against it in accordance with the terms hereof, and its obligations under this Agreement will be legally valid, binding and enforceable obligations against it in accordance with the terms hereof;

(d) it is subject to the laws of Myanmar, and hereby expressly and irrevocably waives any immunity in any jurisdiction in respect of this Agreement or matters arising thereunder including any obligation, liability or responsibility hereunder;

(e) the information furnished in the Bid and as updated on or before the date of this Agreement is true and accurate in all respects as on the date of this Agreement;

(f) the execution, delivery and performance of this Agreement will not conflict with, result in the breach of, constitute a default under, or accelerate performance required by any of the terms of its memorandum and articles of association or any Applicable Laws or any covenant, contract, agreement, arrangement, understanding, decree or order to which it is a party or by which it or any of its properties or assets is bound or affected;

(g) there are no actions, suits, proceedings, or investigations pending or, to its knowledge, threatened against it at law or in equity before any court or before any other judicial, quasi-judicial or other authority, the outcome of which may result in the breach of this Agreement or which individually or in the aggregate may result in any material impairment of its ability to perform any of its obligations under this Agreement;

(h) it has no knowledge of any violation or default with respect to any order, writ, injunction or decree of any court or any legally binding order of any Government Instrumentality which may result in any material adverse effect on its ability to perform its obligations under this Agreement and no fact or circumstance exists which may give rise to such proceedings that would adversely affect the performance of its obligations under this Agreement;

(i) it has complied with Applicable Laws in all material respects and has not been subject to any fines, penalties, injunctive relief or any other civil or criminal liabilities which in the aggregate have or may have a material adverse effect on its ability to perform its obligations under this Agreement;
(j) no representation or warranty by it contained herein or in any other document furnished by it to the Employer or to any Government Instrumentality in relation to Applicable Permits contains or will contain any untrue or misleading statement of material fact or omits or will omit to state a material fact necessary to make such representation or warranty not misleading;

(k) no sums, in cash or kind, have been paid or will be paid, by it or on its behalf, to any person by way of fees, commission or otherwise for securing the contract or entering into this Agreement or for influencing or attempting to influence any officer or employee of the Employer in connection therewith;

(l) all information provided by the selected bidder in response to the Employer or otherwise, is to the best of its knowledge and belief, true and accurate in all material respects; and

(m) nothing contained in this Agreement shall create any contractual relationship or obligation between the Employer and any Sub-contractors, designers, consultants or agents of the Sub-Contractor.

5.2 Representations and warranties of the Employer

The Employer represents and warrants to the Sub-Contractor that:

(a) it has full power and Employer to execute, deliver and perform its obligations under this Agreement and to carry out the transactions contemplated herein and that it has taken all actions necessary to execute this Agreement, exercise its rights and perform its obligations, under this Agreement;

(b) it has taken all necessary actions under the Applicable Laws to authorise the execution, delivery and performance of this Agreement;

(c) it has the financial standing and capacity to perform its obligations under this Agreement;

(d) this Agreement constitutes a legal, valid and binding obligation enforceable against it in accordance with the terms hereof;

(e) it has no knowledge of any violation or default with respect to any order, writ, injunction or any decree of any court or any legally binding order of any Government Instrumentality which may result in any material adverse effect on the Authority’s ability to perform its obligations under this Agreement;

(f) it has complied with Applicable Laws in all material respects;

(g) it has good and valid right to the Site and has the power and Employer to grant the Right of Way in respect thereof to the Contractor; and

(h) it has procured Right of Way and environment clearances such that the Sub-Contractor can commence construction forthwith on 70% (seventy per cent) of the total length of the Project Highway.

5.3 Disclosure

In the event that any occurrence or circumstance comes to the attention of either Party that renders any of its aforesaid representations or warranties untrue or
incorrect, such Party shall immediately notify the other Party of the same. Such notification shall not have the effect of remedying any breach of the representation or warranty that has been found to be untrue or incorrect nor shall it adversely affect or waive any obligation of either Party under this Agreement.
ARTICLE 6

DISCLAIMER

6.1 Disclaimer

6.1.1 The Sub-Contractor acknowledges that prior to the execution of this Agreement, the Sub-Contractor has, after a complete and careful examination, made an independent evaluation of the Employer, Scope of the Work, Specifications and Standards of design and construction, Site, local conditions, physical qualities of ground, subsoil and geology, traffic volumes, suitability and availability of access routes to the Site and all information provided by the Employer or obtained, procured or gathered otherwise, and has determined to its satisfaction the accuracy or otherwise thereof and the nature and extent of difficulties, risks and hazards as are likely to arise or may be faced by it in the course of performance of its obligations hereunder. Save as provided in Clause 4.1.2 and Clause 5.2, the Employer makes no representation whatsoever, express, implicit or otherwise, regarding the accuracy, adequacy, correctness, reliability and/or completeness of any assessment, assumptions, statement or information provided by it and the Sub-Contractor confirms that it shall have no claim whatsoever against the Employer in this regard.

6.1.2 The Sub-Contractor acknowledges and hereby accepts to have satisfied itself as to the correctness and sufficiency of the Contract Price.

6.1.3 The Sub-Contractor acknowledges and hereby accepts the risk of inadequacy, mistake or error in or relating to any of the matters set forth in Clause 6.1.1 above and hereby acknowledges and agrees that the Employer shall not be liable for the same in any manner whatsoever to the Sub-Contractor, or any person claiming through or under any of them, and shall not lead to any adjustment of Contract Price or Scheduled Completion Date.

6.1.4 The Parties agree that any mistake or error in or relating to any of the matters set forth in Clause 6.1.1 above shall not vitiate this Agreement, or render it voidable.

6.1.5 In the event that either Party becomes aware of any mistake or error relating to any of the matters set forth in Clause 6.1.1 above, that Party shall immediately notify the other Party, specifying the mistake or error.

6.1.6 Except as otherwise provided in this Agreement, all risks relating to the Project shall be borne by the Sub-Contractor; and the Employer shall not be liable in any manner for such risks or the consequences thereof.
Part III Construction
ARTICLE 7

PERFORMANCE SECURITY

7.1 Performance Security

7.1.1 Sub-Contractor shall for the performance of its obligation hereunder during the construction period, provide to the Employer, within 10(Ten) days of issue of LOI, an irrevocable and unconditional Guarantee from a Bank in the form set forth in Schedule-G (The performance Security) for an amount equal to 5% (five percent) of the Contract Price. The performance Security shall be valid until 60 (sixty) days after the defect liability period. Until such time the performance Security is provided by the contractor pursuing hereto and the same come into effect, the Bid Security shall remain in force and effect, then upon such provision of the performance Security, the Employer shall release the Bid Security to the contractor.

7.1.2 Notwithstanding anything to the contrary contained in this Agreement, the Parties agree that in the event of failure of the Sub-Contractor to provide the Performance Security in accordance with the provisions of Clause 7.1.1 and within the time specified therein or such extended period as may be provided by the Authority, in accordance with the provisions of Clause 7.1.3, the Employer may encash the Bid Security and appropriate the proceeds thereof as Damages, and thereupon all rights, privileges, claims and entitlements of the Sub-Contractor under or arising out of this Agreement shall be deemed to have been waived by, and to have ceased with the concurrence of the Sub-Contractor, and this Agreement shall be deemed to have been terminated by mutual agreement of the Parties.

7.1.3 In the event the sub-contractor fails to provide the performance Security within 20 (twenty) days of this agreement, it may seek extension of time for a period not exceeding 30 (thirty) days on payment of Damages for such extended period in a sum calculated at the rate of 0.01% (zero point zero one percent) of the contract price for each day until the performance Security is provided. For avoidance of doubt the agreement shall be deemed to be terminated on expire of additional 30 days' time period and Bid Security shall be encased by the Employer.

7.2 Extension of Performance Security

The Sub-Contractor may initially provide the Performance Security for a period of 2 (two) years; provided that it shall procure the extension of the validity of the Performance Security, as necessary, at least 2 (two) months prior to the date of expiry thereof. Upon the Sub-Contractor providing an extended Performance Security, the previous Performance Security shall be deemed to be released and the Employer shall return the same to the Sub-Contractor within a period of 7 (seven) business days from the date of submission of the extended Performance Security.
7.3 **Appropriation of Performance Security**

7.3.1 Upon occurrence of a Sub-Contractor’s Default, the Employer shall, without prejudice to its other rights and remedies hereunder or in law, be entitled to encash and appropriate the relevant amounts from the Performance Security as Damages for such Sub-Contractor’s Default.

7.3.2 Upon such encashment and appropriation from the Performance Security, the Sub-Contractor shall, within 30 (thirty) days thereof, replenish, in case of partial appropriation, to its original level the Performance Security, and in case of appropriation of the entire Performance Security provide a fresh Performance Security, as the case may be, and the Sub-Contractor shall, within the time so granted, replenish or furnish fresh Performance Security as aforesaid failing which the Authority shall be entitled to terminate the Agreement in accordance with Article 23. Upon replenishment or furnishing of a fresh Performance Security, as the case may be, as aforesaid, the Sub-Contractor shall be entitled to an additional Cure Period of 30 (thirty) days for remedying the Sub-Contractor’s Default, and in the event of the Sub-Contractor not curing its default within such Cure Period, the Employer shall be entitled to encash and appropriate such Performance Security as Damages, and to terminate this Agreement in accordance with Article 23.

7.4 **Release of Performance Security**

The Employer shall return the Performance Security to the Sub-Contractor after 60 (sixty) days after expiry of DLP of Road and Structures whichever is later. Notwithstanding the aforesaid, the Parties agree that the Employer shall not be obliged to release the Performance Security until all Defects identified during the Defects Liability Period have been rectified.

7.5 **Retention Money**

7.5.1 From every payment for Works due to the Sub-Contractor in accordance with the provisions of Clause 19.5, the Employer shall deduct 6% (six per cent) thereof as guarantee money for performance of the obligations of the Sub-Contractor during the Construction and Defect Liability Period (the “Retention Money”) subject to the condition that the maximum amount of Retention Money shall not exceed 5% (five per cent) of the Contract Price.

7.5.2 Upon occurrence of a Sub-Contractor’s Default, the Employer shall, without prejudice to its other rights and remedies hereunder or in law, be entitled to appropriate the relevant amounts from the Retention Money as Damages for such Sub-Contractor’s Default.

7.5.3 The Sub-Contractor may, upon furnishing an irrevocable and unconditional bank guarantee substantially in the form provided at Annex-II of Schedule-G, require the
Employer to refund the Retention Money deducted by the Employer under the provisions of Clause 7.5.1. Provided that the refund hereunder shall be made in tranches of not less than 1% (one per cent) of the Contract Price.

7.5.4 Within 15 (fifteen) days of the date of issue of the Completion Certificate, the Employer shall discharge the bank guarantees furnished by the Sub-Contractor under the provisions of Clause 7.5.3 and refund the balance of Retention Money remaining with the Employer after adjusting the amounts appropriated under the provisions of Clause 7.5.2 and the amounts refunded under the provisions of Clause 7.5.3.

7.5.5 The Parties agree that in the event of Termination of this Agreement, the Retention Money and the bank guarantees specified in this Clause 7.5 shall be treated as if they are Performance Security and shall be reckoned as such for the purposes of Termination Payment under Clause 23.6.
ARTICLE 8
RIGHT OF WAY

8.1 The Site

The site of the Project Highway (the “Site”) shall comprise the site described in Schedule-A in respect of which the Right of Way shall be provided by the Employer to the Sub-Contractor. The Employer shall be responsible for:

(a) acquiring and providing Right of Way on the Site in accordance with the alignment finalized by the Employer, free from all encroachments and encumbrances, and free access thereto for the execution of this Agreement; and

(b) obtaining licenses and permits for environment clearance for the Project Highway.

8.2 Procurement of the Site

8.2.1 The Employer Representative and the sub-contractor shall, within 30 (thirty) days of the date of this agreement, inspect the site and prepare a memorandum containing an inventory of the Site including the vacant and unencumbered land, buildings structures, roads work & trees and any other immovable property on or attached to the Site, Subject to the Provision of Clause 8.2.3, such memorandum shall have appended thereto an appendix (the” Appendix”) specifying in reasonable details those part of the Site which vacant access and Right of Way has not been given to the sub-contractor. Signing of the memorandum in two counterparts (each of which shall constitute an original), by the authorized representative of the parties shall be deemed to constitute a valid evidence of giving the Right of Way to the sub-contractor for discharging its obligations under and in accordance with provision of this agreement and for no other purpose whatsoever.

Whenever the Employer is ready to handover any part or parts of the Site included in the Appendix, it shall inform the sub-contractor, by notice, the proposed date and time such of handing over. The Employer Representative and the sub-contractor shall, on the date so notified, inspect the specified part of the Site, and prepare a memorandum containing an inventory of the vacant and unencumbered land, buildings, structures, roads work and any other immovable property on or attached to the Site so handed over. Signing of the memorandum in two counterparts (each of which shall constitute an original), by the authorized representative of the parties shall be deemed to constitute a valid evidences of hiving the relevant Right of Way to the sub-contractor. Trees are part of ROW to be handed over and shall also be counted for accountal purpose only.

8.2.2 The Employer shall provide the Right of Way to the Sub-Contractor in respect of all land included in the Appendix by the date specified in Schedule-A for those
parts of the Site referred to therein, or no later than 6 (six) months of the Appointed Date for those parts of the Site which have not been specified in Schedule-A, and in the event of delay for any reason other than Force Majeure or breach of this Agreement by the Sub-Contractor, it shall pay to the Sub-Contractor, Damages in a sum calculated in accordance with Clause 8.3.

8.2.3 Notwithstanding anything to the contrary contained in this Clause 8.2, the Employer shall specify the parts of the Site, if any, for which Right of Way shall be provided to the sub-contractor on the date specified in Schedule-A. Such parts shall also be included in the Appendix prepared in pursuance of Clause 8.2.1. For the avoidance of doubt, the Parties expressly agreed that the Appendix shall in no event contain section of the Project Highway the cumulative length of which exceed 30% (Thirty percent) of the total length of the Project Highway.

8.2.4 Time period of completion of project i.e. date of start shall be reckoned from the date of issuing Letter of Acceptance (LOA) by Employer.

8.3 Damages for delay in handing over the Site

8.3.1 In the event the Right of Way to any part of the Site is not provided by the Authority on or before the date(s) specified in Clause 8.2 for any reason other than Force Majeure or breach of this Agreement by the Sub-Contractor, the Employer shall pay Damages to the Sub-Contractor in a sum calculated in accordance with the following formula for and in respect of those parts of the Site to which the Right of Way has not been provided:

Amount of Damages in Rs. per day per meters = 0.05 \times C \times \frac{1}{L} \times \frac{1}{N}

Where
C = the Contract Price;
L = length of the Project Highway in meters; and
N = Completion period in days (Appointed Date to Scheduled Completion Date)

In the event that any Damages are due and payable to the Sub-Contractor under the provisions of this Clause 8.3.1 for delay in providing the Right of Way, the Sub-Contractor shall, subject to the provisions of Clause 10.5, be entitled to Time Extension equal to the period for which the Damages have become due and payable under this Clause 8.3.1, save and except that:

(a) if any delays involve time overlaps, the overlaps shall not be additive; and

(b) such Time Extension shall be restricted only to the Works which are affected by the delay in providing the Right of Way.

For the avoidance of doubt, the Parties expressly agree that the Damages specified hereunder and the Time Extension specified in Clause 10.5 shall be restricted only to
failure of the Employer to provide the Right of Way for and in respect of the width of the roadway, its embankment and a parallel working strip at least 3 (three) meters wide.

8.3.2 Notwithstanding anything to the contrary contained in this Agreement, the Sub-Contractor expressly agrees that Works on all parts of the Site for which Right of Way is granted within 6 (six) months of the Appointed Date, or with respect to the parts of the Site provided in Schedule-A, no later than the date(s) specified therein, as the case may be, shall be completed before the Scheduled Completion Date and shall not qualify for any Time Extension under the provisions of Clause 8.3.1.

8.3.3 Notwithstanding anything to the contrary contained in this Agreement, the Employer may at any time withdraw any Works forming part of this Agreement, subject to such Works not exceeding an aggregate value, such value to be determined in accordance with Schedule-H, equal to 10 (ten) percent of the Contract Price. Provided that if any Works cannot be undertaken within the municipal limits of a town or within any area falling in a reserved forest or wildlife sanctuary, as the case may be, because the requisite clearances or approvals for commencing construction of Works therein have not been given within 240 (two hundred and forty) days of the Appointed date, the affected Works shall be deemed to be withdrawn under the provisions of this Clause 8.3.3 unless the Parties agree to the contrary, and such Works shall not be computed for the purposes of the aforesaid ceiling of 10% (ten per cent) hereunder.

8.3.4 In the event of withdrawal of Works under Clause 8.3.3, the Contract Price shall be reduced by an amount equal to 90 (ninety) per cent of the value of the Works withdrawn and the Sub-Contractor shall not be entitled to any other compensation or Damages for the withdrawal of Works. Provided that if any Works are withdrawn after commencement of the Construction of such works, the Employer shall pay to the Sub-Contractor 110% (one hundred and ten per cent) of the fair value of the work done, as assessed by the Authority’s Engineer Employer:

8.4 Site to be free from Encumbrances

Subject to the provisions of Clause 8.2, the Site shall be made available by the Employer to the Sub-Contractor pursuant hereto free from all Encumbrances and occupations and without the Sub-Contractor being required to make any payment to the Employer on account of any costs, compensation, expenses and charges for the acquisition and use of such Site for the duration of the Project Completion Schedule. For the avoidance of doubt, it is agreed that the existing rights of way, easements, privileges, liberties and appurtenances to the Site shall not be deemed to be Encumbrances. It is further agreed that, unless otherwise specified in this Agreement, the Sub-Contractor accepts and undertakes to bear any and all risks arising out of the inadequacy or physical condition of the Site.
8.5 **Protection of Site from encroachments**

On and after signing the memorandum and/or subsequent memorandum referred to in Clause 8.2.1, and until the issue of the Completion Certificate, the Contractor shall maintain a round-the-clock vigil over the Site and shall ensure and procure that no encroachment thereon takes place. During the Construction Period, the Sub-Contractor shall protect the Site from any and all occupations, encroachments or Encumbrances, and shall not place or create nor permit any Sub-contractor or other person claiming through or under the Agreement to place or create any Encumbrance or security threat over all or any part of the Site or the Project Assets, or on any rights of the Contractor therein or under this Agreement, save and except as otherwise expressly set forth in this Agreement. In the event of any encroachment or occupation on any part of the Site, the Sub-Contractor shall report such encroachment or occupation forthwith to the Employer and undertake its removal at its own cost and expenses.

8.6 **Special/temporary Right of Way**

The Sub-Contractor shall bear all costs and charges for any special or temporary right of way required by it in connection with access to the Site. The Sub-Contractor shall obtain at its cost such facilities on or outside the Site as may be required by it for the purposes of the Project Highway and the performance of its obligations under this Agreement.

8.7 **Access to the Employer and the Authority’s Engineer**

8.7.1 The Right of Way given to the Sub-Contractor hereunder shall always be subject to the right of access of the Employer and the Authority’s Engineer and their employees and agents for inspection, viewing and exercise of their rights and performance of their obligations under this Agreement.

8.7.2 The Sub-Contractor shall ensure, subject to all relevant safety procedures, that the Employer has un-restricted access to the Site during any emergency situation, as decided by the Authority’s Engineer.

8.8 **Geological and archaeological finds**

It is expressly agreed that mining, geological or archaeological rights do not form part of this Agreement with the Sub-Contractor for the Works, and the Contractor hereby acknowledges that it shall not have any mining rights or interest in the underlying minerals, fossils, antiquities, structures or other remnants or things either of particular geological or archaeological interest and that such rights, interest and property on or under the Site shall vest in and belong to the Employer or the
concerned Government Instrumentality. The Sub -Contractor shall take all reasonable precautions to prevent its workmen or any other person from removing or damaging such interest or property and shall inform the Employer forthwith of the discovery thereof and comply with such instructions as the concerned Government Instrumentality may reasonably give for the removal of such property. For the avoidance of doubt, it is agreed that any reasonable expenses incurred by the Sub-Contractor hereunder shall be reimbursed by the Employer. It is also agreed that the Employer shall procure that the instructions hereunder are issued by the concerned Government Instrumentality within a reasonable period.
ARTICLE 9

UTILITIES AND TREES

9.1 Existing utilities and roads

Notwithstanding anything to the contrary contained herein, the Sub-Contractor shall ensure that the respective entities owning the existing roads, right of way, level crossings, structures, or utilities on, under or above the Site are enabled by it to keep them in continuous satisfactory use, if necessary, by providing suitable temporary diversions with the Employer of the controlling body of that road, right of way or utility.

9.2 Shifting of obstructing utilities

The Sub-Contractor shall, in accordance with Applicable Laws and with assistance of the Employer, cause shifting of any utility (including electric lines, water pipes and telephone cables) to an appropriate location or alignment, if such utility or obstruction adversely affects the execution of Works or Maintenance of the Project Highway in accordance with this Agreement. The actual cost of such shifting, as approved and communicated by the entity owning the utility, shall be paid by the Sub-Contractor and reimbursed by the Employer to the Sub-Contractor. In the event of any delay in such shifting by the entity owning the utility beyond a period of 180 (one hundred and eighty) days from the date of notice by the Sub-Contractor to the Employer, the Sub-Contractor shall be entitled to Damages in a sum calculated in accordance with the formula specified in Clause 8.3.1 for the period of delay, and to Time Extension in accordance with Clause 10.5 for and in respect of the part(s) of the Works affected by such delay; provided that if the delays involve any time overlaps, the overlaps shall not be additive.

9.3 New utilities

9.3.1 The Sub-Contractor shall allow, subject to such conditions as the Employer may specify, access to, and use of the Site for laying telephone lines, water pipes, electric cables or other public utilities. Where such access or use causes any financial loss to the Sub-Contractor, it may require the user of the Site to pay compensation or damages as per Applicable Laws. For the avoidance of doubt, it is agreed that use of the Site under this Clause 9.3 shall not in any manner relieve the Sub-Contractor of its obligation to construct and maintain the Project Highway in accordance with this Agreement and any damage caused by such use shall be restored forthwith at the cost of the Employer.

9.3.2 The Employer may, by notice, require the Sub-Contractor to connect any adjoining road to the Project Highway, and the connecting portion thereof falling
within the Site shall be constructed by the Sub-Contractor at the Employer’s cost in accordance with Article 10. The Employer may by notice require the Sub-Contractor to connect, through a paved road, any adjoining service station, hotel, motel or any other public facility or amenity to the Project Highway, whereupon the connecting portion thereof that falls within the Site shall be constructed by the Sub-Contractor on payment of the cost. The cost to be paid by the Employer to the Sub-Contractor shall be determined by the Authority’s Engineer. For the avoidance of doubt, in the event such road is to be constructed for the benefit of any entity, the Employer may require such entity to make an advance deposit with the Sub-Contractor or the Authority, as the case may be, of an amount equal to the estimated cost as determined by the Authority’s Engineer and such advance shall be adjusted against the cost of construction as determined by the Authority’s Engineer hereunder.

9.3.3 In the event the construction of any Works is affected by a new utility or works undertaken in accordance with this Clause 9.3, the Sub-Contractor shall be entitled to a reasonable Time Extension as determined by the Authority’s Engineer/ Employer.

9.4 Felling of trees

The Employer shall assist the Sub-Contractor in obtaining the Applicable Permits for felling of trees for this purpose if and only if such trees cause a Material Adverse Effect on the construction of the Project Highway. The cost of such felling shall be borne by the Sub-Contractor and in the event of any delay in felling thereof for reasons beyond the control of the Sub-Contractor; it shall be excused for failure to perform any of its obligations hereunder if such failure is a direct consequence of delay in the felling of trees. The Parties hereto agree that the felled trees shall be deemed to be owned by the Govt. of Myanmar and shall be disposed in such manner and subject to such conditions as the Authority (in consultation with Govt. of Myanmar) may in its sole discretion deem appropriate. For the avoidance of doubt, the Parties agree that if any felling of trees hereunder is in a forest area, the Applicable Permit thereof shall be procured by the Employer within the time specified in the Agreement.
ARTICLE 10

DESIGN AND CONSTRUCTION OF THE PROJECT HIGHWAY

10.1 Obigations prior to commencement of Works

10.1.1 Within 20 (twenty) days of the Appointed Date, the Sub-Contractor shall:

(a) appoint its representative, duly authorized to deal with the Employer in respect of all matters under or arising out of or relating to this Agreement;
(b) appoint a representative design director (the “Design Director”) who will head the Sub-Contractor’s team design unit and shall be responsible for initial surveys, investigations, and collection of data and preparation of preliminary and detailed designs;
(c) undertake and perform all such acts, deeds and things as may be necessary or required before commencement of Works under and in accordance with this Agreement, the Applicable Laws and Applicable Permits; and
(d) make its own arrangements for quarrying of materials needed for the Project Highway under and in accordance with the Applicable Laws and Applicable Permits.

10.1.2 The Authority has already appointed an engineer shall appoint a consultant for Architectural and Engineering (A&E) Services i.e. for design and drawings. The appoint consultant will submit the working drawings within 90 days.

10.1.3 If contractor would like to start the works earlier, contractor will submit their own design and drawing on the approved alignment for the approval of Authority and Nodal Agency. No extra payment for this services.

10.1.4 The Authority has already appoint an engineer (the “Authority’s Engineer / Employer”) to discharge the functions and duties specified in this Agreement, and are already mentioned in Vol-I.

10.1.5 Within 20 (Twenty) days of the Appointed Date, the Sub-Contractor shall submit to the Employer a programme (the “Programme") for the Works, developed using networking techniques giving the following details:

Part I Sub-Contractor’s organization for the Work, the general methods and arrangements for design and construction, environmental management plan, Quality Assurance Plan including design quality plan, traffic management and safety plan covering safety of users and workers during construction, Contractor’s key personnel and equipment.

Part II Programme for completion of all stages of construction given in Schedule-H and Project Milestones of the Works as specified in Project Completion Schedule set forth in Schedule-J. The Programme shall include:
(a) the order in which the Sub-Contractor intends to carry out the Works, including the anticipated timing of design and stages of Works;
(b) the periods for reviews under Clause 10.2;
(c) the sequence and timing of inspections and tests specified in this Agreement.

The Sub-Contractor shall submit a revised programme whenever the previous programme is inconsistent with the actual progress or with the Contractor’s obligations.

Part III Monthly cash flow forecast.

10.1.6 The Sub-Contractor shall compute, on the basis of the Design and Drawings prepared and submitted by the consultant in accordance with Clause 10.2.4, and provide to the Authority’s Engineer / Employer, the length, area and numbers, as the case may be, in respect of the various items of work specified in Schedule-H and comprising the Scope of the Project. The Parties expressly agree that these details shall form the basis for estimating the interim payments for the Works in accordance with the provisions of Clause 19.3. For the avoidance of doubt, the sum of payments to be computed in respect of all the items of work shall not exceed the Contract Price, as may be adjusted in accordance with the provisions of this Agreement.

10.1.7 The Authority Contractor shall appoint a safety consultant (the “Safety Consultant”) to carry out safety audit at the design stage of the Project Highway in accordance with the Applicable Laws and Good Industry Practice. The Safety Consultant shall be appointed after proposing to the Authority a panel of three names of qualified and experienced firms from whom the Authority may choose one to be the Safety Consultant. Provided, however, that if the panel is not acceptable to the Authority and the reasons for the same are furnished to the Contractor, the Contractor shall propose to the Authority a revised panel of three names from the firms empanelled as safety consultants by the [Ministry of Road Transport and Highways] for obtaining the consent of the Authority. The Contractor shall also obtain the consent of the Authority for the key personnel of the Safety Consultant who shall have adequate experience and qualifications in safety audit of the highway projects. The Authority shall, within 30 (thirty) days of receiving a proposal from the Contractor hereunder, convey its decision, with reasons, to the Contractor, and if no such decision is conveyed within the said period, the Contractor may proceed with engaging of the Safety Consultant.

10.1.8 The safety audit pursuant to Clause 10.1.5 shall be carried out by the Safety Consultant in respect of all such design details that have a bearing on safety of Users as well as pedestrians and animals involved in or associated with accidents. The recommendations of the Safety Consultant shall be incorporated in the construction activities and programme submitted design of the Project Highway and the Contractor shall forward to the Authority’s Engineer a certificate to this effect together with the recommendations of the Safety Consultant. In the event that any works required by the Safety Consultant shall fall beyond the scope of Schedule-B, Schedule-C or Schedule-D, the Contractor shall make a report thereon and seek the instructions of the Authority for Change in Scope. For the avoidance of doubt,
the Safety Consultant to be engaged by the Contractor shall be independent of the design and implementation team of the Contractor.

10.2 Design and Drawings

The Authority shall appoint A & E Consultant for providing the good for construction drawings dully vetted by proof check consultant (the “Proof Consultant”) appoint by the Authority.

10.2.1 Design and Drawings shall be developed in conformity with the Specifications and Standards set forth in Schedule-D. In the event, the Contractor requires any relaxation in design standards due to restricted Right of Way in any section, the alternative design criteria for such section shall be provided for review of the Authority’s Engineer.

10.2.2 The Contractor shall appoint a proof check consultant (the “Proof Consultant”) after proposing to the Authority a panel of three names of qualified and experienced firms from whom the Authority may choose one to be the Proof Consultant. Provided, however, that if the panel is not acceptable to the Authority and the reasons for the same are furnished to the Contractor, the Contractor shall propose to the Authority a revised panel of three names from the firms empanelled as proof consultants by the [Ministry of Road Transport and Highways] for obtaining the consent of the Authority. The Contractor shall also obtain the consent of the Authority for two key personnel of the Proof Consultant who shall have adequate experience and qualifications in highways and bridges respectively. The Authority shall, within 30 (thirty) days of receiving a proposal from the Contractor hereunder, convey its decision, with reasons, to the Contractor, and if no such decision is conveyed within the said period, the Contractor may proceed with engaging of the Proof Consultant.

10.2.3 the Proof Consultant shall:

(a) evolve a systems approach with the Design Director so as to minimize the time required for final designs and construction drawings; and

(b) proof check the detailed calculations, drawings and designs, which have been approved by the Design Director.

10.2.4 In respect of the Contractor’s obligations with respect to the design and Drawings of the Project Highway as set forth in Schedule-I, the following shall apply:

(a) The Contractor shall prepare and submit, with reasonable promptness and in such sequence as is consistent with the Project Completion Schedule, three copies each of the design and Drawings, duly certified by the Proof Consultant, to the Authority’s Engineer for review. Provided, however, that in respect of Major Bridges and Structures, the Authority’s Engineer may require additional drawings for its review in accordance with Good Industry Practice.
(b) by submitting the Drawings for review to the Authority’s Engineer, the Contractor shall be deemed to have represented that it has determined and verified that the design and engineering, including field construction criteria related thereto, are in conformity with the Scope of the Project, the Specifications and Standards and the Applicable Laws;

(c) within 30 (thirty) days of the receipt of the Drawings, the Authority’s Engineer shall review the same and convey its observations to the Contractor with particular reference to their conformity or otherwise with the Scope of the Project and the Specifications and Standards. The Contractor shall not be obliged to await the observations of the Authority’s Engineer on the Drawings submitted pursuant hereto beyond the said period of 30 (thirty) days and may begin or continue Works at its own discretion and risk; Provided, however that in case of a Major Bridge or Structure, the aforesaid period of 30 (thirty) days may be extended upto 45 (forty five) days;

(d) if the aforesaid observations of the Authority’s Engineer indicate that the Drawings are not in conformity with the Scope of the Project or the Specifications and Standards, such Drawings shall be revised by the Contractor in conformity with the provisions of this Agreement and resubmitted to the Authority’s Engineer for review. The Authority’s Engineer shall give its observations, if any, within 20 (twenty) days of receipt of the revised Drawings. In the event the Contractor fails to revise and resubmit such Drawings to the Authority’s Engineer for review as aforesaid, the Authority’s Engineer may withhold the payment for the affected works in accordance with the provisions of Clause 19.5.4. If the Contractor disputes any decision, direction or determination of the Authority’s Engineer hereunder, the Dispute shall be resolved in accordance with the Dispute Resolution Procedure;

(e) no review and/or observation of the Authority’s Engineer and/or its failure to review and/or convey its observations on any Drawings shall relieve the Contractor of its obligations and liabilities under this Agreement in any manner nor shall the Authority’s Engineer or the Authority be liable for the same in any manner; and if errors, omissions, ambiguities, inconsistencies, inadequacies or other Defects are found in the Drawings, they and the construction works shall be corrected at the Contractor’s cost, notwithstanding any review under this Article 10;

(f) the Contractor shall be responsible for delays in submitting the Drawing as set forth in Schedule-I caused by reason of delays in surveys and field investigations, and shall not be entitled to seek any relief in that regard from the Authority; and

(g) the Contractor warrants that its designers, including any third parties engaged by it, shall have the required experience and capability in accordance with Good Industry Practice and it shall indemnify the Authority against any damage, expense, liability, loss or claim, which the Authority might incur, sustain or be subject to arising from any breach of the Contractor’s design responsibility and/or warranty set out in this Clause.

10.2.5 Any cost or delay in construction arising from review by the Authority’s Engineer shall be borne by the Sub-Contractor.
10.2.6 Works shall be executed in accordance with the Drawings Contractor in accordance with the provisions of this Clause 10.2 and the observations of the Employer/Authority’s Engineer thereon as communicated pursuant to the provisions of Clause 10.2.4 (d). Such Drawings shall not be amended or altered without prior written notice to the Authority’s Engineer. If a Party becomes aware of an error or defect of a technical nature in the design or Drawings, that Party shall promptly give notice to the other Party of such error or defect.

10.2.7 Within 90 (ninety) days of the Project Completion Date, the Contractor shall furnish to the Authority and the Authority’s Engineer a complete set of as-built Drawings, in 2 (two) hard copies and in micro film form or in such other medium as may be acceptable to the Authority, reflecting the Project Highway as actually designed, engineered and constructed, including an as-built survey illustrating the layout of the Project Highway and setback lines, if any, of the buildings and structures forming part of Project Facilities.

10.3 Construction of the Project Highway

10.3.1 The Sub-Contractor shall construct the Project Highway as specified in Schedule-B and Schedule-C, and in conformity with the Specifications and Standards set forth in Schedule-D. The Sub-Contractor shall be responsible for the correct positioning of all parts of the Works, and shall rectify any error in the positions, levels, dimensions or alignment of the Works. The 780th (Seven Hundred Eightieth) day from the Appointed Date shall be the scheduled completion date (the “Scheduled Completion Date”) and the Sub-Contractor agrees and undertakes that the construction shall be completed on or before the Scheduled Completion Date, including any extension thereof.

10.3.2 The Sub-Contractor shall construct the Project Highway in accordance with the Project Completion Schedule set forth in Schedule-J. In the event that the Sub-Contractor fails to achieve any Project Milestone or the Scheduled Completion Date within a period of 30 (thirty) days from the date set forth in Schedule-J, unless such failure has occurred due to Force Majeure or for reasons solely attributable to the Employer, it shall pay Damages to the Employer of a sum calculated at the rate of 0.05% (zero point zero five percent) of the Contract Price for delay of each day reckoned from the date specified in Schedule-J and until such Project Milestone is achieved or the Works are completed; provided that if the period for any or all Project Milestones or the Scheduled Completion Date is extended in accordance with the provisions of this Agreement, the dates set forth in Schedule-J shall be deemed to be modified accordingly and the provisions of this Agreement shall apply as if Schedule-J has been amended as above; provided further that in the event the Works are completed within or before the Scheduled Completion Date including any Time Extension, applicable for that work or section, the Damages paid under this Clause 10.3.2 shall be refunded by the Employer to the Sub-Contractor, but without any interest thereon. For the avoidance of doubt, it is agreed that recovery of Damages under this Clause shall be without prejudice to the rights of the Employer under this Agreement including the right of Termination thereof. The Parties further agree that Time Extension hereunder shall only be reckoned for and in respect of the affected works as specified in Clause 10.5.2.
10.3.3 The Employer shall notify the Sub-Contractor of its decision to impose Damages in pursuance with the provisions of this Clause 10.3. Provided that no deduction on account of Damages shall be effected by the Authority without notifying the Sub-Contractor of its decision to impose the Damages, and taking into consideration the representation, if any, made by the Sub-Contractor within 20 (twenty) days of such notice. The Parties expressly agree that the total amount of Damages under Clause 10.3.2 shall not exceed 10% (ten percent) of the Contract Price.

10.4 Maintenance during Construction Period

During the Construction Period, the Sub-Contractor shall maintain, at its cost, the existing lane(s) of the Project Highway so that the traffic worthiness and safety thereof are at no time materially inferior as compared to their condition 10 (ten) days prior to the date of this Agreement, and shall undertake the necessary repair and maintenance works for this purpose; provided that the Sub-Contractor may, at its cost, interrupt and divert the flow of traffic if such interruption and diversion is necessary for the efficient progress of Works and conforms to Good Industry Practice; provided further that such interruption and diversion shall be undertaken by the Sub-Contractor only with the prior written approval of the Authority’s Engineer / Employer which approval shall not be unreasonably withheld. For the avoidance of doubt, it is agreed that the Sub-Contractor shall at all times be responsible for ensuring safe operation of the Project Highway. It is further agreed that in the event the Project includes construction of a bypass or tunnel and realignment of the existing carriageway, the Contractor shall maintain the existing highway in such sections until the new Works are open to traffic.

10.5 Extension of time for completion

10.5.1 Without prejudice to any other provision of this Agreement for and in respect of extension of time, the Contractor shall be entitled to extension of time in the Project Completion Schedule (the “Time Extension”) to the extent that completion of any Project Milestone is or will be delayed by any of the following, namely:

(a) delay in providing the Right of Way, environmental clearances, specified in Clause 4.1.4;
(b) Change of Scope (unless an adjustment to the Scheduled Completion Date has been agreed under Article 13);
(c) occurrence of a Force Majeure Event;
(d) any delay, impediment or prevention caused by or attributable to the Employer, the Employer's personnel or the Authority's other contractors on the Site; and
(e) any other cause or delay which entitles the Sub-Contractor to Time Extension in accordance with the provisions of this Agreement.

10.5.2 The Sub-Contractor shall, no later than 15 (fifteen) business days from the occurrence of an event or circumstance specified in Clause 10.5.1, inform the Authority’s Engineer / Employer, stating in reasonable detail with supporting particulars, the event or circumstances giving rise to the claim for Time Extension in
accordance with the provisions of this Agreement. Provided that the period of 15 (fifteen) business days shall be calculated from the date on which the Sub-Contractor became aware, or should have become aware, of the occurrence of such an event or circumstance.

Provided further that notwithstanding anything to the contrary contained in this Agreement, Time Extension shall be due and applicable only for the Works which are affected by the aforesaid events or circumstances and shall not in any manner affect the Project Completion Schedule for and in respect of the Works which are not affected hereunder.

10.5.3 In the event of the failure of the Sub-Contractor to submit to the Employer the notice in accordance with the provisions of Clause 10.5.2 within the time specified therein, the Sub-Contractor shall not be entitled to any Time Extension and shall forfeit its right for any such claims in future. For the avoidance of doubt, in the event of failure of the Sub-Contractor as mentioned above, the Employer shall be discharged from all liability in connection with the claim.

10.5.4 The Authority’s Engineer / Employer shall, on receipt of the claim in accordance with the provisions of Clause 10.5.2, examine the claim expeditiously within the time frame specified herein. In the event the Authority’s Engineer / Employer requires any clarifications to examine the claim, the Authority’s Engineer / Employer shall seek the same within 15 (fifteen) days from the date of receiving the claim. The Contractor shall, on receipt of the communication of the Authority’s Engineer / Employer requesting for clarification, furnish the same to the Authority’s Engineer / Employer within 10 (ten) days thereof. The Authority’s Engineer / Employer shall, within a period of 60 (sixty) days from the date of receipt of such clarifications, forward in writing to the Sub-Contractor its determination of Time Extension.

Provided that when determining each extension of time under this Clause 10.5, the Authority’s Engineer shall review previous determinations and may increase, but shall not decrease, the total Time Extension.

10.5.5 If the event or circumstance giving rise to the notice has a continuing effect:

(a) a fully detailed claim shall be considered as interim;
(b) the Sub-Contractor shall, no later than 10 (ten) days after the close of each month, send further interim claims specifying the accumulated delay, the extension of time claimed, and such further particulars as the Authority’s Engineer / Employer may reasonably require; and
(c) the Sub-Contractor shall send a final claim within 30 (thirty) days after the effect of the event or the circumstance ceases.

Upon receipt of the claim hereunder, the Authority’s Engineer / Employer shall examine the same in accordance with the provisions of Clause 10.5.4 within a period of 60 (sixty) days of the receipt thereof.
10.6 Incomplete Works

In the event the Sub-Contractor fails to complete the Works in accordance with the Project Completion Schedule, including any Time Extension granted under this Agreement, the Sub-Contractor shall endeavour to complete the balance work expeditiously and shall pay Damages to the Employer in accordance with the provisions of Clause 10.3.2 for delay of each day until the Works are completed in accordance with the provisions of this Agreement. Recovery of Damages under this Clause shall be without prejudice to the rights of the Employer under this Agreement including the right to termination under Clause 23.1.

10.7 Maintenance Manual

Deleted.
ARTICLE 11

QUALITY ASSURANCE, MONITORING AND SUPERVISION

11.1 Quality of Materials and workmanship

The Sub-Contractor shall ensure that the Construction, Materials and workmanship are in accordance with the requirements specified in this Agreement, Specifications and Standards and Good Industry Practice.

11.2 Quality control system

11.2.1 The Sub-Contractor shall establish a quality control mechanism to ensure compliance with the provisions of this Agreement (the “Quality Assurance Plan” or “QAP”).

11.2.2 The Sub-Contractor shall, within 30 (thirty) days of the Appointed Date (Date of issue of LOA), submit to the Authority’s Engineer / Employer its Quality Assurance Plan which shall include the following:

(a) organization, duties and responsibilities, procedures, inspections and documentation;
(b) quality control mechanism including sampling and testing of Materials, test frequencies, standards, acceptance criteria, testing facilities, reporting, recording and interpretation of test results, approvals, check list for site activities, and Perforam for testing and calibration in accordance with the Specifications for Road and Bridge Works issued by MORTH, relevant IRC specifications and Good Industry Practice; and
(c) internal quality audit system.

The Authority’s Engineer / Employer shall convey its comments to the Sub-Contractor within a period of 21 (twenty-one) days stating the modifications, if any, required, and the Sub-Contractor shall incorporate those in the QAP to the extent required for conforming with the provisions of this Clause 11.2.

11.2.3 The Sub-Contractor shall procure all documents, apparatus and instruments, fuel, consumables, water, electricity, labour, Materials, samples, and qualified personnel as are necessary for examining and testing the Project Assets and workmanship in accordance with the Quality Assurance Plan.

11.2.4 The cost of testing of Construction, Materials and workmanship under this Article 11 shall be borne by the Sub-Contractor.
11.3. Methodology

The Sub-Contractor shall, at least 15 (fifteen) days prior to the commencement of the construction, submit to the Authority’s Engineer/ Employer for review the methodology proposed to be adopted for executing the Works, giving details of equipment to be deployed, traffic management and measures for ensuring safety. The Authority’s Engineer / Employer shall complete the review and convey its comments to the Contractor within a period of 10 (ten) days from the date of receipt of the proposed methodology from the Contractor.

11.4. Inspection and technical audit by the Authority / Employer

The Authority or any representative authorized by the Employer in this behalf may inspect and review the progress and quality of the construction of Project Highway and issue appropriate directions to the Authority’s Engineer / Employer and the Sub-Contractor for taking remedial action in the event the Works are not in accordance with the provisions of this Agreement.

11.5  External technical audit

At any time during construction, the Employer may appoint an external technical auditor to conduct an audit of the quality of the Works. The findings of the audit, to the extent accepted by the Employer, shall be notified to the Sub-Contractor and the Authority’s Engineer / Employer for taking remedial action in accordance with this Agreement. The Sub-Contractor shall provide all assistance as may be required by the auditor in the conduct of its audit hereunder. Notwithstanding anything contained in this Clause 11.5, the external technical audit shall not affect any obligations of the Sub-Contractor or the Authority’s Engineer / Employer under this Agreement.

11.6  Inspection of construction records

The Employer shall have the right to inspect the records of the Sub-Contractor relating to the Works.

11.7  Monthly progress reports

During the Construction Period, the Sub-Contractor shall, no later than 10 (ten) days after the close of each month, furnish to the Employer and the Authority’s Engineer / Employer monthly report on progress of the Works and shall promptly give such other relevant information as may be required by the Authority’s Engineer / Employer.
11.8 Inspection

11.8.1 The Authority’s Engineer/ Employer and its authorized representative shall at all reasonable times:

(a) have full access to all parts of the Site and to all places from which natural Materials are being obtained for use in the Works; and

(b) during production, manufacture and construction at the Site and at the place of production, be entitled to examine, inspect, measure and test the Materials and workmanship, and to check the progress of manufacture of Materials.

11.8.2 The Sub-Contractor shall give the Authority’s Engineer / Employer and its authorized agents access, facilities and safety equipment for carrying out their Obligations under this Agreement.

11.8.3 The Authority’s Engineer / Employer shall submit a monthly inspection report (the “Inspection Report”) to the Employer and the Sub-Contractor bringing out the results of inspections and the remedial action taken by the Sub-Contractor in respect of defects or deficiencies, for the avoidance of doubt, such inspection or submission of Inspection Report by the Authority’s Engineer. Employer shall not relieve or absolve the Sub-Contractor of its obligations and liabilities under this Agreement in any manner whatsoever.

11.9 Samples

The Sub-Contractor shall submit the following samples of Materials and relevant information to the Authority’s Engineer / Employer for pre-construction review:

(a) manufacturer's test reports and standard samples of manufactured Materials; and

(b) Samples of such other Materials/construction materials as the Authority’s Engineer / Employer may require.

11.10 Tests

11.10.1 For determining that the Works conform to the Specifications and Standards, the Authority’s Engineer / Employer shall require the Sub-Contractor to carry out or cause to be carried out tests, at such time and frequency and in such manner as specified in this Agreement, and in accordance with Good Industry Practice for quality assurance. The test checks by the Authority’s Engineer / Employer shall comprise at least 20 (twenty) percent of the quantity or number of tests prescribed for each category or type of test for quality control by the Sub-Contractor.
11.10.2 In the event that results of any tests conducted under this Clause 11.10 establish any Defects or deficiencies in the Works, the Sub-Contractor shall carry out remedial measures and furnish a report to the Authority’s Engineer / Employer in this behalf. The Authority’s Engineer / Employer shall require the Sub-Contractor to carry out or cause to be carried out tests to determine that such remedial measures have brought the Works into compliance with the Specifications and Standards, and the procedure shall be repeated until such Works conform to the Specifications and Standards. For the avoidance of doubt, the cost of such tests and remedial measures in pursuance thereof shall be solely borne by the Sub-Contractor.

11.11 Examination of work before covering up

In respect of the work which the Authority’s Engineer/ Employer is entitled to examine, inspect, measure and/or test before it is covered up or put out of view or any part of the work is placed thereon, the Sub-Contractor shall give notice to the Authority’s Engineer / Employer whenever any such work is ready and before it is covered up. The Authority’s Engineer / Employer shall then either carry out the examination, inspection or testing without unreasonable delay, or promptly give notice to the Sub -Contractor that the Authority’s Engineer / Employer does not require to do so. Provided, however, that if any work is of a continuous nature where it is not possible or prudent to keep it uncovered or incomplete, the Sub-Contractor shall notify the schedule of carrying out such work to give sufficient opportunity, not being less than 3 (three) business days’ notice, to the Authority’s Engineer / Employer to conduct its inspection, measurement or test while the work is continuing. Provided further that in the event the Sub-Contractor receives no response from the Authority’s Engineer / Employer within a period of 3 (three) business days from the date on which the Sub-Contractor’s notice hereunder is delivered to the Authority’s Engineer/ Employer, the Contractor shall be entitled to assume that the Authority’s Engineer/ Employer would not undertake the said inspection.

11.12 Rejection

If, as a result of an examination, inspection, measurement or testing, any Plant, Materials, design or workmanship is found to be defective or otherwise not in accordance with the provisions of this Agreement, the Authority’s Engineer/ Employer shall reject the Plant, Materials, design or workmanship by giving notice to the Sub-Contractor, with reasons. The Sub-Contractor shall then promptly make good the Defect and ensure that the rejected item complies with the requirements of this Agreement.

If the Authority’s Engineer/ Employer requires the Plant, Materials, design or workmanship to be retested, the tests shall be repeated under the same terms and conditions, as applicable in each case. If the rejection and retesting cause the Employer to incur any additional costs, such cost shall be recoverable by the Employer from the Sub-Contractor; and may be deducted by the Employer from any monies due to be paid to the Sub-Contractor.
11.13 Remedial work

11.13.1 Notwithstanding any previous test or certification, the Authority’s Engineer/Employer may instruct the Sub-Contractor to:

(a) remove from the Site and replace any Plant or Materials which are not in accordance with the provisions of this Agreement;
(b) remove and re-execute any work which is not in accordance with the provisions of this Agreement and the Specification and Standards; and
(c) execute any work which is urgently required for the safety of the Project Highway, whether because of an accident, unforeseeable event or otherwise; provided that in case of any work required on account of a Force Majeure Event, the provisions of Clause 21.6 shall apply.

11.13.2 If the Sub-Contractor fails to comply with the instructions issued by the Employer under Clause 11.13.1, within the time specified in the Employer’s notice or as mutually agreed, the Employer executed the work by another agency. The cost so incurred by the Employer for undertaking such work shall, without prejudice to the rights of the Employer to recover Damages in accordance with the provisions of this Agreement, be recoverable from the Sub-Contractor and may be deducted by the Employer from any monies due to be paid to the Sub-Contractor.

11.14 Delays during construction

Without prejudice to the provisions of Clause 10.3, in the event the Sub-Contractor does not achieve any of the Project Milestones or the Authority’s Engineer/Employer shall have reasonably determined that the rate of progress of Works is such that Completion of the Project Highway is not likely to be achieved by the end of the Scheduled Completion Date, it shall notify the same to the Sub-Contractor, and the Sub-Contractor shall, within 15 (fifteen) days of such notice, by a communication inform the Authority’s Engineer /Employer in reasonable detail about the steps it proposes to take to expedite progress and the period within which it shall achieve the Project Completion Date.

11.15 Quality control records and Documents

The Sub-Contractor shall hand over to the Authority’s Engineer / Employer a copy of all its quality control records and documents before the Completion Certificate is issued pursuant to Clause 12.2.

11.16 Video recording

During the Construction Period, the Sub-Contractor shall provide to the Employer
for every calendar quarter or month as required by Authority Engineer / Employer, a video recording, which will be compiled into a 3 (three)-hour compact disc or digital video disc, as the case may be, covering the status and progress of Works in that quarter. The video recording shall be provided to the Employer no later than 15 (fifteen) days after the close of each quarter after the Appointed Date.

11.17 Suspension of unsafe Construction Works

11.17.1 Upon recommendation of the Employer (in consultation with Authority’s Engineer) to this effect, the Employer may by notice require the Sub-Contractor to suspend forthwith the whole or any part of the Works if, in the reasonable opinion of the Employer, such work threatens the safety of the Users and pedestrians.

11.17.2 The Sub-Contractor shall, pursuant to the notice under Clause 11.17.1, suspend the Works or any part thereof for such time and in such manner as may be specified by the Employer and thereupon carry out remedial measures to secure the safety of suspended works, the Users and pedestrians. The Sub-Contractor may by notice require the Authority’s Engineer / Employer to inspect such remedial measures forthwith and make a report to whether or not the suspension hereunder may be revoked. Upon receiving the recommendations of the Authority’s Engineer / Employer, the Authority shall either revoke such suspension or instruct the Contractor to carry out such other and further remedial measures as may be necessary in the reasonable opinion of the Authority, and the procedure set forth in this Clause 11.17 shall be repeated until the suspension hereunder is revoked.

11.17.3 Subject to the provisions of Clause 21.6, all reasonable costs incurred for maintaining and protecting the Works or part thereof during the period of suspension (the “Preservation Costs”), shall be borne by the Sub-Contractor; provided that if the suspension has occurred as a result of any breach of this Agreement by the Employer, the Preservation Costs shall be borne by the Authority.

11.17.4 If suspension of Works is for reasons not attributable to the Sub-Contractor, the Authority’s Engineer / Employer shall determine any Time Extension to which the Sub-Contractor is reasonably entitled.
ARTICLE 12

COMPLETION CERTIFICATE

12.1 Tests on completion

12.1.1 At least 30 (thirty) days prior to the likely completion of the Project Highway, or a Section thereof, the Sub-Contractor shall notify the Authority’s Engineer/ Employer of its intent to subject the Project Highway or a Section thereof, to Tests. The date and time of each of the Tests shall be determined by the Authority’s Engineer/ Employer in consultation with the Sub-Contractor, and notified to the Authority who may designate its representative to witness the Tests. The Sub-Contractor shall either conduct the Tests as directed by the Authority’s Engineer/ Employer or provide such assistance as the Authority’s Engineer/ Employer may reasonably require for conducting the Tests. In the event of the Sub-Contractor and the Authority’s Engineer/ Employer failing to mutually agree on the dates for conducting the Tests, the Sub-Contractor shall fix the dates by giving not less than 10 (ten) days notice to the Authority’s Engineer/ Employer.

12.1.2 All Tests shall be conducted in accordance with Schedule-K. The Authority’s Engineer/ Employer shall either conduct or observe, monitor and review the Tests conducted by the Sub-Contractor, as the case may be, and review the results of the Tests to determine compliance of the Project Highway or a Section thereof, with Specifications and Standards and if it is reasonably anticipated or determined by the Authority’s Engineer/ Employer during the course of any Test that the performance of the Project Highway or Section or any part thereof, does not meet the Specifications and Standards, it shall have the right to suspend or delay such Test and require the Sub-Contractor to remedy and rectify the Defect or deficiencies. Upon completion of each Test, the Authority’s Engineer/ Employer shall provide to the Sub-Contractor of all Test data including detailed Test results. For the avoidance of doubt, it is expressly agreed that the Authority’s Engineer/ Employer may require the Sub-Contractor to carry out or cause to be carried out additional Tests, in accordance with Good Industry Practice, for determining the compliance of the Project Highway or Section thereof with the Specifications and Standards.

12.2 Provisional Certificate

12.2.1 Subject to the provisions of Clause 12.2.5, upon completion of all Works forming part of the Project Highway, save and except the Works for which Time Extension has been granted under Clause 10.5, the Authority’s Engineer/ Employer shall, at the request of the Sub-Contractor, issue a provisional certificate of completion substantially in the form set forth in Schedule-L (the “Provisional Certificate”) if the Tests for and in respect of the completed Works are successful. The Provisional Certificate shall have appended thereto a list of outstanding items of work (the “Punch List”) that need to be completed in accordance with the provisions of this Agreement. The Sub-Contractor undertakes to complete the minor outstanding items of works in respect of those Sections of
the Project Highway for which the Provisional Certificate has been issued, within a period of 30 (thirty) days of the date of Provisional Certificate, and those parts of the Works in respect of which Time Extension has been granted, within the extended period thereof. For the avoidance of doubt, the Parties agree that the Punch List shall include all Works for which Time Extension has been granted and shall also include any minor outstanding items of work forming part of the completed Sections if such works do not materially affect the use of the completed Sections for their intended purpose. The Parties further agree that Provisional Certificate shall not be issued if the completed Works cannot be safely and reliably placed in service of the Users thereof.

12.2.2 Upon issue of Provisional Certificate, the provisions of Articles 14 and 17 shall apply to the completed parts of the Project Highway and the property and ownership of all such completed Works shall vest in the Authority.

12.2.3 If the Authority’s Engineer/ Employer determines that the Project Highway or any completed part thereof does not conform to the provisions of this Agreement and cannot be safely and reliably placed in operation, it shall forthwith make a report in this behalf and send copies thereof to the Employer and the Sub-Contractor and withhold issuance of the Provisional Certificate until the Defects or deficiencies are rectified by the Sub-Contractor and Tests are successful in accordance with this Article 12.

12.2.4 Notwithstanding anything to the contrary contained in Clause 12.2.3, the Employer may, at any time after receiving a report from the Authority’s Engineer/ Employer under that Clause, direct the Authority’s Engineer/ to issue a Provisional Certificate under Clause 12.2.1 and such direction shall be complied forthwith.

12.2.5 No Provisional Certificate shall be issued under the provisions of this Clause 12.2 until the Sub-Contractor has submitted valid claims for payment of at least 80% (eighty per cent) of the amount arrived at after reducing the lump sum price specified in Clause 19.1.1 by the amount attributable to works which have been withdrawn under the provisions of Clause 8.3.3. For the avoidance of doubt and by way of illustration, the Parties agree that if the Contract Price specified in Clause 19.1.1 is Rs. 105 cr. (Rs. one hundred and five crore) and the works withdrawn under Clause 8.3.3 have a value of Rs. 5 cr. (Rs. five crore), a Provisional Certificate shall not be issued until valid claims for payment of an amount of Rs. 80 cr. (Rs. eighty crore) have been submitted by the Sub-Contractor in accordance with the provisions of this Agreement. It is further agreed that all price adjustments made in pursuance of Clause 19.10 shall not be reckoned for computation of the claims for payments referred to in this Clause 12.2.5.

12.3 Completion of remaining Works

All items in the Punch List shall be completed by the Sub-Contractor in accordance with the provisions of this Agreement. For any delay in their completion other than for the reasons solely attributable to the Employer or due to Force Majeure, the Employer shall be entitled to recover Damages from the Sub-Contractor in accordance with the provisions of Clause 10.3.2 of this Agreement.
12.4 Completion Certificate

12.4.1 Upon completion of all Works, including the items specified in the Punch List, and the Authority’s Engineer/ Employer determining the Tests to be successful, it shall forthwith issue to the Sub-Contractor and the Authority a certificate substantially in the form set forth in Schedule-L (the “Completion Certificate”).

12.4.2 Upon receiving the Completion Certificate, the Sub-Contractor shall remove its equipment, materials, debris and temporary works from the Site within a period of 30 (thirty) days thereof, failing which the Employer may remove or cause to be removed, such equipment, materials, debris and temporary works and recover from the Sub-Contractor an amount equal to 120% (one hundred and twenty per cent) of the actual cost of removal incurred by the Employer.

12.4.3 Without prejudice to the obligations of the Sub-Contractor specified in Articles 14 and 17, the property and ownership of all the completed Works forming part of the Project Highway shall vest in the Employer.

12.5 Rescheduling of Tests

If the Authority’s Engineer/ Employer certifies to the Authority and the Sub-Contractor that it is unable to issue the Completion Certificate or Provisional Certificate, as the case may be, because of events or circumstances on account of which the Tests could not be held or had to be suspended, the Sub-Contractor shall be entitled to re-schedule the Tests and hold the same as soon as reasonably practicable.
ARTICLE 13

CHANGE OF SCOPE

13.1 Change of Scope

13.1.1 The Employer may, notwithstanding anything to the contrary contained in this Agreement, require the Sub-Contractor to make modifications/alterations to the Works ("Change of Scope") before the issue of the Completion Certificate either by giving an instruction or by requesting the Sub-Contractor to submit a proposal for Change of Scope only if there will be involving additional cost or reduction in cost or accelerated the work. Any such Change of Scope shall be made and valued in accordance with the provisions of this Article 13.

13.1.2 Change of Scope shall mean:

(a) change in specifications of any item of Works;
(b) omission of any work from the Scope of the Work except under Clause 8.3.3; provided that, subject to Clause 13.5, the Employer shall not omit any work under this Clause in order to get it executed by any other authority; and / or
(c) any additional work, Plant, Materials or services which are not included in the Scope of the Project, including any associated Tests on completion of construction.

13.1.3 If the Sub-Contractor determines at any time that a Change of Scope will, if adopted, (i) accelerate completion, (ii) reduce the cost to the Employer of executing, maintaining or operating the Project Highway, (iii) improve the efficiency or value to the Employer of the completed Project Highway, or (iv) otherwise be of benefit to the Employer, it shall prepare a proposal with relevant details at its own cost. The Sub-Contractor shall submit such proposal, supported with the relevant details and the amount of reduction in the Contract Price to the Authority to consider such Change of Scope. The Employer shall, within 30 (thirty) days of receipt of such proposal, either accept such Change of Scope with modifications, if any, and initiate proceedings therefore in accordance with this Article 13 or reject the proposal and inform the Sub-Contractor of its decision. For the avoidance of doubt, the Parties agree that the Sub-Contractor shall not undertake any Change of Scope without the express consent of the Employer, save and except any Works necessary for meeting any Emergency.

13.2 Procedure for Change of Scope

13.2.1 In the event of the Employer determining that a Change of Scope is necessary, it may direct the Authority’s Engineer / Employer to issue to the Sub-Contractor a notice specifying in reasonable detail the works and services contemplated there under (the “Change of Scope Notice”).
13.2.2 Upon receipt of a Change of Scope Notice, the Sub-Contractor shall, with due
diligence, provide to the Authority and the Authority’s Engineer/ Employer such
information as is necessary, together with preliminary documentation in support of:

(a) the impact, if any, which the Change of Scope is likely to have on the Project
Completion Schedule if the works or services are required to be carried out
during the Construction Period; and

(b) the options for implementing the proposed Change of Scope and the effect, if
any, each such option would have on the costs and time thereof, including
the following details:

(i) break down of the quantities, unit rates and cost for different items
of work;
(ii) proposed design for the Change of Scope; and
(iii) proposed modifications, if any, to the Work Completion
Schedule of the Project Highway.

For the avoidance of doubt, the Parties expressly agree that, subject to the provisions
of Clause 13.4.2, the Contract Price shall be increased same or decreased, as the case
may be, on account of Change of Scope.

13.2.3 The Sub-Contractor’s quotation of costs for the Change of Scope shall be determined on
the following principles:

(a) For works where Schedule of Rates (SOR) of Mizoram Public Works
Department are available shall be applicable for determination of costs. In
case of non-availability of current SOR, the available Schedule of Rates shall
be applied by updating the same based on WPI.

(b) For works not similar in nature to the Works being executed, the cost of
work shall be derived on the basis of MORTH Standard Data Book and the
applicable schedule of rates for the relevant circle, as published by the
respective Mizoram Government, and such rates shall be indexed with
reference to the WPI once every year, with the base being the month and
year of the publication of the said schedule of rates; provided, however, that
for any item not included in the schedule of rates, the prevailing
market rates as determined by the Authority’s Engineer shall apply, and
for any item in respect of which MORTH Standard Data Book does not
provide the requisite details, the Authority’s Engineer shall determine
the rate in accordance with Good Industry Practice.

13.2.4 Upon reaching an agreement, the Employer shall issue an order (the “Change of
Scope Order”) requiring the Sub-Contractor to proceed with the performance
thereof. In the event that the Parties are unable to agree, the Employer may:

(a) issue a Change of Scope Order requiring the Sub-Contractor to proceed with the
performance thereof at the rates and conditions approved by the Employer till the
matter is resolved in accordance with Article 26; or
13.2.5 The provisions of this Agreement, insofar as they relate to Works and Tests, shall apply *mutatis mutandis* to the works undertaken by the Sub-Contractor under this Article 13.

### 13.3 Payment for Change of Scope

Payment for Change of Scope shall be made in accordance with the payment schedule specified in the Change of Scope Order.

### 13.4 Restrictions on Change of Scope

13.4.1 No Change of Scope shall be executed unless the Employer has issued the Change of Scope Order save and except any Works necessary for meeting any Emergency.

13.4.2 Unless the Parties mutually agree to the contrary, the total value of all Change of Scope Orders shall not exceed 10 (ten) per cent of the Contract Price.

13.4.3 Notwithstanding anything to the contrary in this Article 13, no change made necessary because of any default of the Sub-Contractor in the performance of its obligations under this Agreement shall be deemed to be Change of Scope, and shall not result in any adjustment of the Contract Price or the Project Completion Schedule.

### 13.5 Power of the Employer to undertake works

13.5.1 In the event the Parties are unable to agree to the proposed Change of Scope Orders in accordance with Clause 13.2, the Employer may, after giving notice to the Sub-Contractor and considering its reply thereto, award such works or services to any person on the basis of open competitive bidding from amongst bidders who are pre-qualified for undertaking the additional work; provided that the Sub-Contractor shall have the option of matching the first ranked bid in terms of the selection criteria, subject to payment of 2% (two per cent) of the bid amount $\text{\textdollar}$, and thereupon securing the award of such works or services. For the avoidance of doubt, it is agreed that the Sub-Contractor shall be entitled to exercise such option only if it has participated in the bidding process and its bid does not exceed the first ranked bid by more than 10% (ten percent) thereof. It is also agreed that the Sub-Contractor shall provide assistance and cooperation to the person who undertakes the works or services hereunder, but shall not be responsible for rectification of any Defects and/ or maintenance of works carried out by other agencies.
13.5.2 The works undertaken in accordance with this Clause 13.5 shall conform to the Specifications and Standards and shall be carried out in a manner that minimizes the disruption in operation of the Project Highway. The provisions of this Agreement, insofar as they relate to Works and Tests, shall apply *mutatis mutandis* to the works carried out under this Clause 13.5.

\[\text{The Employer shall transfer 75\% (seventy five percent) of the amount so received to the first ranked bidder whose bid shall have been matched by the Sub-Contractor.}\]
ARTICLE 14

MAINTENANCE

14.1 Maintenance obligation of the Sub-Contractor

The Sub-Contractor shall maintain the Project Highway during construction period of Project.

14.1.1 Deleted.

14.1.2 Deleted.

14.1.3 In respect of any Defect or deficiency not specified in Schedule-E, the Sub-Contractor shall, at its own cost, undertake repair or rectification in accordance with Good Industry Practice, save and except to the extent that such Defect or deficiency shall have arisen on account of any default or neglect of the Employer or a Force Majeure Event.

14.1.4 Deleted.

14.2 Deleted

14.3 Deleted

14.3.1 Deleted.

14.4 Deleted

14.4.1 Deleted.

14.4.2 Deleted.

14.5 DELETED

14.5.1 Deleted.

14.5.2 Deleted.
14.6 DELETED

14.6.1 DELETED.

14.6.2 DELETED.

14.7 Employer’s right to take remedial measures

In the event the Sub-Contractor does not maintain and/or repair the Project Highway or any part thereof in conformity with the Maintenance Requirements, as the case may be, and fails to commence remedial works within 15 (fifteen) days or a notice in this behalf from the Employer or the Authority’s Engineer, as the case may be, the Employer shall, without prejudice to its rights under this Agreement including Termination thereof, be entitled to undertake such remedial measures at the cost of the Contractor, and to recover its cost from the Contractor. In addition to recovery of the aforesaid cost, a sum equal to 20% (twenty per cent) of such cost shall be paid by the Contractor to the Authority as Damages.

14.8 Restoration of loss or damage to Project Highway

Save and except as otherwise expressly provided in this Agreement, in the event that the Project Highway or any part thereof suffers any loss or damage during the Maintenance from any cause attributable to the Sub-Contractor, the Sub-Contractor shall, at its cost and expense, rectify and remedy such loss or damage forthwith so that the Project Highway conforms to the provisions of this Agreement.

14.9 Overriding powers of the Employer

14.9.1 If in the reasonable opinion of the Employer, the Sub-Contractor is in material breach of its obligations under this Agreement and, in particular, the Maintenance Requirements, and such breach is causing or likely to cause material hardship or danger to the Users and pedestrians, the Employer may, without prejudice to any of its rights under this Agreement including Termination thereof, by notice require the Sub-Contractor to take reasonable measures immediately for rectifying or removing such hardship or danger, as the case may be.

14.9.2 In the event that the Sub-Contractor, upon notice under Clause 14.9.1, fails to rectify or remove any hardship or danger within a reasonable period, the Employer may exercise overriding powers under this Clause 14.9.2 and take over the performance of any or all the obligations of the Sub-Contractor to the extent deemed necessary by it for rectifying or removing such hardship or danger; provided that the exercise of such overriding powers by the Employer shall be of no greater scope and of no longer duration than is reasonably required hereunder; provided further that any costs and expenses incurred by the Employer in discharge of its obligations hereunder shall be recovered by the Employer from the Sub-Contractor, and the Authority shall be entitled to deduct any such costs and expenses incurred from the payments due to the Sub-Contractor or retention money.
14.9.3 In the event of a national emergency, civil commotion or any other circumstances specified in Clause 21.3, the Employer may take over the performance of any or all the obligations of the Sub-Contractor to the extent deemed necessary by it, and exercise such control over the Project Highway or give such directions to the Sub-Contractor as may be deemed necessary; provided that the exercise of such overriding powers by the Employer shall be of no greater scope and of no longer duration than is reasonably required in the circumstances which caused the exercise of such overriding power by the Employer. For the avoidance of doubt, it is agreed that the consequences of such action shall be dealt in accordance with the provisions of Article 21.

It is also agreed that the Sub-Contractor shall comply with such instructions as the Employer may issue in pursuance of the provisions of this Clause 14.9.3, and shall provide assistance and cooperation to the Authority, on a best effort basis, for performance of its obligations hereunder.
ARTICLE 15

DELETED
ARTICLE 16

TRAFFIC REGULATION

16.1 Traffic regulation by the Sub-Contractor

16.1.1 The Sub-Contractor shall take all the required measures and make arrangements for the safety of Users during the construction of the Project Highway or a Section thereof in accordance with the provisions of MORTH Specifications. It shall provide, erect and maintain all such barricades, signs, markings, flags, and lights as may be required by Good Industry Practice for the safety of the traffic passing through the Section under construction.

16.1.2 All works shall be carried out in a manner creating least interference to traffic passing through the Project Highway or a Section thereof. In stretches where construction works on the carriageway are taken up, the Sub-Contractor shall ensure that proper passage is provided for the traffic. Where it is not possible or safe to allow traffic on part width of the carriageway, a temporary diversion of proper specifications shall be constructed by the Sub-Contractor at its own cost. The Sub-Contractor shall take prior approval of the Employer for any proposed arrangement for traffic regulation during Construction, which approval shall be granted promptly and reasonably.
ARTICLE 17

DEFECTS LIABILITY

17.1 Defects Liability Period

17.1.1 The sub-Contractor shall be responsible for all the Defects and deficiencies, except usual wear and tear in the Project Highway or any Section thereof, till the expire of a period of 2 (Two) years commencing from the date of Provisional Certificate (the “Defect Liability Period”). Provided that the Defect Liability Period shall in no case be less than 18 (eighteen) months from the date of completion certificate for and in respect of work for which Time Extension was granted. Provided further date in the event no Provisional Certificate is issued, the Defect Liability Period shall commence from the date of the Completion Certificate.

17.1.2 Without prejudice to the provision of Clause 17.1.1, the Defect Liability Period for and in respect of any structure or Major Bridge as specified in Annexure-I of Scheduled-B shall deemed to be expended a further period of 3 (three) years after expire of Defect Liability Period specified in Clause 17.1.1

17.2 Remediying Defects

Save and except as provided in Clause 14.1.2, the Sub-Contractor shall repair or rectify all Defects and deficiencies observed by the Employer/Authority’s Engineer during the Defects Liability Period within a period of 15 (fifteen) days from the date of notice issued by the Employer/Authority’s Engineer in this behalf, or within such reasonable period as may be determined by the Employer/Authority’s Engineer at the request of the Contractor, in accordance with Good Industry Practice.

17.3 Cost of remedying Defects

For the avoidance of doubt, any repair or rectification undertaken in accordance with the provisions of Clause 17.2, including any additional testing, shall be carried out by the Contractor at its own risk and cost, to the extent that such rectification or repair is attributable to:

(a) the design of the Project;
(b) Plant, Materials or workmanship not being in accordance with this Agreement and the Specifications and Standards;
(c) improper maintenance during construction of the Project Highway by the Contractor; and/or
(d) failure by the Sub-Contractor to comply with any other obligation under this Agreement.

17.4 Contractor’s failure to rectify Defects

In the event that the Sub-Contractor fails to repair or rectify such Defect or deficiency within the period specified in Clause 17.2, the Employer shall be entitled to get the same repaired, rectified or remedied at the Sub-Contractor’s cost so
as to make the Project Highway conform to the Specifications and Standards and the provisions of this Agreement. All costs consequent thereon shall, after due consultation with the Employer and the Sub-Contractor, be determined by the Employer/Authority’s Engineer. The cost so determined and an amount equal to twenty percent of the cost as Damages shall be recoverable by the Employer from the Sub-Contractor and may be deducted by the Employer from any monies due to the Sub-Contractor.

17.5 Sub-Contractor to search cause

17.5.1 The Employer/Authority’s Engineer may instruct the Sub-Contractor to examine the cause of any Defect in the Works or part thereof before the expiry of the Defects Liability Period.

17.5.2 In the event any Defect identified under Clause 17.5.1 is attributable to the Sub-Contractor, the Sub-Contractor shall rectify such Defect within the period specified by the Employer/Authority’s Engineer, and shall bear the cost of the examination and rectification of such Defect.

17.5.3 In the event such Defect is not attributable to the Sub-Contractor, the Employer shall, after due consultation with the Authority Engineer’s and the Sub-Contractor, determine the costs incurred by the Sub-Contractor on such examination and notify the same to the Sub-Contractor, with a copy to the Employer, and the Sub-Contractor shall be entitled to payment of such costs by the Employer.

17.6 Extension of Defects Liability Period

The Defects Liability Period shall be deemed to be extended till the identified Defects under Clause 17.2 have been remedied.
ARTICLE 18

Authority’s Engineer

18.1 Appointment of the Authority’s Engineer

18.1.1 The Authority has already appointed the engineer under this Agreement (the “Authority’s Engineer”), particulars of Authority’s Engineer are mentioned in Vol-I.

18.1.2 The Authority shall notify the replacement of the Authority’s Engineer to the Contractor.

18.1.3 The staff of the Authority’s Engineer shall include suitably qualified engineers and other professionals who are competent to assist the Authority’s Engineer to carry out its duties.

18.2 Duties and authority of the Authority’s Engineer

18.2.1 The Authority’s Engineer shall perform the duties and exercise the authority in accordance with the provisions of this Agreement, and substantially in accordance with the terms of reference (“Terms of Reference” or “TOR”) set forth in Annex 1 of Schedule N, but subject to obtaining prior written approval of the Authority before determining:

(a) any Time Extension;

(b) any additional cost to be paid by the Authority to the Contractor;

(c) the Termination Payment; or

(d) any other matter which is not specified in (a), (b) or (c) above and which creates an obligation or liability on either Party for a sum exceeding Rs.5,000,000 (Rs. fifty lakh).

18.2.2 No decision or communication of the Authority’s Engineer shall be effective or valid unless it is accompanied by an attested true copy of the approval of the Authority for and in respect of any matter specified in Clause 18.2.1.

18.2.3 The Authority’s Engineer shall submit regular periodic reports, at least once every month, to the Authority in respect of its duties and functions under this Agreement. Such reports shall be submitted by the Authority’s Engineer within 20 (twenty) days of the beginning of every month. For the avoidance of doubt, the Authority’s Engineer shall include in its report, compliance of the recommendations of the Safety Consultant.

18.3 Delegation by the Authority’s Engineer

18.3.1 The Authority’s Engineer may, by order in writing, delegate any of his duties and responsibilities to suitably qualified and experienced personnel who are accountable to Authority’s Engineer, or may revoke any such delegation, under intimation to the Authority and the Contractor. Provided, however, that the Authority’s Engineer shall be responsible and liable for all actions and omissions of such personnel.

18.3.2 Any failure of the Authority’s Engineer to disapprove any work, Plant or Materials shall not constitute approval, and shall therefore not prejudice the right of the Authority to reject the work, Plant or Materials, which is not in accordance with the provisions of this Agreement and the Specifications and Standards.

18.3.3 Notwithstanding anything stated in Clause 18.3.1 above, the Authority’s Engineer shall not delegate the authority to refer any matter for the Authority’s prior approval wherever required
in accordance with the provisions of Clause 18.2.

18.4 Instructions of the Authority’s Engineer

18.4.1 The Authority’s Engineer may issue to the Contractor instructions for remedying any Defect. The Contractor shall take such instructions from the Authority’s Engineer, or from an assistant to whom appropriate authority has been delegated under Clause 18.3.

18.4.2 The instructions issued by the Authority’s Engineer shall be in writing. However, if the Authority’s Engineer issues any oral instructions to the Contractor, it shall confirm in writing the oral instructions within 2 (two) working days of issuing them.

18.4.3 In case the Contractor does not receive the confirmation of the oral instruction within the time specified in Clause 18.4.2, the Contractor shall seek the written confirmation of the oral instructions from the Authority’s Engineer. The Contractor shall obtain acknowledgement from the Authority’s Engineer of the communication seeking written confirmation. In case of failure of the Authority’s Engineer or its delegated assistant to reply to the Contractor within 2 (two) days of the receipt of the communication from the Contractor, the Contractor may not carry out the instruction.

18.4.4 In case of any dispute on any of the instructions issued by the delegated assistant, the Contractor may refer the dispute to the Authority’s Engineer, who shall then confirm, reverse or vary the instructions within [3 (three)] business days of the dispute being referred.

18.5 Determination by the Authority’s Engineer

18.5.1 The Authority’s Engineer shall consult with each Party in an endeavour to reach agreement wherever this Agreement provides for the determination of any matter by the Authority’s Engineer. If such agreement is not achieved, the Authority’s Engineer shall make a fair determination in accordance with this Agreement having due regard to all relevant circumstances. The Authority’s Engineer shall give notice to both the Parties of each agreement or determination, with supporting particulars.

18.5.2 Each Party shall give effect to each agreement or determination made by the Authority’s Engineer in accordance with the provisions of this Agreement. Provided, however, that if any Party disputes any instruction, decision, direction or determination of the Authority’s Engineer, the Dispute shall be resolved in accordance with the Dispute Resolution Procedure.

18.6 Remuneration of the Authority’s Engineer

The remuneration, cost and expenses of the Authority’s Engineer shall be paid by the Authority.

18.7 Termination of the Authority’s Engineer

18.7.1 Deleted

18.7.2 Deleted
Part IV Financial Covenants
ARTICLE 19

PAYMENTS

19.1 Contract Price

19.1.1 The Employer shall make payments to the Sub-Contractor for the Works on the basis of the lump sum price accepted by the Employer in consideration of the obligations specified in this Agreement for an amount of Rs. … … … … (Rs. … … … … … …) (the “Contract Price”), which shall be subject to adjustments in accordance with the provisions of this Agreement. The Parties further agree that save and except as provided in this Agreement, the Contract Price shall be valid and effective until issue of Completion Certificate.

19.1.2 The Contract Price includes all duties, taxes, royalty, and fees excluding GST that may be levied in accordance with the laws and regulations in force as on the Base Date on the Contractor's equipment, Plant, Materials and supplies acquired for the purpose of this Agreement and on the services performed under this Agreement. Nothing in this Agreement shall relieve the Contractor from its responsibility to pay any tax including any tax that may be levied in India/Myanmar on profits made by it in respect of this Agreement.

However, the Government of India (GOI) and the Government of Myanmar (GOM) will provide the following exemptions/facilities in respect of construction materials, plants, equipment, etc. required for the execution of works given under the Scope of Work for this project:

Successful Indian Bidders shall raise their RA bill along with GST at the applicable rates of GST.

For Myanmar registered successful bidders, No GST shall be payable on their RA Bill.

In case of JV, GST shall be applicable on the basis of their registered address. If registered in India, then treated as an Indian bidder and if registered in Myanmar, treated as Myanmar Bidder.

Exemption will be considered as per clause no. 19.1.2 of SCC, Vol-II.

1. The bidder/Contractor must be registered with GST and should have valid GSTIN number.
2. The bidder/contractor must submit as an compliances of GST Act, the invoices in GST compliant format failing which the GST amount shall be recovered/ adjusted by EPI without any prior notice from the next invoices or available dues with EPI.
3. The bidders/Contractors are requested to update/upload the GST/Taxes data periodically so as to avail ITC credit by EPI failing which it shall be recovered/ adjusted by EPI without any prior notice from the next invoices or available dues with EPI.
4. Rates quoted in this tender are inclusive of all taxes, levies, cess, duties etc. excluding GST.
5. Bidder while quoting the rates in the tender must also consider the ITC credit applicable for the works, if any.
6. In case of any reduction in rate of GST or other taxes in future or the project getting exemption status prior to the last date of submission or afterwards, the subcontractor shall pass on the benefit to EPIL immediately, failing which EPIL shall have right to recover the differential amount from the amounts due to the sub-contractor. Further, in case of any increase in rate of GST or other taxes in future or the project losing exemption status prior to the last date of bid submission or afterwards, the said increase of taxes shall be paid
The goods, equipment, machinery, transport vehicles, construction materials etc. required in connection with the project shall be allowed expeditious entry into and exit from India and Myanmar and free movement at border or within their respective countries by Government of India and Myanmar. These shall be exempted from all taxes, duties, levies and cesses chargeable at Entry/Exit at International border of Myanmar.

At the time of entry into India or Myanmar the details of plant, machinery, transport vehicles, construction materials etc. imported into the country shall be got entered into the registers with border customs check posts so that the same could be allowed to be taken back on completion of the project without any let or hindrance or payment of taxes, duties etc. If any of the above plant, machinery, transport vehicles etc. are sold or disposed off in the country of importation, the local taxes, duties, etc. prevailing at that time in the country of importation shall be levied on them.

The Sub-Contractor shall be free to import specified amount approved by Authority through Employer of Indian currency / US Dollars that may be deemed necessary for the execution of the work into Myanmar but shall convert it into Myanmar currency at locally recognized exchange counters for transactions inside Myanmar. They shall also be allowed to repatriate their currency holding which shall be converted into Indian currency or US Dollars. The conversion charges shall be borne by the Sub-Contractor.

Government of Myanmar and Government of India shall endeavor to grant licenses, permits and similar other authorisations necessary to enable the sub-Contractors to execute the work relating to the project, as expeditiously as possible.

19.1.3 The Sub-Contract Price shall not be adjusted for any change in costs stated in Clause 19.1.2 above, except as stated in Clauses 19.10 and 19.19.

19.1.4 The Sub-Contract Price shall not be adjusted to take account of any unforeseen difficulties or costs, unless otherwise provided for in this Agreement.

19.1.5 Unless otherwise stated in this Agreement, the Contract Price covers all the Contractor’s obligations for the Works under this Agreement and all things necessary for the Construction and the remedying of any Defects in the Project Highway.

19.1.6 All payments under this Agreement shall be made in Indian Rupees.

19.2. Mobilization Advance & Recovery:

19.2.1 Mobilization advance up to maximum of amount as mentioned in the “Memorandum” shall be paid to the Sub-Contractor on submission of non-revocable and unconditional Bank Guarantee for an amount equal to110% of the Mobilization Advance, from a Nationalized Bank / Scheduled Bank as per the applicable Performa subject to conditions given hereunder. The Mobilization Advance shall be at the Interest Rate as mentioned in the “Memorandum”. This advance shall be paid in three installments as follows: -
   i) First Installment of fifty percent of total mobilization advance shall be paid after fulfillment of the following conditions:
      a) Signing of the agreement.
b) Submission of Security Deposit cum Performance Guarantee as per Applicable clause.

ii) Second installment of twenty five percent of total mobilization advance will be paid after the setting up of site office and providing facilities to EPI as per contract, and completion of enabling works required for taking up the construction. These include construction of store, labour huts, etc.

iii) The balance twenty five percent of total mobilization advance shall be paid on mobilization of manpower, plant & equipment etc. to the satisfaction of Engineer-In-Charge of EPI.

19.2.2 Recovery of such sums advanced shall be made by the deduction from the Sub-contractor bills commencing after first ten per cent of the gross value of the work is executed and paid, on pro-rata percentage basis to the gross value of the work billed beyond 10% in such a way that the entire advance is recovered by the time eighty percent of the gross value of the contract is executed and paid, together with interest due on the entire outstanding amount up to the date of recovery of the installment.

19.2.3 Part ‘Bank Guarantees’ (BGs) against mobilization advance shall be furnished in as many numbers as the number of recovery installments as given in “Memorandum” and should be equivalent to the amount of each recovery installment. At any point of time, if the Sub-Contractor’s payable amount on account of work done is not available with EPI or the amount payable is less than the recovery installment, recovery of such advance shall be effected by encashing the BG of equivalent recovery amount. The decision of EPI in this regard shall be final and binding on the Sub-Contractor. The validity period for the part BGs shall be till three months after the end of the month in which installment is due to be recovered with further three months claim period.

19.2.4 In case recovery of Mobilization Advance is delayed, interest shall be charged@12% (Twelve percent) per annum on delayed recoveries due to late submission of bills by the Sub-Contractor or due to delayed encashment of Bank Guarantee, as stated above or due to any other reasons whatsoever.

19.2.5 Sub-Contractor is required to furnish the Utilization Certificate for each installment of mobilization advance to the satisfaction of Engineer-In-Charge. Subsequent installments of mobilization advance shall be released only after getting satisfactory utilisation certificate from the Contractor for the earlier released installment.

19.2.6 Notwithstanding what is contained in aforesaid clauses, no mobilization advance whatsoever shall be payable, if payment of mobilization advance is not mentioned in the “Memorandum”. 
19.3 Procedure for estimating the payment for the Works

19.3.1 The Employer shall make interim payments to the Sub-Contractor as certified by the Authority’s Engineer on completion of a stage, in a length, number or area as specified, and valued in accordance with the proportion of the Contract Price assigned to each item and its stage in Schedule-H.

19.3.2 The Sub-Contractor shall base its claim for interim payment for the stages completed till the end of the month for which the payment is claimed, valued in accordance with Clause 19.3.1, supported with necessary particulars and documents in accordance with this Agreement.

19.3.3 Any reduction in the Contract Price arising out of Change of Scope or the works withdrawn under Clause 8.3 shall not affect the amounts payable for the items or stage payments thereof which are not affected by such Change of Scope or withdrawal. For avoidance of doubt and by way of illustration, the Parties agree that if the amount assigned to Major Bridges is reduced from Rs. 100 crore to Rs. 80 crore owing to Change of Scope or withdrawal of work, the reduction in payment shall be restricted to relevant payments for Major Bridges only and the payment due in respect of all other stage payments under the item Major Bridges shall not be affected in any manner. The Parties further agree that the adjustments arising out of the aforesaid modifications shall be carried out in a manner that the impact of such modifications is restricted to the said Change of Scope or withdrawal, as the case may be, and does not alter the payments due for and in respect of items or stage payments which do not form part of such Change of Scope or withdrawal.

19.4 Stage Payment Statement for Works

The Contractor shall submit a statement/Running Account (RA) Bill (the “Stage Payment Statement”), in 3 copies, by the 7th (seventh) day of the month to the Employer in the form set forth in Schedule-O, showing the amount calculated in accordance with Clause 19.3 to which the Sub-Contractor considers himself entitled for completed stage(s) of the Works. The Stage Payment Statement shall be accompanied with the progress reports and any other supporting documents. The Sub-Contractor shall not submit any claim for payment of incomplete stages of work.

19.5 Stage Payment for Works

19.5.1 Within 15 (fifteen) days of receipt of the Stage Payment Statement from the sub-Contractor pursuance to Clause 19.4, the Authority’s Engineer/Employer shall broadly determine the amount due to the sub-Contractor and recommend the release of 90 (ninety) percent of the amount so determined as part payment against the Stage Payment Statement, pending issue of the Interim Payment Certified by the Authority’s Engineer/Employer. Upon receipt of recommendation of the Authority’s Engineer, the Employer shall make electronic payment directly to the sub-Contractor’s Bank Account as early as possible.

19.5.2 Within 30 (thirty) days of the receipt of the Stage Payment Statement referred to in
Clause 19.4, the Employer shall determine and deliver to the Sub-Contractor an IPC certifying the amount due and payable to the Sub-Contractor, after adjusting the payments already released to the Sub-Contractor against the said statement. For the avoidance of doubt, the Parties agree that the IPC shall specify all the amounts that have been deducted from the Stage Payment Statement and the reasons therefore.

19.5.3 In cases where there is a difference of opinion as to the value of any stage, the Employer’s view shall prevail and interim payments shall be made to the Sub-Contractor on this basis; provided that the foregoing shall be without prejudice to the Sub-Contractor’s right to raise a Dispute.

19.5.4 The Employer may, for reasons to be recorded, withhold from payment:

(a) the estimated value of work or obligation that the Sub-Contractor has failed to perform in accordance with this Agreement and the Employer had notified the Sub-Contractor; and

(b) the estimated cost of rectification of work done being not in accordance with this Agreement.

19.5.5 Payment by the Employer shall not be deemed to indicate the Employer’s acceptance, approval, consent or satisfaction with the work done.

19.5.6 All the payments to Sub-contractor shall be released only after receipt of corresponding payments from Authority / Authority Engineer.

19.6 DELETED

19.7 DELETED

19.8 DELETED

19.9 Time of payment

19.9.1 The Employer shall pay to the Sub-Contractor any amount due under any payment certificate issued by the Employer in accordance with the provisions of this Article 19, or in accordance with any other clause of this Agreement as follows:

(a) payment shall be made by the Employer on submission of Stage Payment Statement by the sub-Contractor

(b) Final payment shall be made no later than 90 (ninety) days from the date of submission of the Final Payment Certificate for Works along with the discharge submitted to the Employer in accordance with the provisions of Clause 19.17 for certification.

19.10. Price adjustment for the Works

19.10.1 The amounts payable to the Sub-Contractor for Works shall be adjusted in
accordance with the provisions of this Clause 19.10. 

19.10.2 Subject to the provisions of Clause 19.10.3, the amounts payable to the Sub - Contractor for Works, shall be adjusted in the IPC issued by the Employer for the increase or decrease in the index cost of inputs for the Works and currency fluctuation, by the addition or subtraction of the amounts determined by the formulae prescribed in Clause 19.10.4 & 19.10.5.

19.10.3 To the extent that full compensation for any increase or decrease in costs to the Sub - Contractor or currency fluctuations is not covered by the provisions of this or other Clauses in this Agreement, the costs and prices payable under this Agreement shall be deemed to include the amounts required to cover the contingency of such other increase or decrease of costs and prices.

19.10.4 Price Adjustment due to Increase or decrease in costs

The sub-Contract Price shall be adjusted for increase or decrease in rates and price of labour, cement, steel, Plant, machinery and spares, bitumen, fuel and lubricants, and other material inputs in accordance with the principles, procedures and formulae specified below:

(a) Price adjustment shall be applied on completion of the specified stage of the respective item of work in accordance with Schedule-H;
(b) Adjustment for each item of work/stage shall be made separately.
(c) The following expressions and meanings are assigned to the value of the work done:

\[ RW = \text{Value of work done for the completion of a stage under the following items of Schedule-H:} \]
\[ (i) \quad \text{Road works; and} \]
\[ (ii) \quad \text{Other works} \]

\[ BR = \text{Value of work done for the completion of a stage under the items Major Bridges and Structures (Schedule-H)} \]

(d) Price adjustment for changes in cost shall be paid in accordance with the following formulae:

\[ (i) \quad \text{VRW} = 0.85 \times RW \times \left[ PL \times (LI - LO)/LO + PA \times (AI - AO)/AO + PF \times (FI - FO)/FO + PB \times (BI - BO)/BO + PM \times (MI - MO)/MO + PC \times (CI - CO)/CO + PS \times (SI - SO)/SO \right] \]

\[ (ii) \quad \text{VBR} = 0.85 \times BR \times \left[ PL \times (LI - LO)/LO + PA \times (AI - AO)/AO + PF \times (FI - FO)/FO + PM \times (MI - MO)/MO + PC \times (CI - CO)/CO + PS \times (SI - SO)/SO \right] \]
Where

VRW = Increase or decrease in the cost of road works/other works during the period under consideration due to changes in the rates for relevant components as stated in sub-paragraph (e)

VBR = Increase or decrease in the cost of Major Bridges and Structures during the period under consideration due to changes in the rates for relevant components as stated in sub-paragraph (e)

PB, PC, PL, PM, and PS are the percentages of bitumen, cement, labour, other materials, and steel/components (including strands and cables) respectively for the relevant item as stated in sub-paragraph (e)

PA is the percentage of Plant, machinery and spares component for the relevant item as stated in sub-paragraph (e).

PF is the percentage of fuel and lubricants for the relevant items as stated in sub-paragraph (e).

AO = The wholesale price index as published by the Ministry of Commerce & Industry, Government of India (hereinafter called “WPI”) for construction machinery for the month of the Base Date.

AI = The WPI for construction machinery for the month three months prior to the month to which the IPC relates.

BO = The official retail price of bitumen at the nearest refinery at Haldia on the Base Date.

BI = The official retail price of bitumen at nearest refinery at Haldia, on the first day of the month three months prior to the month to which the IPC relates.

CO = The WPI for grey cement for the month of the Base Date.

CI = The WPI for grey cement for the month three months prior to the month to which the IPC relates.

FO = The official retail price of high speed diesel (HSD) oil at the existing consumer pumps of Indian Oil Corporation (“IOC”) in the State of Mizoram on
the Base Date.

FI = The official retail price of HSD at the existing consumer pumps of IOC in the State of Mizoram on the first day of the month three months prior to the month to which the IPC relates.

LO = The consumer price index for industrial workers in the State of Tripura, published by Labour Bureau, Ministry of Labour, Government of India, (hereinafter called “CPI”) for the month of the Base Date.

LI = The CPI (refer LO) for the month three months prior to the month to which the IPC relates.

MO = The WPI for all commodities for the month of the Base Date.

MI = The WPI for all commodities for the month three months prior to the month to which the IPC relates.

SO = The WPI for steel (re-bars) for the month of the Base Date.

SI = The WPI for steel (re-bars) for the month three months prior to the month to which the IPC relates.

(e) The following percentages shall govern the price adjustment of the Contract Price:

<table>
<thead>
<tr>
<th>Component</th>
<th>Item</th>
<th>Road Works</th>
<th>Major Bridges and Structures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Earthwork, Granular work, and Other works</td>
<td>Bituminous work</td>
</tr>
<tr>
<td>Labour (PL)</td>
<td>[20%]</td>
<td>[20%]</td>
<td>[20%]</td>
</tr>
<tr>
<td>Cement (PC)</td>
<td>[5%]</td>
<td>Nil</td>
<td>[20%]</td>
</tr>
<tr>
<td>Steel (PS)</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td>Bitumen (PB)</td>
<td>Nil</td>
<td>[15%]</td>
<td>Nil</td>
</tr>
</tbody>
</table>
**Fuel and lubricants (PF)** | [10%] | [10%] | [10%] | [10%] | [10%]  
---|---|---|---|---|---  
**Other Materials (PM)** | [50%] | [40%] | [35%] | [30%] | [25%]  
---|---|---|---|---|---  
**Plant, machinery and spares. (PA)** | [15%] | [15%] | [15%] | [15%] | [15%]  
---|---|---|---|---|---  
**Total** | 100% | 100% | 100% | 100% | 100%  

(f) In case an IPC relates to a month which is within 3 (three) months from the Base Date, no price adjustment shall be applicable.

**19.10.5 Price Adjustment due to Currency Fluctuations**

The sub-Contract Price shall be adjusted for fluctuation in conversion rates of USD (United States Dollar) from INR (Indian National Rupee) only in accordance with the principles, procedures and formula specified below:

(a) Price adjustment shall be applied on completion of the specified stage of works in accordance with Schedule-H;

(b) No Adjustment shall be made for fluctuations in conversion rates of currencies of any other country (except USD to INR or vice versa). It is construed that costs of all such conversions are inclusive in the awarded contract price.

(c) If the fluctuation in conversions rate from INR to USD is within +/-5% with respect to base date, no price adjustment shall be applicable as the fluctuation upto +/- 5% is deemed to be inclusive in awarded contract price

(d) Conversion rate of INR to USD or vice versa shall be the daily representative exchange rates published by the International Monetary Fund for the relevant date.

(e) Price adjustment for changes in currency fluctuation shall be paid in accordance with the following formula:

\[
V$ = 0.85 \times R$ \times (SI - SO)/SO
\]

Where:
V$ = Increase or decrease in the cost of Project in USD during the period under consideration due to changes in the conversion rates of INR to USD or Vice versa.

R$ = Equivalent Value of work done for the completion of a stage under all items of Schedule-H in USD. The contractor should submit a certificate from Statuary Auditor of the Contractor towards percentage of expenditure incurred by Contractor in USD in a particular stage at conversion rate as per daily exchange rate of INR to USD published by International Monetary Fund as applicable on Base Date duly supported by the invoices/vouchers of foreign expenditure incurred or other proof as desired by Authority’s Engineer; however the limiting value of USD component in such IPC shall not exceed 40% of IPC amount certified by Authority’s Engineer. Any further or additional foreign component, if incurred by Contractor, the Authority shall not be responsible for such payment or price adjustment due to currency fluctuation on such payments.

$I = Representative exchange rate of USD to INR published by the International Monetary Fund on the first day of the month three months prior to which the IPC relates.

$O = Representative exchange rate of USD to INR published by the International Monetary Fund for the month of the Base Date.

(f) In case an IPC relates to a month which is within 3 (three) months from the Base Date, no price escalation due to currency fluctuation shall be applicable.

19.11 Restrictions on price adjustment

Price adjustment shall be due and payable only in respect of the stages of Works for which the Stage Payment Statement has been submitted by the Sub-Contractor no later than 30 (thirty) days from the date of the applicable Project Milestone or the Scheduled Completion Date, as the case may be, including any Time Extension granted therefore in accordance with the provisions of this Agreement. For the avoidance of doubt, in the event of submission of any Stage Payment Statement after
the period specified herein, price adjustment shall be applicable until the date of the respective Project Milestone or the Scheduled Completion Date, as the case may be.

19.12. DELETED

19.13 Final Payment Statement

19.13.1 Within 30 (thirty) days after receiving the Completion Certificate under Clause 12.4, the sub-Contractor shall submit to the Employer for consideration six copies of a Final Payment Statement (the “Final Payment Statement”) for Works, with supporting documents showing in detail, in the form prescribed by the Employer:

(a) the summary of Contractor’s Stage Payment claims for Works as submitted in accordance with Clause 19.4;
(b) the amounts received from the Employer against each claim; and
(c) any further sums which the sub-Contractor considers due to it from the Employer.

If the Employer disagrees with or cannot verify any part of the Final Payment Statement, the sub-Contractor shall submit such further information as the Employer may reasonably require. The Employer shall deliver to the Authority’s Engineer:

(i) an IPC for those parts of the Final Payment Statement which are not in dispute, along with a list of disputed items which shall then be settled in accordance with the provisions of Article 26; or
(ii) a Final Payment Certificate in accordance with Clause 19.15 if there are no disputed items.

19.13.2 If the Employer does not prescribe the form referred to in Clause 19.13.1 within 15 (fifteen) of the date of issue of the Completion Certificate, the sub-Contractor shall submit the statement in such form as it deems fit.

19.14 Discharge

Upon submission of the Final Payment Statement for Works under Clause 19.13, the sub-Contractor shall give to the Employer, a written discharge confirming that the total of the Final Payment Statement represents full and final settlement of all monies due to the Contractor in respect of this Agreement for all the Works arising out of this Agreement, except for any monies due to either Party on account of any Defect. Provided that such discharge shall become effective only after the payment due has been made in accordance with the Final Payment Certificate issued pursuant to Clause 19.15.

19.15 Final Payment Certificate
19.15.1 Within 50 (fifty) days after receipt of the Final Payment Statement for Works under Clause 19.13, and the written discharge under Clause 19.14, and there being no disputed items of claim, the Employer shall deliver to the Authority Engineer, with a copy to the Contractor, a final payment certificate (the “Final Payment Certificate”) stating the amount which, in the opinion of the Authority’s Engineer, is finally due under this Agreement or otherwise. For the avoidance of doubt, before issuing the Final Payment Certificate, the Authority’s Engineer shall ascertain from the Authority all amounts previously paid by the Authority and for all sums to which the Authority is entitled, the balance, if any, due from the Authority to the Contractor or from the Contractor to the Authority, as the case may be.

19.15.2 The Authority shall, in accordance with the provisions of Clause 19.9, pay to the Sub-Contractor the amount which is stated as being finally due in the Final Payment Certificate.

19.16 DELETED

19.17 Change in law

19.17.1 If as a result of Change in Law, the Sub-Contractor suffers any additional costs in the execution of the Works or in relation to the performance of its other obligations under this Agreement, the Sub-Contractor shall, within 15 (fifteen) days from the date it becomes reasonably aware of such addition in cost, notify the Employer with a copy to the Authority’s Engineer of such additional cost due to Change in Law.

19.17.2 If as a result of Change in Law, the Sub-Contractor benefits from any reduction in costs for the execution of this Agreement or in accordance with the provisions of this Agreement, either Party shall, within 15 (fifteen) days from the date it becomes reasonably aware of such reduction in cost, notify the other Party with a copy to the Authority’s Engineer of such reduction in cost due to Change in Law.

19.17.3 The Employer shall, within 15 (fifteen) days from the date of receipt of the notice from the Sub-Contractor, determine any addition or reduction to the Contract Price, as the case may be, due to the Change in Law.

19.18 Correction of Interim Payment Certificates

The Employer may by an Interim Payment Certificate make any correction or modification in any previous Interim Payment Certificate issued by the Authority’s Engineer.
19.19 Employer’s claims

If the Employer considers itself to be entitled to any payment from the sub-Contractor under any Clause of this Agreement, it shall give notice and particulars to the sub-Contractor 20 (twenty) days before making the recovery from any amount due to the sub-Contractor, and shall take into consideration the representation, if any, made by the Sub-Contractor in this behalf, before making such recovery.

19.20 Bonus for early completion-DELETED
ARTICLE 20

INSURANCE

Employer will take Contractors all risk policy pertaining to the contract in compliance with clause No. 20. The bidder should take note of it and also cover any other risk at its own cost.

20.1 Deleted

20.2 Deleted

20.3 Deleted
20.4 Deleted

20.5 Deleted

20.6 Deleted
20.7  Deleted

20.8  Deleted
20.9  Deleted

20.10 Deleted

20.11 Deleted
Part V

Force Majeure and Termination
ARTICLE 21

FORCE MAJEURE

21.1 Force Majeure

And used in this Agreement, the expression “Force Majeure” or the “Force Majeure Event” shall mean occurrence in Myanmar of any or all of Non Political Event, Indirect Political Event and Political Event, as defined in the Clause 21.2, 21.3 and 21.4 respectively, if it affects the performance by the Party claiming the benefit of Force Majeure (the “Affected Party”) of its obligation under this Agreement and which act or event (i) is beyond the reasonable control of the Affected Party, and (ii) The Affected Party could not have prevented or overcome by exercise of due diligence and following Good Industry Practice, and (iii) has Material Adverse Effect on the Affected Party.

21.2 Non-Political Event

A Non-Political Event shall mean one or more of the following acts or events:

(a) act of God, epidemic, extremely adverse weather conditions, lightning, earthquake, landslide, cyclone, flood, volcanic eruption, chemical or radioactive contamination or ionising radiation, fire or explosion (to the extent of contamination or radiation or fire or explosion originating from a source external to the Site);

(b) strikes or boycotts (other than those involving the Sub-contractors or their respective employees/representatives, or attributable to any act or omission of any of them) interrupting supplies and services to the Project Highway for a continuous period of 24 (twenty-four) hours and an aggregate period exceeding 10 (ten) days in an Accounting Year, and not being an Indirect Political Event set forth in Clause 21.3;

(c) any failure or delay of a Sub-contractor but only to the extent caused by another Non-Political Event;

(d) any judgement or order of any court of competent jurisdiction or statutory authority made against the Sub-Contractor in any proceedings for reasons other than (i) failure of the Sub-Contractor to comply with any Applicable Law or Applicable Permit, or (ii) on account of breach of any Applicable Law or Applicable Permit or of any contract, or (iii) enforcement of this Agreement, or (iv) exercise of any of its rights under this Agreement by the Employer;

(e) the discovery of geological conditions, toxic contamination or archaeological remains on the Site that could not reasonably have been expected to be discovered through a site inspection; or any event or circumstances of a nature analogous to any of the foregoing.
21.3 Indirect Political Event

An Indirect Political Event shall mean one or more of the following acts or events:

(a) an act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo, riot, insurrection, terrorist or military action, civil commotion or politically motivated sabotage;
(b) industry-wide or State-wide strikes or industrial action for a continuous period of 24 (twenty-four) hours and exceeding an aggregate period of 10 (ten) days in an Accounting Year;
(c) any civil commotion, boycott or political agitation which prevents construction of the Project Highway by the Contractor for an aggregate period exceeding 10 (ten) days in an Accounting Year;
(d) any failure or delay of a Sub-contractor to the extent caused by any Indirect Political Event;
(e) any Indirect Political Event that causes a Non-Political Event; or
(f) any event or circumstances of a nature analogous to any of the foregoing.

21.4 Political Event

A Political Event shall mean one or more of the following acts or events by or on account of any Government Instrumentality:

(a) Change in Law, only if consequences thereof cannot be dealt with under and in accordance with the provisions of Clause 19.17;
(b) compulsory acquisition in national interest or expropriation of any Project Assets or rights of the Contractor or of the Sub-Contractors;
(c) unlawful or unauthorized or without jurisdiction revocation of, or refusal to renew or grant without valid cause, any clearance, license, permit, authorization, no objection certificate, consent, approval or exemption required by the Sub-Contractor or any of the Sub-contractors to perform their respective obligations under this Agreement; provided that such delay, modification, denial, refusal or revocation did not result from the Sub-contractor’s inability or failure to comply with any condition relating to grant, maintenance or renewal of such clearance, license, authorization, no objection certificate, exemption, consent, approval or permit;
(d) any failure or delay of a Sub-contractor but only to the extent caused by another Political Event; or
(e) any event or circumstances of a nature analogous to any of the foregoing.

21.5 Duty to report Force Majeure Event

21.5.1 Upon occurrence of a Force Majeure Event, the Affected Party shall by notice report such occurrence to the other Party forthwith. Any notice pursuant hereto shall include full particulars of:
21.5.2 The Affected Party shall not be entitled to any relief for or in respect of a Force Majeure Event unless it shall have notified the other Party of the occurrence of the Force Majeure Event as soon as reasonably practicable, and in any event no later than 10 (ten) days after the Affected Party knew, or ought reasonably to have known, of its occurrence, and shall have given particulars of the probable material effect that the Force Majeure Event is likely to have on the performance of its obligations under this Agreement.

21.5.3 For so long as the Affected Party continues to claim to be materially affected by such Force Majeure Event, it shall provide the other Party with regular (and not less than weekly) reports containing information as required by Clause 21.5.1, and such other information as the other Party may reasonably request the Affected Party to provide.

21.6 **Effect of Force Majeure Event on the Agreement**

21.6.1 Upon the occurrence of any Force Majeure after the Appointed Date, the costs incurred and attributable to such event and directly relating to this Agreement (the “**Force Majeure costs**”) shall be allocated and paid as follows:

(a) upon occurrence of a Non-Political Event, the Parties shall bear their respective Force Majeure costs and neither Party shall be required to pay to the other Party any costs thereof;

(b) upon occurrence of an Indirect Political Event, all Force Majeure costs attributable to such Indirect Political Event, and not exceeding the Insurance Cover for such Indirect Political Event, shall be borne by the Sub-Contractor, and to the extent Force Majeure costs exceed such Insurance Cover, one half of such excess amount shall be reimbursed by the Employer to the Sub-Contractor for the Force Majeure events; and

(c) upon occurrence of a Political Event, all Force Majeure costs attributable to such Political Event shall be reimbursed by the Employer to the Sub-Contractor.

For the avoidance of doubt, Force Majeure costs may include costs directly attributable to the Force Majeure Event, but shall not include debt repayment obligations, if any, of the Sub-Contractor.
21.6.2 Save and except as expressly provided in this Article 21, neither Party shall be liable in any manner whatsoever to the other Party in respect of any loss, damage, cost, expense, claims, demands and proceedings relating to or arising out of occurrence or existence of any Force Majeure Event or exercise of any right pursuant hereto.

21.6.3 Upon the occurrence of any Force Majeure Event during the Construction Period, the Project Completion Schedule for and in respect of the affected Works shall be extended on a day for day basis for such period as performance of the Sub-Contractor’s obligations is affected on account of the Force Majeure Event or its subsisting effects.

21.7 Termination Notice for Force Majeure Event

21.7.1 If a Force Majeure Event subsists for a period of 60 (sixty) days or more within a continuous period of 120 (one hundred and twenty) days, either Party may in its discretion terminate this Agreement by issuing a Termination Notice to the other Party without being liable in any manner whatsoever, save as provided in this Article 21, and upon issue of such Termination Notice, this Agreement shall, notwithstanding anything to the contrary contained herein, stand terminated forthwith; provided that before issuing such Termination Notice, the Party intending to issue the Termination Notice shall inform the other Party of such intention and grant 15 (fifteen) days time to make a representation, and may after the expiry of such 15 (fifteen) days period, whether or not it is in receipt of such representation, in its sole discretion issue the Termination Notice.

21.8 Termination Payment for Force Majeure Event

21.8.1 In the event of this Agreement being terminated on account of a Non-Political Event, the Termination Payment shall be an amount equal to the sum payable under Clause 23.5.

Provided that in the event Termination occurs during the Maintenance Period, the Employer/Authority’s Engineer shall only determine the value of Works associated with Maintenance.

21.8.2 If Termination is on account of an Indirect Political Event, the Termination Payment shall include:

(a) any sums due and payable under Clause 23.5; and
(b) the reasonable cost, as determined by the Employer /Authority’s Engineer, of the Plant and Materials procured by the Sub-Contractor and transferred to the Employer for use in Construction or Maintenance, only if such Plant and Materials are in conformity with the Specifications and Standards;
Provided that in the event Termination occurs during the Maintenance Period, the Authority’s Engineer shall only determine the value of Works associated with Maintenance.

21.8.3 If Termination is on account of a Political Event, the Authority shall make a Termination Payment to the Contractor in an amount that would be payable under Clause 23.6.2 as if it were an Authority Default.

21.9 **Dispute resolution**

In the event that the Parties are unable to agree in good faith about the occurrence or existence of a Force Majeure Event, such Dispute shall be finally settled in accordance with the Dispute Resolution Procedure; provided that the burden of proof as to the occurrence or existence of such Force Majeure Event shall be upon the Party claiming relief and/or excuse on account of such Force Majeure Event.

21.10 **Excuse from performance of obligations**

If the Affected Party is rendered wholly or partially unable to perform its obligations under this Agreement because of a Force Majeure Event, it shall be excused from performance of such of its obligations to the extent it is unable to perform on account of such Force Majeure Event; provided that:

(a) the suspension of performance shall be of no greater scope and of no longer duration than is reasonably required by the Force Majeure Event;

(b) the Affected Party shall make all reasonable efforts to mitigate or limit damage to the other Party arising out of or as a result of the existence or occurrence of such Force Majeure Event and to cure the same with due diligence; and

(c) when the Affected Party is able to resume performance of its obligations under this Agreement, it shall give to the other Party notice to that effect and shall promptly resume performance of its obligations hereunder.
ARTICLE 22

SUSPENSION OF SUB-CONTRACTOR'S RIGHTS

22.1 Suspension upon Sub-Contractor Default

Upon occurrence of a Sub-Contractor Default, the Employer shall be entitled, without prejudice to its other rights and remedies under this Agreement including its rights of Termination hereunder, to (i) suspend carrying out of the Works or Maintenance or any part thereof, and (ii) carry out such Works or Maintenance itself or authorize any other person to exercise or perform the same on its behalf during such suspension (the “Suspension”). Suspension hereunder shall be effective forthwith upon issue of notice by the Employer to the Sub-Contractor and may extend up to a period not exceeding 90 (ninety) days from the date of issue of such notice.

22.2 Employer to act on behalf of Sub-Contractor

During the period of Suspension hereunder, all rights and liabilities vested in the Sub-Contractor in accordance with the provisions of this Agreement shall continue to vest therein and all things done or actions taken, including expenditure incurred by the Employer for discharging the obligations of the Sub-Contractor under and in accordance with this Agreement shall be deemed to have been done or taken for and on behalf of the Sub-Contractor and the Sub-Contractor undertakes to indemnify the Employer for all costs incurred during such period. The Sub-Contractor hereby licenses and sub-licenses respectively, the Authority or any other person authorized by it under Clause 22.1 to use during Suspension, all Intellectual Property belonging to or licensed to the Contractor with respect to the Project Highway and its design, engineering, construction and maintenance, and which is used or created by the Contractor in performing its obligations under the Agreement.

22.3 Revocation of Suspension

22.3.1 In the event that the Employer shall have rectified or removed the cause of Suspension within a period not exceeding 60 (sixty) days from the date of Suspension, it shall revoke the Suspension forthwith and restore all rights of the Sub-Contractor under this Agreement. For the avoidance of doubt, the Parties expressly agree that the Employer may, in its discretion, revoke the Suspension at any time, whether or not the cause of Suspension has been rectified or removed hereunder.

22.3.2 Upon the Sub-Contractor having cured the Sub-Contractor Default within a period not exceeding 60 (sixty) days from the date of Suspension, the Employer shall revoke the Suspension forthwith and restore all rights of the Sub-Contractor under this Agreement.
22.4 Termination

22.4.1 At any time during the period of Suspension under this Article 22, the Sub-Contractor may by notice require the Employer to revoke the Suspension and issue a Termination Notice. The Employer shall, within 15 (fifteen) days of receipt of such notice, terminate this Agreement under and in accordance with Article 23.

22.4.2 Notwithstanding anything to the contrary contained in this Agreement, in the event that Suspension is not revoked within 90 (ninety) days from the date of Suspension hereunder, the Agreement shall, upon expiry of the aforesaid period, be deemed to have been terminated by mutual agreement of the Parties and all the provisions of this Agreement shall apply, mutatis mutandis, to such Termination as if a Termination Notice had been issued by the Employer upon occurrence of a Sub-Contractor Default.
ARTICLE 23

TERMINATION

23.1 Termination for Sub-Contractor Default

23.1.1 Save as otherwise provided in this Agreement, in the event that any of the defaults specified below shall have occurred, and the Sub-Contractor fails to cure the default within the Cure Period set forth below, or where no Cure Period is specified, then within a Cure Period of 60 (sixty) days, the Sub-Contractor shall be deemed to be in default of this Agreement (the “Contractor Default”), unless the default has occurred solely as a result of any breach of this Agreement by the Employer or due to Force Majeure. The defaults referred to herein shall include:

(a) the Sub-Contractor fails to provide, extend or replenish, as the case may be, the Performance Security in accordance with this Agreement;
(b) subsequent to the replenishment or furnishing of fresh Performance Security in accordance with Clause 7.3, the Sub-Contractor fails to cure, within a Cure Period of 30 (thirty) days, the Contractor Default for which the whole or part of the Performance Security was appropriated;
(c) the Sub-Contractor does not achieve the latest outstanding Project Milestone due in accordance with the provisions of Schedule-J, subject to any Time Extension, and continues to be in default for 45 (forty five) days;
(d) the Sub-Contractor abandons or manifests intention to abandon the construction or Maintenance of the Project Highway without the prior written consent of the Employer;
(e) the Sub-Contractor fails to proceed with the Works in accordance with the provisions of Clause 10.1 or stops Works and/or the Maintenance for 30 (thirty) days without reflecting the same in the current programme and such stoppage has not been authorized by the Authority’s Engineer;
(f) the Project Completion Date does not occur within the period specified in Schedule-J for the Scheduled Completion Date, or any extension thereof;
(g) failure to complete the Punch List items within the periods stipulated therefore in Clause 12.2.1;
(h) the Sub-Contractor fails to rectify any Defect, the non-rectification of which shall have a Material Adverse Effect on the Project, within the time specified in this Agreement or as directed by the Employer /Authority’s Engineer;
(i) the Sub-Contractor subcontracts the Works or any part thereof in violation of this Agreement or assigns any part of the Works or the Maintenance without the prior approval of the Employer;
(j) the Sub-Contractor creates any Encumbrance in breach of this Agreement;
(k) an execution levied on any of the assets of the Sub-Contractor has caused a Material Adverse Effect;
(l) the Sub-Contractor is adjudged bankrupt or insolvent, or if a trustee or receiver is appointed for the Contractor or for the whole or material part of its assets that has a material bearing on the Project;
the Sub-Contractor has been, or is in the process of being liquidated, dissolved, wound-up, amalgamated or reconstituted in a manner that would cause, in the reasonable opinion of the Authority, a Material Adverse Effect;

a resolution for winding up of the Sub-Contractor is passed, or any petition for winding up of the Sub-Contractor is admitted by a court of competent jurisdiction and a provisional liquidator or receiver is appointed and such order has not been set aside within 90 (ninety) days of the date thereof or the Sub-Contractor is ordered to be wound up by court except for the purpose of amalgamation or reconstruction; provided that, as part of such amalgamation or reconstruction, the entire property, assets and undertaking of the Sub-Contractor are transferred to the amalgamated or reconstructed entity and that the amalgamated or reconstructed entity has unconditionally assumed the obligations of the Sub-Contractor under this Agreement; and provided that:

(i) the amalgamated or reconstructed entity has the capability and experience necessary for the performance of its obligations under this Agreement; and

(ii) the amalgamated or reconstructed entity has the financial standing to perform its obligations under this Agreement and has a credit worthiness at least as good as that of the Sub-Contractor as at the Appointed Date;

any representation or warranty of the Sub-Contractor herein contained which is, as of the date hereof, found to be materially false or the Sub-Contractor is at any time hereafter found to be in breach thereof;

the Sub-Contractor submits to the Employer any statement, notice or other document, in written or electronic form, which has a material effect on the Employer’s rights, obligations or interests and which is false in material particulars;

the Sub-Contractor has failed to fulfill any obligation, for which failure Termination has been specified in this Agreement; or

the Sub-Contractor commits a default in complying with any other provision of this Agreement if such a default causes a Material Adverse Effect on the Project or on the Authority.

23.1.2 Without prejudice to any other rights or remedies which the Employer may have under this Agreement, upon occurrence of a Sub-Contractor Default, the Employer shall be entitled to terminate this Agreement by issuing a Termination Notice to the Sub-Contractor; provided that before issuing the Termination Notice, the Employer shall by a notice inform the Sub-Contractor of its intention to issue such Termination Notice and grant 15 (fifteen) days to the Sub-Contractor to make a representation, and may after the expiry of such 15 (fifteen) days, whether or not it is in receipt of such representation, issue the Termination Notice.

23.1.3 After termination of this Agreement for Sub-Contractor Default, the Employer may complete the Works and/or arrange for any other entities to do so. The Employer and these entities may then use any Materials, Plant and equipment, Contractor’s documents and other design documents made by or on behalf of the Contractor.
23.2 **Termination for Employer Default**

23.2.1 In the event that any of the defaults specified below shall have occurred, and the Employer fails to cure such default within a Cure Period of 90 (ninety) days or such longer period as has been expressly provided in this Agreement, the Employer shall be deemed to be in default of this Agreement (the “Employer Default”) unless the default has occurred as a result of any breach of this Agreement by the Sub-Contractor or due to Force Majeure. The defaults referred to herein shall include:

(a) the Employer commits a material default in complying with any of the provisions of this Agreement and such default has a Material Adverse Effect on the Contractor;

(b) the Employer has failed to make payment of any amount due and payable to the Contractor within the period specified in this Agreement;

(c) the Employer has failed to provide, within a period of 180 (one hundred and eighty) days from the Appointed Date, the environmental clearances required for construction of the Project Highway;

(d) the Employer repudiates this Agreement or otherwise takes any action that amounts to or manifests an irrevocable intention not to be bound by this Agreement; or

(e) the Employer fails to issue the relevant Interim Payment Certificate within 60 (sixty) days after receiving a statement and supporting documents.

23.2.2 Without prejudice to any other right or remedy which the Sub-Contractor may have under this Agreement, upon occurrence of an Employer Default, the Sub-Contractor shall be entitled to terminate this Agreement by issuing a Termination Notice to the Employer; provided that before issuing the Termination Notice, the Sub-Contractor shall by a notice inform the Employer of its intention to issue the Termination Notice and grant 15 (fifteen) days to the Employer to make a representation, and may after the expiry of such 15 (fifteen) days, whether or not it is in receipt of such representation, issue the Termination Notice.

If on the consideration of Employer’s representation or otherwise, the Sub-Contractor does not issue the Termination Notice on such 15th day and prefers to continue with the project, it is deemed that the cause of action of the Termination Notice has been condoned by the Sub-Contractor. Hence he forfeits his right to any other remedy on that count.

23.3 **Termination for Employer’s convenience**

Notwithstanding anything stated hereinabove, the Employer may terminate this Agreement for convenience. The termination shall take effect 30 (thirty) days from the date of notice hereunder.
23.4 Requirements after Termination

Upon Termination of this Agreement in accordance with the terms of this Article 23, the Sun-Contractor shall comply with and conform to the following:

(a) deliver to the Employer all Plant and Materials which shall have become the property of the Employer under this Article 23;
(b) deliver all relevant records, reports, Intellectual Property and other licenses pertaining to the Works, Maintenance, other design documents and in case of Termination occurring after the Provisional Certificate has been issued, the “as built” Drawings for the Works;
(c) transfer and/or deliver all Applicable Permits to the extent permissible under Applicable Laws; and
(d) Vacate the Site within 15 (fifteen) days.

23.5 Valuation of Unpaid Works

23.5.1 Within a period of 45 (forty-five) days after Termination under Clause 23.1, 23.2 or 23.3, as the case may be, has taken effect, the Employer’s Engineer shall proceed in accordance with Clause 18.5 to determine as follows the valuation of unpaid Works (the “Valuation of Unpaid Works”):

(a) value of the completed stage of the Works, less payments already made;
(b) reasonable value of the partially completed stages of works as on the date of Termination, only if such works conform with the Specifications and Standards; and
(c) Deleted.

and shall adjust from the sum thereof (i) any other amounts payable or recoverable, as the case may be, in accordance with the provisions of this Agreement; and (ii) all taxes due to be deducted at source.

23.5.2 The Valuation of Unpaid Works shall be communicated to the Employer, with a copy to the Sub-Contractor, within a period of 30 (thirty) days from the date of Termination.

23.6 Termination Payment

23.6.1 Upon Termination on account of Sub-Contractor’s Default under Clause 23.1, the Employer shall:

(a) encash and appropriate the Performance Security and Retention Money, or in the event the Contractor has failed to replenish or extend the Performance Security, claim the amount stipulated in Clause 7.1.1, as agreed
pre-determined compensation to the Employer for any losses, delays and cost of completing the Works and Maintenance, if any;

(b) encash and appropriate the bank guarantee, if any, for and in respect of the outstanding Advance Payment and interest thereon; and

(c) pay to the Sub-Contractor, by way of Termination Payment, an amount equivalent to the Valuation of Unpaid Works after adjusting any other sums payable or recoverable, as the case may be, in accordance with the provisions of this Agreement.

23.6.2 Upon Termination on account of an Employer Default under Clause 23.2 or for Employer’s convenience under Clause 23.3, the Employer shall:

(a) return the Performance Security and Retention Money forthwith;

(b) encash and appropriate the bank guarantee, if any, for and in respect of the outstanding Advance Payment; and

(c) pay to the Sub-Contractor, by way of Termination Payment, an amount equal to:

(i) Valuation of Unpaid Works;

(ii) the reasonable cost, as determined by the Authority’s Engineer / Employer, of the Plant and Materials procured by the Sub-Contractor and transferred to the Employer for its use, only if such Plant and Materials are in conformity with the Specifications and Standards;

(iii) the reasonable cost of temporary works, as determined by the Authority’s Engineer/ Employer;

and

(iv) 10% (ten per cent) of the cost of the Works and Maintenance that are not commenced or not completed,

and shall adjust from the sum thereof (i) any other amounts payable or recoverable, as the case may be, in accordance with the provisions of this Agreement, and (ii) all taxes due to be deducted at source.

23.6.3 Termination Payment shall become due and payable to the Sub-Contractor within 30 (thirty) days of a demand being made by the Sub-Contractor to the Employer with the necessary particulars, and in the event of any delay, the Employer shall pay interest at the Base Rate plus 2% (two percent), calculated at quarterly rests, on the amount of Termination Payment remaining unpaid; provided that such delay shall not exceed 90 (ninety) days. For the avoidance of doubt, it is expressly agreed that Termination Payment shall constitute full discharge by the Authority of its payment obligations in respect thereof hereunder.

23.6.4 The Sub-Contractor expressly agrees that Termination Payment under this Article 23 shall constitute a full and final settlement of all claims of the Sub-Contractor on account of Termination of this Agreement and that it shall not have any further right or claim under any law, treaty, convention, contract or otherwise.
23.7 Other rights and obligations of the Parties

Upon Termination for any reason whatsoever

(a) property and ownership in all Materials, Plant and Works and the Project Highway shall, as between the Sub-Contractor and the Employer, vest in the Employer in whole; provided that the foregoing shall be without prejudice to Clause 23.6

(b) risk of loss or damage to any Materials, Plant or Works and the care and custody thereof shall pass from the Sub-Contractor to the Employer; and

(c) the Employer shall be entitled to restrain the Sub-Contractor and any person claiming through or under the Agreement from entering upon the Site or any part of the Work except for taking possession of materials, stores, implements, construction plants and equipment of the Sub-Contractor, which have not been vested in the Employer in accordance with the provisions of this Agreement.

23.8 Survival of rights

Notwithstanding anything to the contrary contained in this Agreement any Termination pursuant to the provisions of this Agreement shall be without prejudice to the accrued rights of either Party including its right to claim and recover money damages, insurance proceeds, security deposits, and other rights and remedies, which it may have in law or Agreement. All rights and obligations of either Party under this Agreement, including Termination Payments, shall survive the Termination to the extent such survival is necessary for giving effect to such rights and obligations.
Part VI Other Provisions
ARTICLE 24

ASSIGNMENT AND CHARGES

24.1 Restrictions on assignment and charges

This Agreement shall not be assigned by the Sub-Contractor to any person, save and except with the prior consent in writing of the Employer, which consent the Employer shall be entitled to decline without assigning any reason.

24.2 Hypothecation of Materials or Plant

Notwithstanding the provisions of Clause 24.1, the Sub-Contractor may pledge or hypothecate to its lenders, any Materials or Plant prior to their incorporation in the Works. Further, the Sub-Contractor may, by written notice to the Employer, assign its right to receive payments under this Agreement either absolutely or by way of charge, to any person providing financing to the Sub-Contractor in connection with the performance of the Contractor’s obligations under this Agreement. The Sub-Contractor acknowledges that any such assignment by the Sub-Contractor shall not relieve the Contractor from any obligations, duty or responsibility under this Agreement.
ARTICLE 25

LIABILITY AND INDEMNITY

25.1 General indemnity

25.1.1 The Sub-Contractor will indemnify, defend, save and hold harmless the Employer and its officers, servants, agents, Government Instrumentalities and Government owned and/or controlled entities/enterprises, (the “Employer Indemnified Persons”) against any and all suits, proceedings, actions, demands and third party claims for any loss, damage, cost and expense of whatever kind and nature, whether arising out of any breach by the Sub-Contractor of any of its obligations under this Agreement or from any negligence under the Agreement, including any errors or deficiencies in the design documents, or tort or on any other ground whatsoever, except to the extent that any such suits, proceedings, actions, demands and claims have arisen due to any negligent act or omission, or breach or default of this Agreement on the part of the Employer Indemnified Persons.

25.2 Indemnity by the Sub-Contractor

25.2.1 Without limiting the generality of Clause 25.1, the Sub-Contractor shall fully indemnify, hold harmless and defend the Employer and the Employer Indemnified Persons from and against any and all loss and/or damages arising out of or with respect to:

(a) failure of the Sub-Contractor to comply with Applicable Laws and Applicable Permits;
(b) payment of taxes required to be made by the Sub-Contractor in respect of the income or other taxes of the agencies, suppliers and representatives; or
(c) Non-payment of amounts due as a result of Materials or services furnished to the Sub-Contractor or any of its Agencies which are payable by the Contractor or any of its agencies.

25.2.2 Without limiting the generality of the provisions of this Article 25, the Sub-Contractor shall fully indemnify, hold harmless and defend the Employer Indemnified Persons from and against any and all suits, proceedings, actions, demands, liabilities and damages which the Employer Indemnified Persons may hereafter suffer, or pay by reason of any demands, claims, suits or proceedings arising out of claims of infringement of any domestic or foreign patent rights, copyrights or other intellectual property, proprietary or confidentiality rights with respect to any materials, information, design or process used by the Sub-Contractor or by the Sub-contractors in performing the Sub-Contractor’s obligations or in any way incorporated in or related to the Work. If in any such suit, action, claim or proceedings, a temporary restraint order or preliminary injunction is granted, the Sub-Contractor shall make every reasonable effort, by giving a satisfactory bond or otherwise, to secure the revocation or suspension of the injunction or restraint order. If, in any such suit, action, claim or proceedings, the Project Highway, or any part thereof or comprised therein, is held to constitute an infringement and its
use is permanently enjoined, the Sub-Contractor shall promptly make every reasonable effort to secure for the Employer a license, at no cost to the Employer, authorizing continued use of the infringing work. If the Sub-Contractor is unable to secure such license within a reasonable time, the Sub-Contractor shall, at its own expense, and without impairing the Specifications and Standards, either replace the affected work, or part, or process thereof with non-infringing work or part or process, or modify the same so that it becomes non-infringing.

25.3 Notice and contest of claims

In the event that either Party receives a claim or demand from a third party in respect of which it is entitled to the benefit of an indemnity under this Article 25 (the “Indemnified Party”) it shall notify the other Party (the “Indemnifying Party”) within 15 (fifteen) days of receipt of the claim or demand and shall not settle or pay the claim without the prior approval of the Indemnifying Party, which approval shall not be unreasonably withheld or delayed. In the event that the Indemnifying Party wishes to contest or dispute the claim or demand, it may conduct the proceedings in the name of the Indemnified Party, subject to the Indemnified Party being secured against any costs involved, to its reasonable satisfaction.

25.4 Defense of claims

25.4.1 The Indemnified Party shall have the right, but not the obligation, to contest, defend and litigate any claim, action, suit or proceeding by any third party alleged or asserted against such Party in respect of, resulting from, related to or arising out of any matter for which it is entitled to be indemnified hereunder, and reasonable costs and expenses thereof shall be indemnified by the Indemnifying Party. If the Indemnifying Party acknowledges in writing its obligation to indemnify the Indemnified Party in respect of loss to the full extent provided by this Article 25, the Indemnifying Party shall be entitled, at its option, to assume and control the defense of such claim, action, suit or proceeding, liabilities, payments and obligations at its expense and through the counsel of its choice; provided it gives prompt notice of its intention to do so to the Indemnified Party and reimburses the Indemnified Party for the reasonable cost and expenses incurred by the Indemnifying Party prior to the assumption by the Indemnifying Party of such defense. The Indemnifying Party shall not be entitled to settle or compromise any claim, demand, action, suit or proceeding without the prior written consent of the Indemnified Party, unless the Indemnifying Party provides such security to the Indemnified Party as shall be reasonably required by the Indemnified Party to secure the loss to be indemnified hereunder to the extent so compromised or settled.

25.4.2 If the Indemnifying Party has exercised its rights under Clause 25.3, the Indemnified Party shall not be entitled to settle or compromise any claim, action, suit or proceeding without the prior written consent of the Indemnifying Party (which consent shall not be unreasonably withheld or delayed).
25.4.3 If the Indemnifying Party exercises its rights under Clause 25.3, the Indemnified Party shall nevertheless have the right to employ its own counsel, and such counsel may participate in such action, but the fees and expenses of such counsel shall be at the expense of the Indemnified Party, when and as incurred, unless:

(a) the employment of counsel by such party has been authorized in writing by the Indemnifying Party; or

(b) the Indemnified Party shall have reasonably concluded that there may be a conflict of interest between the Indemnifying Party and the Indemnified Party in the conduct of the defense of such action; or

(c) the Indemnifying Party shall not, in fact, have employed independent counsel reasonably satisfactory to the Indemnified Party, to assume the defense of such action and shall have been so notified by the Indemnified Party; or

(d) the Indemnified Party shall have reasonably concluded and specifically notified the Indemnifying Party either:

(i) that there may be specific defenses available to it which are different from or additional to those available to the Indemnifying Party; or

(ii) that such claim, action, suit or proceeding involves or could have a material adverse effect upon it beyond the scope of this Agreement:

Provided that if Sub-clauses (b), (c) or (d) of this Clause 25.4.3 shall be applicable, the counsel for the Indemnified Party shall have the right to direct the defense of such claim, demand, action, suit or proceeding on behalf of the Indemnified Party, and the reasonable fees and disbursements of such counsel shall constitute legal or other expenses hereunder.

25.5 No consequential claims

Notwithstanding anything to the contrary contained in this Article 25, the indemnities herein provided shall not include any claim or recovery in respect of any cost, expense, loss or damage of an indirect, incidental or consequential nature, including loss of profit, except as expressly provided in this Agreement.

25.6 Survival on Termination

The provisions of this Article 25 shall survive Termination.
ARTICLE 26

DISPUTE RESOLUTION

26.1 Dispute Resolution

26.1.1 Any dispute, difference or controversy of whatever nature howsoever arising under or out of or in relation to this Agreement (including its interpretation) between the Parties, and so notified in writing by either Party to the other Party (the “Dispute”) shall, in the first instance, be attempted to be resolved amicably in accordance with the conciliation procedure set forth in Clause 26.2.

26.1.2 The Parties agree to use their best efforts for resolving all Disputes arising under or in respect of this Agreement promptly, equitably and in good faith, and further agree to provide each other with reasonable access during normal business hours to all non-privileged records, information and data pertaining to any Dispute.

26.2 Conciliation

In the event of any Dispute between the Parties, either Party may call upon the Authority’s Engineer/ Employer, or such other person as the Parties may mutually agree upon (the “Conciliator”) to mediate and assist the Parties in arriving at an amicable settlement thereof. Failing mediation by the Conciliator or without the intervention of the Conciliator, either Party may require such Dispute to be referred to the Chairman of the Employer and the Chairman of the Board of Directors of the Sub-Contractor for amicable settlement, and upon such reference, the said persons shall meet no later than 7 (seven) business days from the date of reference to discuss and attempt to amicably resolve the Dispute. If such meeting does not take place within the 7 (seven) business day period or the Dispute is not amicably settled within 15 (fifteen) days of the meeting or the Dispute is not resolved as evidenced by the signing of written terms of settlement within 30 (thirty) days of the notice in writing referred to in Clause 26.1.1 or such longer period as may be mutually agreed by the Parties, either Party may refer the Dispute to arbitration in accordance with the provisions of Clause 26.3.

26.3 Arbitration

26.3.1 Any Dispute which is not resolved amicably by conciliation, as provided in Clause 26.2, shall be finally decided by reference to arbitration by a Board of Arbitrators appointed in accordance with Clause 26.3.2. Such arbitration shall be held in accordance with the Rules of Arbitration of the International Centre for Alternative Dispute Resolution, New Delhi (the “Rules”), or such other rules as may be mutually agreed by the Parties, and shall be subject to the provisions of the Arbitration Act. The venue of such arbitration shall be [Delhi], and the language of arbitration proceedings shall be English.
26.3.2 There shall be a Board of three arbitrators, of whom each Party shall select one, and the third arbitrator shall be appointed by the two arbitrators so selected and in the event of disagreement between the two arbitrators, the appointment shall be made in accordance with the Rules.

26.3.3 The arbitrators shall make a reasoned award (the “Award”). Any Award made in any arbitration held pursuant to this Article 26 shall be final and binding on the Parties as from the date it is made, and the Sub-Contractor and the Employer agree and undertake to carry out such Award without delay.

26.3.4 The Sub-Contractor and the Employer agree that an Award may be enforced against the Sub-Contractor and/or the Employer, as the case may be, and their respective assets wherever situated.

26.3.5 This Agreement and the rights and obligations of the Parties shall remain in full force and effect, pending the Award in any arbitration proceedings hereunder.

26.3.6 In the event the Party against whom the Award has been granted challenges the Award for any reason in a court of law, it shall make an interim payment to the other Party for an amount equal to 75% (seventy five per cent) of the Award, pending final settlement of the Dispute. The aforesaid amount shall be paid forthwith upon furnishing an irrevocable Bank Guarantee for a sum equal to 120 % (one hundred and twenty per cent) of the aforesaid amount. Upon final settlement of the Dispute, the aforesaid interim payment shall be adjusted and any balance amount due to be paid or returned, as the case may be, shall be paid or returned with interest calculated at the rate of 10% (ten per cent) per annum from the date of interim payment to the date of final settlement of such balance.

26.4 Adjudication by Regulatory Employer, Tribunal or Commission

In the event of constitution of a statutory regulatory authority, tribunal or commission, as the case may be, with powers to adjudicate upon disputes between the Sub-Contractor and the Employer, all Disputes arising after such constitution shall, instead of reference to arbitration under Clause 26.3, be adjudicated upon by such regulatory Employer, tribunal or commission in accordance with the Applicable Law and all references to Dispute Resolution Procedure shall be construed accordingly. For the avoidance of doubt, the Parties hereto agree that the adjudication hereunder shall not be final and binding until an appeal against such adjudication has been decided by an appellate tribunal or court of competent jurisdiction, as the case may be, or no such appeal has been preferred within the time specified in the Applicable Law.
ARTICLE 27

MISCELLANEOUS

27.1 Governing law and jurisdiction

This Agreement shall be construed and interpreted in accordance with and governed by the laws of India, and the courts at Delhi shall have exclusive jurisdiction over matters arising out of or relating to this Agreement.

27.2 Waiver of immunity

Each Party unconditionally and irrevocably:

(a) agrees that the execution, delivery and performance by it of this Agreement constitute commercial acts done and performed for commercial purpose;
(b) agrees that, should any proceedings be brought against it or its assets, property or revenues in any jurisdiction in relation to this Agreement or any transaction contemplated by this Agreement, no immunity (whether by reason of sovereignty or otherwise) from such proceedings shall be claimed by or on behalf of the Party with respect to its assets;
(c) waives any right of immunity which it or its assets, property or revenues now has, may acquire in the future or which may be attributed to it in any jurisdiction; and
(d) consents generally in respect of the enforcement of any judgment or award against it in any such proceedings to the giving of any relief or the issue of any process in any jurisdiction in connection with such proceedings (including the making, enforcement or execution against it or in respect of any assets, property or revenues whatsoever irrespective of their use or intended use of any order or judgment that may be made or given in connection therewith).

27.3 DELETED

27.4 Waiver

27.4.1 Waiver, including partial or conditional waiver, by either Party of any default by the other Party in the observance and performance of any provision of or obligations under this Agreement:-

(a) shall not operate or be construed as a waiver of any other or subsequent default hereof or of other provisions of or obligations under this Agreement;
(b) shall not be effective unless it is in writing and executed by a duly authorized representative of the Party; and
(c) shall not affect the validity or enforceability of this Agreement in any manner.

27.4.2 Neither the failure by either Party to insist on any occasion upon the performance of
the terms, conditions and provisions of this Agreement or any obligation there under nor time or other indulgence granted by a Party to the other Party shall be treated or deemed as waiver of such breach or acceptance of any variation or the relinquishment of any such right hereunder.

### 27.5 Liability for review of Documents and Drawings

Except to the extent expressly provided in this Agreement:

(a) no review, comment or approval by the Employer or the Authority’s Engineer of any Document or Drawing submitted by the Contractor nor any observation or inspection of the construction, or maintenance of the Project Highway nor the failure to review, approve, comment, observe or inspect hereunder shall relieve or absolve the Contractor from its obligations, duties and liabilities under this Agreement, the Applicable Laws and Applicable Permits; and

(b) the Employer shall not be liable to the Sub-Contractor by reason of any review, comment, approval, observation or inspection referred to in Sub-clause (a) above.

### 27.6 Exclusion of implied warranties etc.

This Agreement expressly excludes any warranty, condition or other undertaking implied at law or by custom or otherwise arising out of any other agreement between the Parties or any representation by either Party not contained in a binding legal agreement executed by both Parties.

### 27.7 Survival

27.7.1 Termination shall:

(a) not relieve the Sub-Contractor or the Employer, as the case may be, of any obligations hereunder which expressly or by implication survive Termination hereof; and

(b) except as otherwise provided in any provision of this Agreement expressly limiting the liability of either Party, not relieve either Party of any obligations or liabilities for loss or damage to the other Party arising out of, or caused by, acts or omissions of such Party prior to the effectiveness of such Termination or arising out of such Termination.

27.7.2 All obligations surviving Termination shall only survive for a period of 3 (three) years following the date of such Termination.

### 27.8 Entire Agreement

This Agreement and the Schedules together constitute a complete and exclusive statement of the terms of the agreement between the Parties on the subject hereof, and no amendment or modification hereto shall be valid and effective unless such
modification or amendment is agreed to in writing by the Parties and duly executed by persons especially empowered in this behalf by the respective Parties. All prior written or oral understandings, offers or other communications of every kind pertaining to this Agreement are abrogated and withdrawn. For the avoidance of doubt, the Parties hereto agree that any obligations of the Sub-Contractor arising from the Request for Qualification or Request for Proposals, as the case may be, shall be deemed to form part of this Agreement and treated as such.

27.9 Severability

If for any reason whatever, any provision of this Agreement is or becomes invalid, illegal or unenforceable or is declared by any court of competent jurisdiction or any other instrumentality to be invalid, illegal or unenforceable, the validity, legality or enforceability of the remaining provisions shall not be affected in any manner, and the Parties will negotiate in good faith with a view to agreeing to one or more provisions which may be substituted for such invalid, unenforceable or illegal provisions, as nearly as is practicable to such invalid, illegal or unenforceable provision. Failure to agree upon any such provisions shall not be subject to the Dispute Resolution Procedure set forth under this Agreement or otherwise.

27.10 No partnership

This Agreement shall not be interpreted or construed to create an association, joint venture or partnership between the Parties, or to impose any partnership obligation or liability upon either Party, and neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

27.11 Third parties

This Agreement is intended solely for the benefit of the Parties, and their respective successors and permitted assigns, and nothing in this Agreement shall be construed to create any duty to, standard of care with reference to, or any liability to, any person not a Party to this Agreement.

27.12 Successors and assigns

This Agreement shall be binding upon, and inure to the benefit of the Parties and their respective successors and permitted assigns.
27.13 Notices

Any notice or other communication to be given by any Party to the other Party under or in connection with the matters contemplated by this Agreement shall be in writing and shall:

(a) in the case of the Sub-Contractor, be given by facsimile or e-mail and by letter delivered by hand to the address given and marked for attention of the person set out below or to such other person as the Sub-Contractor may from time to time designate by notice to the Employer; provided that notices or other communications to be given to an address outside [Delhi] may, if they are subsequently confirmed by sending a copy thereof by registered acknowledgement due, air mail or by courier, be sent by facsimile or e-mail to the person as the Sub-Contractor may from time to time designate by notice to the Employer;

(b) in the case of the Employer, be given by facsimile or e-mail and by letter delivered by hand and be addressed to the [Chairman] of the Employer with a copy delivered to the Employer Representative or such other person as the Employer may from time to time designate by notice to the Sub-Contractor; provided that if the Sub-Contractor does not have an office in [Delhi] it may send such notice by facsimile or e-mail and by registered acknowledgement due, air mail or by courier; and

(c) any notice or communication by a Party to the other Party, given in accordance herewith, shall be deemed to have been delivered when in the normal course of post it ought to have been delivered and in all other cases, it shall be deemed to have been delivered on the actual date and time of delivery; provided that in the case of facsimile or e-mail, it shall be deemed to have been delivered on the working day following the date of its delivery.

27.14 Language

All notices required to be given by one Party to the other Party and all other communications, Documentation and proceedings which are in any way relevant to this Agreement shall be in writing and in English language.

27.15 Counterparts

This Agreement may be executed in two counterparts, each of which, when executed and delivered, shall constitute an original of this Agreement.

27.16 Confidentiality

The Parties shall treat the details of this Agreement as private and confidential, except to the extent necessary to carry out obligations under it or to comply with Applicable Laws. The Sub-Contractor shall not publish, permit to be published, or disclose any particulars of the Works in any trade or technical paper or elsewhere without the previous agreement of the Employer.
27.17 Copyright and Intellectual Property rights

27.17.1 As between the Parties, the Sub-contractor shall retain the copyright and other intellectual property rights in the Sub-contractor's Documents and other design documents made by (or on behalf of) the Sub-contractor. The Sub-contractor shall be deemed (by signing this Agreement) to give to the Employer a non-terminable transferable non-exclusive royalty-free license to copy, use and communicate the Sub-contractor's Documents, including making and using modifications of them. This license shall:

(a) apply throughout the actual or intended working life (whichever is longer) of the relevant parts of the Works,

(b) entitle any person in proper possession of the relevant part of the Works to copy, use and communicate the Sub-contractor's Documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing the Works, and

(c) in the case of Sub-contractor's Documents which are in the form of computer programs and other software, permit their use on any computer on the Site and other places as envisaged by this Agreement, including replacements of any computers supplied by the Sub-contractor.

27.17.2 The Sub-contractor's Documents and other design documents made by (or on behalf of) the Sub-contractor shall not, without the Sub-contractor's consent, be used, copied or communicated to a third party by (or on behalf of) the Employer for purposes other than those permitted under this Clause 27.17.

27.17.3 As between the Parties, the Employer shall retain the copyright and other intellectual property rights in this Agreement and other documents made by (or on behalf of) the Employer. The Employer may, at its cost, copy, use, and obtain communication of these documents for the purposes of this Agreement. They shall not, without the Employer's consent, be copied, used or communicated to a third party by the Contractor, except as necessary for the purposes of the contract.

27.18 Limitation of Liability

27.18.1 Neither Party shall be liable to the other Party for loss of use of any Works, loss of profit, loss of any contract or for any indirect or consequential loss or damage which may be suffered by the other Party in connection with this Agreement, save and except as provided under Articles 23 and 25.

27.18.2 The total liability of one Party to the other Party under and in accordance with the provisions of this Agreement, save and except as provided in Articles 23 and 25, shall not exceed the Contract Price. For the avoidance of doubt, this Clause shall not limit the liability in any case of fraud, deliberate default or reckless misconduct by the defaulting Party.
ARTICLE 28

DEFINITIONS

28.1 Definitions

In this Agreement, the following words and expressions shall, unless repugnant to the context or meaning thereof, have the meaning hereinafter respectively assigned to them:

“Accounting Year” means the financial year commencing from the first day of April of any calendar year and ending on the thirty-first day of March of the next calendar year;

“Advance Payment” shall have the meaning set forth in Clause 19.2;

“Affiliate” means, in relation to either Party {and/or Members}, a person who controls, is controlled by, or is under the common control with such Party {or Member} (as used in this definition, the expression “control” means, with respect to a person which is a company or corporation, the ownership, directly or indirectly, of more than 50% (fifty per cent) of the voting shares of such person, and with respect to a person which is not a company or corporation, the power to direct the management and policies of such person, whether by operation of law or by contract or otherwise);

“Agreement” means this Agreement, its Recitals, and the Schedules hereto and any amendments thereto made in accordance with the provisions contained in this Agreement;

“Applicable Laws” means all laws, brought into force and effect by GOI or the State Government including rules, regulations and notifications made there under, and judgments, decrees, injunctions, writs and orders of any court of record, applicable to this Agreement and the exercise, performance and discharge of the respective rights and obligations of the Parties hereunder, as may be in force and effect during the subsistence of this Agreement;

“Applicable Permits” means all clearances, licenses, permits, authorizations, no objection certificates, consents, approvals and exemptions required to be obtained or maintained under Applicable Laws in connection with the construction, operation and maintenance of the Project Highway during the subsistence of this Agreement;
“Appointed Date” means that date which is later of the 15th day of the date of this Agreement, the date on which the Sub-Contractor has delivered the Performance Security in accordance with the provisions of Article 7 and the date on which the Employer has provided the Right of Way on no less than 70% (Seventy per cent) of the total length of Project Highway;

“Arbitration Act” means the Arbitration and Conciliation Act, 1996 and shall include modifications to or any re-enactment thereof, as in force from time to time;

“Authority” shall have the meaning attributed thereto in the array of Parties hereinabove as set forth in the Recitals;

“Employer” shall have the meaning attributed thereto in the array of Parties hereinabove as set forth in the Recitals;

“Employer Default” shall have the meaning set forth in Clause 23.2;

“Authority’s Engineer” shall have the meaning set forth in Clause 18.1;

“Employer Representative” means such person or persons as may be authorized in writing by the Employer to act on its behalf under this Agreement and shall include any person or persons having authority to exercise any rights or perform and fulfill any obligations of the Employer under this Agreement;

“Bank” means a bank incorporated in India and having a minimum net worth of Rs. 1,000 crore (Rupees one thousand crore) or any other bank acceptable to the Authority;

“Base Rate” means the floor rate of interest announced by the State Bank of India for all its lending operations;

“Bid” means the documents in their entirety comprised in the bid submitted by the [selected bidder/Consortium] in response to the Request for Proposals in accordance with the provisions thereof;

“Bid Security” means the bid security provided by the Contractor to the Authority in accordance with the Request for Proposal, and which is to remain in force until substituted by the Performance Security;

“Change in Law” means the occurrence of any of the following after the Base Date:
(a) the enactment of any new Myanmar law;

(b) the repeal, modification or re-enactment of any existing Myanmar law;

(c) the commencement of any Myanmar law which has not entered into effect until the Base Date;

(d) a change in the interpretation or application of any Myanmar law by a judgment of a court of record which has become final, conclusive and binding, as compared to such interpretation or application by a court of record prior to the Base Date;

“Change of Scope” shall have the meaning set forth in Article 13;

“Change of Scope Notice” shall have the meaning set forth in Clause 13.2.1;

“Change of Scope Order” shall have the meaning set forth in Clause 13.2.4;

“Completion Certificate” shall have the meaning set forth in Clause 12.4;

“Construction” shall have the meaning set forth in Clause 1.2.1 (f);

“Construction Period” means the period commencing from the Appointed Date and ending on the date of the Completion Certificate;

“Contract Price” means the amount specified in Clause 19.1.1;

“Contractor” shall have the meaning attributed thereto in the array of Parties hereinabove as set forth in the Recitals;

“Sub-Contractor” shall have the meaning attributed thereto in the array of Parties hereinabove as set forth in the Recitals

“Sub-Contractor Default” shall have the meaning set forth in Clause 23.1;

“Cure Period” means the period specified in this Agreement for curing any breach or default of any provision of this Agreement by the Party responsible for such breach or default and shall:
(a) commence from the date on which a notice is delivered by one Party to the other Party asking the latter to cure the breach or default specified in such notice;

(b) not relieve any Party from liability to pay Damages or compensation under the provisions of this Agreement; and

(c) not in any way be extended by any period of Suspension under this Agreement; provided that if the cure of any breach by the Contractor requires any reasonable action by the Contractor that must be approved by the Authority or the Authority’s Engineer hereunder, the applicable Cure Period shall be extended by the period taken by the Authority or the Authority’s Engineer to accord their approval;

$ This definition may be omitted if the Contractor is not a Consortium.

“Damages” shall have the meaning set forth in paragraph (w) of Clause 1.2.1;

“Defect” means any defect or deficiency in Construction of the Works or any part thereof, which does not conform with the Specifications and Standards, and in the case of Maintenance, means any defect or deficiency which is specified in Schedule-E;

“Defects Liability Period” shall have the meaning set forth in Clause 17.1;

“Dispute” shall have the meaning set forth in Clause 26.1.1;

“Dispute Resolution Procedure” means the procedure for resolution of Disputes set forth in Article 26;

“Drawings” means all of the drawings, calculations and documents pertaining to the Project Highway as set forth in Schedule-I, and shall include ‘as built’ drawings of the Project Highway;

“Document” or “Documentation” means documentation in printed or written form, or in tapes, discs, drawings, computer programmes, writings, reports, photographs, films, cassettes, or expressed in any other written, electronic, audio or visual form;

“Emergency” means a condition or situation that is likely to endanger the safety or security of the individuals on or about the Project Highway, including Users thereof, or which poses an immediate threat of material damage to any of the Project Assets;
“Encumbrances” means, in relation to the Project Highway, any encumbrances such as mortgage, charge, pledge, lien, hypothecation, security interest, assignment, privilege or priority of any kind having the effect of security or other such obligations, and shall include any designation of loss payees or beneficiaries or any similar arrangement under any insurance policy pertaining to the Project Highway, where applicable herein but excluding utilities referred to in Clause 9.1;

“EPC” means engineering, procurement and construction;

“Final Payment Certificate” shall have the meaning set forth in Clause 19.15.1;

“Final Payment Statement” shall have the meaning set forth in Clause 19.13.1;

“Force Majeure” or “Force Majeure Event” shall have the meaning ascribed to it in Clause 21.1;

“GAD” or “General Arrangement Drawings” shall have the meaning set forth in Clause 4.1.3 (b);

“GOI/GOM” or “Government” means the Government of India/Government of Myanmar as applicable;

“Good Industry Practice” means the practices, methods, techniques, designs, standards, skills, diligence, efficiency, reliability and prudence which are generally and reasonably expected from a reasonably skilled and experienced contractor engaged in the same type of undertaking as envisaged under this Agreement and which would be expected to result in the performance of its obligations by the Contractor in accordance with this Agreement, Applicable Laws and Applicable Permits in reliable, safe, economical.

“Government Instrumentality” means any department, division or sub-division of the Government or the State Government and includes any commission, board, authority, agency or municipal and other local authority or statutory body including panchayat under the control of the Government or the State Government, as the case may be, and having jurisdiction over all or any part of the Project Highway or the performance of all or any of the services or obligations of the Sub-Contractor under or pursuant to this Agreement;

“IRC” means the Indian Roads Congress;
“Indemnified Party” means the Party entitled to the benefit of an indemnity pursuant to Article 25;

“Indemnifying Party” means the Party obligated to indemnify the other Party pursuant to Article 25;

“Indirect Political Event” shall have the meaning set forth in Clause 21.3;

“Insurance Cover” means the aggregate of the maximum sums insured under the insurances taken out by the Contractor pursuant to Article 20, and includes all insurances required to be taken out by the Contractor under Clauses 20.1 and 20.9 but not actually taken, and when used in the context of any act or event, it shall mean the aggregate of the maximum sums insured and payable or deemed to be insured and payable in relation to such act or event;

“Intellectual Property” means all patents, trademarks, service marks, logos, get-up, trade names, internet domain names, rights in designs, blue prints, programmes and manuals, drawings, copyright (including rights in computer software), database rights, semi-conductor, topography rights, utility models, rights in know-how and other intellectual property rights, in each case whether registered or unregistered and including applications for registration, and all rights or forms of protection having equivalent or similar effect anywhere in the world;

“Interim Payment Certificate” or “IPC” means the interim payment certificate issued by the Authority’s Engineer for payment to the Contractor in respect of Sub-Contractor’s claims for payment raised in accordance with the provisions of this Agreement;

“LOA” or “Letter of Acceptance” means the letter of acceptance referred to in Recital (E);

“Maintenance” means the maintenance of the Project Highway as set forth in Article 14 for the period specified therein;

“Maintenance Inspection Report” shall have the meaning set forth in Clause 15.2.1;

“Maintenance Manual” shall have the meaning ascribed to it in Clause 10.7;

“Maintenance Programme” shall have the meaning set forth in Clause 14.3;
“Maintenance Period” shall have the meaning set forth in Clause 14.1.1;

“Maintenance Requirements” shall have the meaning set forth in Clause 14.2;

“Major Bridge” means a bridge having a total length of more than 60 (sixty) metres between the inner faces of the dirt walls as specified in IRC: 5-1998;

“Manual” shall mean the Manual of Standards and Specifications for Two Laning of Highways (IRC: SP: 73-2007);

“Material Adverse Effect” means a material adverse effect of any act or event on the ability of either Party to perform any of its obligations under and in accordance with the provisions of this Agreement and which act or event causes a material financial burden or loss to either Party;

“Materials” are all the supplies used by the Contractor for incorporation in the Works or for the maintenance of the Project Highway;

“Monthly Maintenance Statement” shall have the meaning set forth in Clause 19.6.1;

“MORTH” means the Ministry of Road Transport and Highways or any substitute thereof dealing with Highways;

“Non-Political Event” shall have the meaning set forth in Clause 21.2;

“Parties” means the parties to this Agreement collectively and “Party” shall mean any of the parties to this Agreement individually;

“Performance Security” shall have the meaning set forth in Clause 7.1;

“Plant” means the apparatus and machinery intended to form or forming part of the Works;

“Political Event” shall have the meaning set forth in Clause 21.4;
“Programme” shall have the meaning set forth in Clause 10.1.3;

“Work” means the construction of balance work Two Lane Road on NH Specifications From Kaletwa to India-Myanmar Border (Zorinpui) from km 60.70 to km 109.2 in Chin State of Myanmar in accordance with the provisions of this Agreement, and includes all works, services and equipment relating to or in respect of the Scope of the Project;

“Work Assets” means all physical and other assets relating to (a) tangible assets such as civil works and equipment including foundations, embankments, pavements, road surface, interchanges, bridges, culverts, road over-bridges, drainage works, traffic signals, sign boards, kilometre-stones, [toll plaza(s)], electrical systems, communication systems, rest areas, relief centres, maintenance depots and administrative offices; and (b) Project Facilities situated on the Site;

“Work Completion Date” means the date on which the Provisional Certificate is issued and in the event no Provisional Certificate is issued, the date on which the Completion Certificate is issued;

“Work Completion Schedule” means the progressive Project Milestones set forth in Schedule-J for completion of the Project Highway on or before the Scheduled Completion Date;

“Work Facilities” means all the amenities and facilities situated on the Site, as described in Schedule-C;

“Project Highway” means the Site comprising from Km 60.70 to km 109.2 on Kaletwa to India-Myanmar Border (Zorinpui) in Chin State of Myanmar and all Project Assets, and its subsequent development and augmentation in accordance with this Agreement;

“Project Milestone” means the project milestone set forth in Schedule-J;

“Proof Consultant” shall have the meaning set forth in Clause 10.2.2;

“Provisional Certificate” shall have the meaning set forth in Clause 12.2;

“Punch List” shall have the meaning set forth in Clause 12.2.1;

“Quality Assurance Plan” or “QAP” shall have the meaning set forth in Clause 11.2;
“Re.”, “Rs.” or “Rupees” or “Indian Rupees” means the lawful currency of the Republic of India;

“Retention Money” shall have the meaning set forth in Clause 7.5.1;

“Right of Way” means the constructive possession of the Site free from encroachments and encumbrances, together with all way leaves, easements, unrestricted access and other rights of way, howsoever described, necessary for construction and maintenance of the Project Highway in accordance with this Agreement;

“Safety Consultant” shall have the meaning set forth in Clause 10.1.5;

“Scheduled Completion Date” shall be the date set forth in Clause 10.3.1;

“Scope of the Project” shall have the meaning set forth in Clause 2.1;

“Section” means a part of the Project Highway;

“Site” shall have the meaning set forth in Clause 8.1;

“Specifications and Standards” means the specifications and standards relating to the quality, quantity, capacity and other requirements for the Project Highway, as set forth in Schedule-D, and any modifications thereof, or additions thereto, as included in the design and engineering for the Project Highway submitted by the Contractor to, and expressly approved by, the Authority;

“Stage Payment Statement” shall have the meaning set forth in Clause 19.4;

“Structures” means an elevated road or a flyover, as the case may be;

“Sub-contractor” means any person or persons to whom a part of the Works or the Maintenance has been subcontracted by the Contractor and the permitted legal successors in title to such person, but not an assignee to such person;

“Suspension” shall have the meaning set forth in Article 22;

“Taxes” means any Indian/Myanmar taxes including excise duties, customs duties,
value added tax, sales tax, local taxes, cess and any impost or surcharge of like nature (whether Central, State or local) on the goods, Materials, equipment and services incorporated in and forming part of the Project Highway charged, levied or imposed by any Government Instrumentality, but excluding any interest, penalties and other sums in relation there to imposed on any account whatsoever. For the avoidance of doubt, Taxes shall not include taxes on corporate income;

“Termination” means the expiry or termination of this Agreement;

“Termination Notice” means the communication issued in accordance with this Agreement by one Party to the other Party terminating this Agreement;

“Termination Payment” means the amount payable by either Party to the other upon Termination in accordance with Article 23;

“Terms of Reference” or “TOR” shall have the meaning set forth in Clause 18.2.1;

“Tests” means the tests set forth in Schedule-K to determine the completion of Works in accordance with the provisions of this Agreement;

“Time Extension” shall have the meaning set forth in Clause 10.5.1;

“User” means a person who travels or intends to travel on the Project Highway or any part thereof in/on any vehicle;

"USD" means lawful currency of United States of America (United States Dollar);

“Valuation of Unpaid works” shall have the meaning set forth in Clause 23.5.1;

“Works” means all works including survey and investigation, design, engineering, procurement, construction, Plant, Materials, maintenance, temporary works and other things necessary to complete the Project Highway in accordance with this Agreement; and

“WPI” means the wholesale price index for various commodities as published by the Ministry of Commerce and Industry, GOI and shall include any index which substitutes the WPI, and any reference to WPI shall, unless the context otherwise requires, be construed as a reference to the WPI published for the period ending with the preceding month.
IN WITNESS WHEREOF THE PARTIES HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DAY, MONTH AND YEAR FIRST ABOVE WRITTEN.

SIGNED, SEALED AND DELIVERED
For and on behalf of

[MINISTRY OF EXTERNAL AFFAIRS, GOVT. OF INDIA] by:

SIGNED, SEALED AND DELIVERED
For and on behalf of

THE CONTRACTOR by:

(Signature)  (Signature)
(Name)     (Name)
(Designation) (Designation)

In the presence of:  1.

2.

{COUNTERSIGNED and accepted by:

Name and particulars of other members of the Consortium}
Schedules
SITE OF THE PROJECT

1. **The Site**
   1.1 Site of the Project Highway shall include the land, buildings, structures and road works as described in Annex-I of this Schedule-A.
   
   1.2 The dates of handing over the Right of Way to the Contractor are specified in Annex-II of this Schedule-A.
   
   1.3 An inventory of the Site including the land, buildings, structures, road works, trees and any other immovable property on, or attached to, the Site shall be prepared jointly by the Authority Representative and the Contractor, and such inventory shall form part of the memorandum referred to in Clause 8.2.1 of this Agreement.
   
   1.4 The alignment plans of the Project Highway are specified in Annex-III. The proposed profile of the Project Highway shall be followed by the contractor with minimum FRL as indicated in the alignment plan. The Contractor, however, may improve/upgrade the Road Profile as indicated in Annexure – III based on site/design requirements.
   
   1.5 The status of the environment clearances obtained or awaited is given in Annex IV.
Annex - I
(Schedule-A)

Site

1. Site
The Site of the Balance work of Two Lane Road on NH Specifications From Kaletwa to India-Myanmar Border (Zorinpui) from km 60.700 to km 109.200 in Chin State of Myanmar,. The land, carriageway and structures comprising the Site are described below.

2. Chainage References (Existing vs Design)
As project road is green field alignment, there is no existing road. The Project road would start from Kaletwa and end at Zorinpui/Indi-Myanmar Border.

3. Land
The Site of the Project Highway comprises the land (sum total of land already available in possession and land to be possessed) as described below:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Existing Road</th>
<th>Chainage (km)</th>
<th>ROW (m)</th>
<th>Name of Village/Location</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>From</td>
<td>To</td>
<td>Min.</td>
<td>Max.</td>
</tr>
<tr>
<td></td>
<td>(Kaletwa to Zorinpui /India-Myanmar Border)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. Carriageway

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Existing Road</th>
<th>Chainage (km)</th>
<th>Carriageway Width (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>From</td>
<td>To</td>
<td></td>
</tr>
</tbody>
</table>

Section - II (Kaletwa to Zorinpui /India-Myanmar Border)

NIL

*Project Road is green field project.

1. Major Bridges

The Site includes the following Major Bridges:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Chainage (km)</th>
<th>Type of structure</th>
<th>No. of Spans</th>
<th>Carriageway Width (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Foundation</td>
<td>Sub-structure</td>
<td>Super-structure</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section - II (Kaletwa to Zorinpui /India-Myanmar Border)

NIL

2. Road over-bridges (ROB)/ Road under-bridges (RUB)

The Site includes the following ROB (Road over Railway line)/ RUB (Road under Railway Line):

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Chainage (km)</th>
<th>Type of Structure</th>
<th>No. of Spans</th>
<th>Width (m)</th>
<th>ROB/RUB</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Foundation</td>
<td>Super-Structure</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section - II (Kaletwa to Zorinpui /India-Myanmar Border)
3. Grade separators

The Site includes the following grade separators:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Chainage (km)</th>
<th>Type of Structure</th>
<th>No. of Spans with span length (m)</th>
<th>Width (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Foundation</td>
<td>Superstructure</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIL</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section - II (Kaletwa to Zorinpui /India-Myanmar Border)

NIL

5. Minor bridges

The Site includes the following minor bridges:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Chainage (km)</th>
<th>Type of structure</th>
<th>No. of Spans with Span length (m)</th>
<th>Width (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Foundation</td>
<td>Sub-Structure</td>
<td>Super-Structure</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIL</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Kaletwa to Zorinpui /India-Myanmar Border)

NIL

6. Railway level crossings

The Site includes the following railway level crossings:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Chainage (km)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(Kaletwa to Zorinpui /India-Myanmar Border)</td>
</tr>
</tbody>
</table>
7. Underpasses (Vehicular, Non-Vehicular)

The Site includes the following underpasses:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Chainage (km)</th>
<th>Type of Structure</th>
<th>No. of Spans with span length (m)</th>
<th>Width (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaletwa to Zorinpui /India-Myanmar Border</td>
<td>NIL</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Culverts

The Site has the following culverts:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Culvert No.</th>
<th>Chainage (km)</th>
<th>Spans / Opening</th>
<th>Type of Culverts</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Kaletwa to Zorinpui /India-Myanmar Border)</td>
<td>NIL</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. Bus bays

The details of existing bus bays are as follows:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Chainage (km)</th>
<th>Length (m)</th>
<th>Left Side</th>
<th>Right Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Kaletwa to Zorinpui /India-Myanmar Border)</td>
<td>NIL</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NIL
10. Truck Lay byes

The details of truck lay byes are as follows:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Chainage (km)</th>
<th>Length (m)</th>
<th>Left Side</th>
<th>Right Side</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Kaletwa to Zorinpui /India-Myanmar Border)</td>
<td></td>
<td>NIL</td>
<td></td>
</tr>
</tbody>
</table>

11. Road side drains

The details of road side drains are noted below:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Chainage (km)</th>
<th>Left Side</th>
<th>Right Side</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Kaletwa to Zorinpui /India-Myanmar Border)</td>
<td>NIL</td>
<td></td>
</tr>
</tbody>
</table>

12. Major junctions

The details of major junctions are noted below:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Chainage (km)</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Kaletwa to Zorinpui /India-Myanmar Border)</td>
<td>NIL</td>
</tr>
</tbody>
</table>

13. Minor junctions

The details of minor junctions are noted below:
14. Bypasses

The details of bypasses are noted below:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of bypass</th>
<th>Chainage (km) From – to -</th>
<th>Length (Km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Kaletwa to Zorinpui /India-Myanmar Border)</td>
<td>NIL</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. Detail of any other structures

NIL
Annexure II

(Schedule-A)

Dates for providing Right of Way

The dates on which the Authority shall provide Right of Way to the Contractor on different parts of the Site are stated below:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Length (km)</th>
<th>Width (m)</th>
<th>Date of providing ROW</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>33.950</td>
<td>45m</td>
<td>At appointed date.</td>
</tr>
<tr>
<td>(i)</td>
<td>Full Right of Way (full width)</td>
<td>33.950</td>
<td>45m</td>
</tr>
<tr>
<td>(ii)</td>
<td>Full Right of Way (full width)</td>
<td>7.275</td>
<td>45m</td>
</tr>
<tr>
<td>(iii)</td>
<td>Full Right of Way (full width)</td>
<td>7.275</td>
<td>45m</td>
</tr>
</tbody>
</table>
Project road is green field project and there is no existing roads and plan and profile.

The Plan and profile of the proposed alignment is attached separately as “plan & Profile (part-II)”

The proposed profile of the Project Highway shall be followed by the contractor with minimum FRL as indicated in the alignment plan. The Contractor, however, may improve/upgrade the Road Profile as indicated in Annexure –III based on site/design requirements.
Annexure – IV

(Schedule-A)

Environment Clearances

Environmental Clearance is not applicable for this project.
SCHEDULE - B

(See Clause 2.1)

Development of the Project Highway

1 Development of the Project Highway

Development of the Project Highway shall include design and construction of the Project Highway as described in this Schedule-B and in Schedule-C. The alignment plans of the Project Highway are specified in Annex-III of Schedule-A, which has to be followed by the Contractor as minimum. The Contractor, however, may improve/upgrade the Road Profile as indicated in Annexure –III of Schedule-A based on site/design requirements.

2 Rehabilitation and augmentation

Rehabilitation and augmentation shall include Two-Lane with Paved shoulders configuration and strengthening of the Project Highway as described in Annex-I of this Schedule-B and in Schedule-C.

3 Specifications and Standards

The Project Highway shall be designed and constructed in conformity with the Specifications and Standards specified in Annex-I of Schedule-D.
Annexure – I
(Schedule - B)

Description of Two-Laning

Construction of balance work of Two Lane Road on NH Specifications from Kaletwa to India-Myanmar Border (Zorinpui) from km 60.700 to km 109.200 in Chin State of Myanmar

1. WIDENING OF THE EXISTING HIGHWAY

1.1 The Project Highway shall follow the proposed alignment as specified by the Authority and shown in the alignment plans specified in Annex III of Schedule-A. Geometric deficiencies, if any, in the existing horizontal and vertical profiles or in proposed alignment, shall be corrected as per the prescribed standards for hilly terrain to the extent land is available.

1.2 WIDTH OF CARRIAGEWAY

1.2.1 Two-Laning with paved shoulder shall be undertaken. The paved carriageway shall be 7.0 m wide in accordance with the typical cross sections drawings in section 2.11 with paved shoulder as per section 5.

1.2.2 Except as otherwise provided in this Agreement, the width of the paved carriageway and cross-sectional features shall conform to paragraph 1.2.1 above.

2 GEOMETRIC DESIGN AND GENERAL FEATURES

2.1 General

Geometric design and general features of the Project Highway shall be in accordance with Section 2 of the Manual.

2.2 Design Speed

The design speed shall be the minimum design speed of 50 km per hr for Mountainous terrain and 40 km per hr for Steep terrain.

2.3 Improvement of the existing road geometrics

Not applicable (Development of road would be as per two lane manual.)

2.4 Right of Way

Details of the Right of Way are given in Annex II of Schedule-A.

2.5 Type of shoulders

Type of Shoulder: 2.5m wide paved shoulder including drain shall be provided on both side of the carriageway with 25mm thick SDBC, 150mm WMM and 425mm thick excavated rock
2.6  **Lateral and Vertical Clearances at Underpasses/Flyovers**

2.6.1  Lateral and vertical clearances at underpasses/Flyovers and provision of guardrails/crash barriers shall be as per the paragraph 2.10 of 2-lanning Manual.

2.6.2  Lateral clearance: The size of the opening at the underpasses/Flyovers shall be as follows:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Location (Design Chainage)</th>
<th>Span Arrangement c/c of expansion joint (m)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>From (Km) To (Km)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Kaletwa to Zorinpui /India-Myanmar Border)

Nil

2.6.3  Vertical clearance: Vertical Clearance at underpasses/Flyovers shall not be less than 5.5 m and for Cattle underpass shall not be less than 4.5 m.

2.7  **Laterals and Vertical Clearance at Overpasses**

2.7.1  Lateral and Vertical clearances at over passes shall be as per paragraph 2.11 of the 2-lanning Manual.

2.7.2  Lateral clearance: The size of the opening at the overpasses shall be as follows:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Location (Design Chainage)</th>
<th>Number and length of spans</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>From (Km) To (Km)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Kaletwa to Zorinpui /India-Myanmar Border)

Nil

2.7.3  Vertical clearance: A minimum 5.5 m vertical clearance shall be provided at all points of the carriageway of the project highway.

2.8  **Service/ Slip Roads**
Service roads shall be constructed at the locations and for the lengths indicated below:

**Details of Service Road**

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Location</th>
<th>Chainage</th>
<th>Right Handside (RHS) or Left Handside (LHS) or Both side</th>
<th>Length Km of Service Road</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>From</td>
<td>To</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section - II (Kaletwa to Zorinpui /India-Myanmar Border)

NIL

Slip roads shall be constructed at the locations and for the lengths indicated below:

**Details of Slip Road**

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Location</th>
<th>Chainage</th>
<th>Right Handside (RHS) or Left Handside (LHS) or Both side</th>
<th>Length Km of Service Road</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>From</td>
<td>To</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section - II (Kaletwa to Zorinpui /India-Myanmar Border)

NIL

2.9 **Grade Separated Structures**

2.9.1 Grade separated structures shall be provided as per paragraph 2.13 of the 2 Lane Manual. The requisite particulars are given below:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Location of structure</th>
<th>Length (m)</th>
<th>Number and length of Spans (m)</th>
<th>Approach Gradient</th>
<th>Remarks if Any</th>
</tr>
</thead>
</table>

Section - II (Kaletwa to Zorinpui /India-Myanmar Border)

NIL

2.9.2 In the case of grade separated structures, the type of structure and the level of the Project Highway and the cross roads shall be as follows:

<table>
<thead>
<tr>
<th>S.</th>
<th>Location</th>
<th>Type of Structure</th>
<th>Cross road at</th>
</tr>
</thead>
</table>

[Type here]
2.10 Cattle and pedestrian underpass / overpass

Cattle and pedestrian underpass/ overpass shall be constructed as follows:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Chainage</th>
<th>Village</th>
<th>Type of Crossing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Design</td>
<td>Existing</td>
<td>Section - II (Kaletwa to Zorinpui /India-Myanmar Border)</td>
</tr>
<tr>
<td></td>
<td>NIL</td>
<td>NIL</td>
<td>NIL</td>
</tr>
</tbody>
</table>

2.11 Typical Cross section of the Project Highways

The Cross-section of the project road will be as per the following Figures;
3.0 INTERSECTIONS AND GRADE SEPARATORS

All intersections and grade separators shall be as per Section 3 of the Manual. Existing intersections which are deficient shall be improved to the prescribed standards.

Properly designed intersections shall be provided at the locations and of the types and features given in the tables below:

(a) At-grade intersections

**Major Intersection**

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Location of Intersection (km)</th>
<th>Type of Intersection</th>
<th>Other features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section - II (Kaletwa to Zorinpui /India-Myanmar Border)</td>
<td>NIL</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Minor Intersections**

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Location of Intersection (km)</th>
<th>Type of Intersection</th>
<th>Other features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section - II (Kaletwa to Zorinpui /India-Myanmar Border)</td>
<td>NIL</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(b) Grade separated intersection with/without ramps

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Location (Design Chainage) (km)</th>
<th>Silent Feature</th>
<th>Minimum Length of Viaduct</th>
<th>Road to be carried Under structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section - II (Kaletwa to Zorinpui /India-Myanmar Border)</td>
<td>NIL</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.0 ROAD EMBANKMENT AND CUT SECTION

4.1 Construction of new road embankment / cuttings shall conform to the standards and specifications given in Section 4 of the Manual and the specified cross sectional details.

4.2 Raising of the existing road

Since it is a new alignment, road to be constructed as per Alignment Plan & profile. The Minimum FRL Provided in plan and profile had to be achieved.

5.0 PAVEMENT DESIGN

Notwithstanding anything to the contrary contained in this Agreement or the Manual, the contractor shall construct the road with the following pavement composition;

<table>
<thead>
<tr>
<th>BC (mm)</th>
<th>DBM (mm)</th>
<th>WMM (mm)</th>
<th>GSB (mm)</th>
<th>Sub-grade (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>70</td>
<td>250</td>
<td>300</td>
<td>500</td>
</tr>
</tbody>
</table>

5.1 Type of pavement

The flexible pavements for the project road have been designed

5.2 Design requirements

5.2.1 Design Period and strategy

Flexible pavement for new pavement shall be designed for a minimum design period of 15 years. Stage construction shall not be permitted.

5.2.2 Design Traffic

Notwithstanding anything to the contrary contained in this Agreement or the Manual, the Contractor shall design the pavement for design traffic of 5 million standard axles

5.3 Reconstruction of stretches

Not Applicable

6 ROADSIDE DRAINAGE

Drainage system including surface and subsurface drains for the Project Road shall be provided as per section 6 of the Manual. Lined Drains shall be provided for 51 km in project.

<table>
<thead>
<tr>
<th>Project Road Package</th>
<th>Length of Proposed Drain (km)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LHS of Road</td>
</tr>
<tr>
<td>(Kaletwa to Zorinpui / Indian – Myanmar Border)</td>
<td>24.61</td>
</tr>
</tbody>
</table>
7  DESIGN OF STRUCTURES

7.1  General

7.1.1  All bridges, culverts and structures shall be designed and constructed in accordance with section 7 of the Manual and shall conform to the cross-sectional features and other details specified therein.

7.1.2  Width of the carriageway of new bridges and structures shall be 12m.

7.1.3  The footpath shall be provided for all bridges:

7.1.4  All bridges shall be high-level bridges. This shall be as per site condition.

7.1.5  Utility services to be carried over the structure.

The following structures shall be designed to carry utility services specified in the table below:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Bridge at km</th>
<th>Utility service to be carried</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Kaletwa to Zorinpui /India-Myanmar Border)</td>
<td></td>
<td></td>
<td>NIL</td>
</tr>
</tbody>
</table>

7.1.6  Cross-section of the new culverts and bridges at deck level for the Project Highway shall conform to the typical cross-sections given in section 7 of the Manual.

7.2  Culverts

7.2.1  Overall width of all culverts shall be equal to the roadway width of the approaches.

7.2.2  Reconstruction of existing culverts & causeway:

The existing culverts & causeway at the following locations shall be re-constructed as new culverts:

a)  Box Culvert
7.2.3 Widening of existing culvert

All existing culverts which are not to be reconstructed shall be widened to the roadway width of the Project Highway as per the typical cross section given in section 7 of the Manual. Repairs and strengthening of existing structures where required shall be carried out.

a) Box Culvert
**7.2.4** Additional new culverts shall be constructed as per particulars given in the table below:

(Kaletwa to Zorinpui /India-Myanmar Border)

a) Box Culvert

<table>
<thead>
<tr>
<th>SL. No.</th>
<th>Chainage</th>
<th>Existing Type of culvert</th>
<th>Existing Span</th>
<th>Proposal Final</th>
<th>Proposal Span</th>
<th>Proposal Type of culvert</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NIL
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Chainage (km)</th>
<th>Span (m)</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10+110</td>
<td>1x3.0x3.0</td>
<td>Box</td>
</tr>
<tr>
<td>2</td>
<td>10+700</td>
<td>1x3.0x3.0</td>
<td>Box</td>
</tr>
<tr>
<td>3</td>
<td>10+810</td>
<td>1x3.0x3.0</td>
<td>Box</td>
</tr>
<tr>
<td>4</td>
<td>11+010</td>
<td>1x3.0x3.0</td>
<td>Box</td>
</tr>
<tr>
<td>5</td>
<td>11+120</td>
<td>1x3.0x3.0</td>
<td>Box</td>
</tr>
<tr>
<td>6</td>
<td>11+240</td>
<td>1x3.0x3.0</td>
<td>Box</td>
</tr>
<tr>
<td>7</td>
<td>11+580</td>
<td>1x3.0x3.0</td>
<td>Box</td>
</tr>
<tr>
<td>8</td>
<td>13+700</td>
<td>1x2.0x2.0</td>
<td>Box</td>
</tr>
<tr>
<td>9</td>
<td>14+520</td>
<td>1x3.0x3.0</td>
<td>Box</td>
</tr>
<tr>
<td>10</td>
<td>14+630</td>
<td>1x3.0x3.0</td>
<td>Box</td>
</tr>
<tr>
<td>11</td>
<td>14+980</td>
<td>1x2.0x2.0</td>
<td>Box</td>
</tr>
<tr>
<td>12</td>
<td>15+690</td>
<td>1x2.0x2.0</td>
<td>Box</td>
</tr>
<tr>
<td>13</td>
<td>16+048</td>
<td>1x2.0x2.0</td>
<td>Box</td>
</tr>
<tr>
<td>14</td>
<td>17+240</td>
<td>1x2.0x2.0</td>
<td>Box</td>
</tr>
<tr>
<td>15</td>
<td>18+500</td>
<td>1x2.0x2.0</td>
<td>Box</td>
</tr>
<tr>
<td>16</td>
<td>19+250</td>
<td>1x2.0x2.0</td>
<td>Box</td>
</tr>
<tr>
<td>17</td>
<td>19+400</td>
<td>1x2.0x2.0</td>
<td>Box</td>
</tr>
<tr>
<td>18</td>
<td>19+680</td>
<td>1x2.0x2.0</td>
<td>Box</td>
</tr>
<tr>
<td>19</td>
<td>19+860</td>
<td>1x2.0x2.0</td>
<td>Box</td>
</tr>
<tr>
<td>20</td>
<td>21+141</td>
<td>1x2.0x2.0</td>
<td>Box</td>
</tr>
<tr>
<td>21</td>
<td>21+930</td>
<td>1x2.0x2.0</td>
<td>Box</td>
</tr>
<tr>
<td>22</td>
<td>22+410</td>
<td>1x2.0x2.0</td>
<td>Box</td>
</tr>
<tr>
<td>Sl. No.</td>
<td>Chainage (km)</td>
<td>Span (m)</td>
<td>Type</td>
</tr>
<tr>
<td>--------</td>
<td>---------------</td>
<td>---------------</td>
<td>--------</td>
</tr>
<tr>
<td>23</td>
<td>25+230</td>
<td>1x2.0x2.0</td>
<td>Box</td>
</tr>
<tr>
<td>24</td>
<td>25+590</td>
<td>1x2.0x2.0</td>
<td>Box</td>
</tr>
<tr>
<td>25</td>
<td>26+400</td>
<td>1x2.0x2.0</td>
<td>Box</td>
</tr>
<tr>
<td>26</td>
<td>26+550</td>
<td>1x2.0x2.0</td>
<td>Box</td>
</tr>
<tr>
<td>27</td>
<td>27+820</td>
<td>1x2.0x2.0</td>
<td>Box</td>
</tr>
<tr>
<td>28</td>
<td>29+360</td>
<td>1x3.0x3.0</td>
<td>Box</td>
</tr>
<tr>
<td>29</td>
<td>30+180</td>
<td>1x2.0x2.0</td>
<td>Box</td>
</tr>
<tr>
<td>30</td>
<td>32+880</td>
<td>1x2.0x2.0</td>
<td>Box</td>
</tr>
<tr>
<td>31</td>
<td>33+210</td>
<td>1x2.0x2.0</td>
<td>Box</td>
</tr>
<tr>
<td>32</td>
<td>33+630</td>
<td>1x3.0x3.0</td>
<td>Box</td>
</tr>
<tr>
<td>33</td>
<td>34+440</td>
<td>1x2.0x2.0</td>
<td>Box</td>
</tr>
<tr>
<td>34</td>
<td>35+022</td>
<td>1x3.0x3.0</td>
<td>Box</td>
</tr>
<tr>
<td>35</td>
<td>37+230</td>
<td>1x2.0x2.0</td>
<td>Box</td>
</tr>
<tr>
<td>36</td>
<td>37+590</td>
<td>1x3.0x3.0</td>
<td>Box</td>
</tr>
<tr>
<td>37</td>
<td>38+230</td>
<td>1x3.0x3.0</td>
<td>Box</td>
</tr>
<tr>
<td>38</td>
<td>38+390</td>
<td>1x3.0x3.0</td>
<td>Box</td>
</tr>
<tr>
<td>39</td>
<td>39+010</td>
<td>1x3.0x3.0</td>
<td>Box</td>
</tr>
<tr>
<td>40</td>
<td>39+130</td>
<td>1x3.0x3.0</td>
<td>Box</td>
</tr>
<tr>
<td>41</td>
<td>39+290</td>
<td>1x3.0x3.0</td>
<td>Box</td>
</tr>
<tr>
<td>42</td>
<td>39+400</td>
<td>1x3.0x3.0</td>
<td>Box</td>
</tr>
<tr>
<td>43</td>
<td>39+590</td>
<td>1x3.0x3.0</td>
<td>Box</td>
</tr>
<tr>
<td>44</td>
<td>39+890</td>
<td>1x3.0x3.0</td>
<td>Box</td>
</tr>
<tr>
<td>45</td>
<td>40+160</td>
<td>1x3.0x3.0</td>
<td>Box</td>
</tr>
<tr>
<td>46</td>
<td>40+450</td>
<td>1x3.0x3.0</td>
<td>Box</td>
</tr>
<tr>
<td>47</td>
<td>42+200</td>
<td>1x3.0x3.0</td>
<td>Box</td>
</tr>
<tr>
<td>48</td>
<td>42+460</td>
<td>1x2.0x2.0</td>
<td>Box</td>
</tr>
<tr>
<td>Sl. No.</td>
<td>Chainage (km)</td>
<td>Span (m)</td>
<td>Type</td>
</tr>
<tr>
<td>--------</td>
<td>---------------</td>
<td>------------</td>
<td>-------</td>
</tr>
<tr>
<td>1</td>
<td>13+420</td>
<td>1x1.20</td>
<td>Pipe</td>
</tr>
<tr>
<td>2</td>
<td>14+359</td>
<td>1x1.20</td>
<td>Pipe</td>
</tr>
<tr>
<td>3</td>
<td>14+760</td>
<td>1x1.20</td>
<td>Pipe</td>
</tr>
<tr>
<td>4</td>
<td>15+450</td>
<td>1x1.20</td>
<td>Pipe</td>
</tr>
<tr>
<td>5</td>
<td>18+000</td>
<td>1x1.20</td>
<td>Pipe</td>
</tr>
<tr>
<td>6</td>
<td>18+930</td>
<td>1x1.20</td>
<td>Pipe</td>
</tr>
<tr>
<td>7</td>
<td>21+660</td>
<td>1x1.20</td>
<td>Pipe</td>
</tr>
</tbody>
</table>

b) Pipe Culvert
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Chainage (km)</th>
<th>Span (m)</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>22+810</td>
<td>1x1.20</td>
<td>Pipe</td>
</tr>
<tr>
<td>9</td>
<td>24+740</td>
<td>1x1.20</td>
<td>Pipe</td>
</tr>
<tr>
<td>10</td>
<td>25+860</td>
<td>1x1.20</td>
<td>Pipe</td>
</tr>
<tr>
<td>11</td>
<td>25+960</td>
<td>1x1.20</td>
<td>Pipe</td>
</tr>
<tr>
<td>12</td>
<td>26+040</td>
<td>1x1.20</td>
<td>Pipe</td>
</tr>
<tr>
<td>13</td>
<td>28+930</td>
<td>1x1.20</td>
<td>Pipe</td>
</tr>
<tr>
<td>14</td>
<td>36+000</td>
<td>1x1.20</td>
<td>Pipe</td>
</tr>
<tr>
<td>15</td>
<td>36+360</td>
<td>1x1.20</td>
<td>Pipe</td>
</tr>
<tr>
<td>16</td>
<td>37+420</td>
<td>1x1.20</td>
<td>Pipe</td>
</tr>
<tr>
<td>17</td>
<td>37+730</td>
<td>1x1.20</td>
<td>Pipe</td>
</tr>
<tr>
<td>18</td>
<td>37+830</td>
<td>1x1.20</td>
<td>Pipe</td>
</tr>
<tr>
<td>19</td>
<td>41+720</td>
<td>1x1.20</td>
<td>Pipe</td>
</tr>
<tr>
<td>20</td>
<td>46+700</td>
<td>1x1.20</td>
<td>Pipe</td>
</tr>
<tr>
<td>21</td>
<td>47+670</td>
<td>1x1.20</td>
<td>Pipe</td>
</tr>
</tbody>
</table>

c) Slab Culvert

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Chainage (KM)</th>
<th>Span (m)</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>28+660</td>
<td>1x4.0</td>
<td>Slab</td>
</tr>
<tr>
<td>2</td>
<td>32+500</td>
<td>1x4.0</td>
<td>Slab</td>
</tr>
<tr>
<td>3</td>
<td>33+930</td>
<td>1x4.0</td>
<td>Slab</td>
</tr>
<tr>
<td>4</td>
<td>34+090</td>
<td>1x4.0</td>
<td>Slab</td>
</tr>
<tr>
<td>5</td>
<td>34+590</td>
<td>1x4.0</td>
<td>Slab</td>
</tr>
<tr>
<td>6</td>
<td>36+610</td>
<td>1x4.0</td>
<td>Slab</td>
</tr>
</tbody>
</table>

*Any Change in the span due to any reason would not be considered as change in scope. Additional culvert required due to any reason will not be considered as change in scope. Formation width of culvert shall match with respective TCS applicable for road.

7.2.5 Repairs/replacements of railing/parapets, flooring and protection works of the existing culverts shall be undertaken as follows:
7.2.6 Floor protection works shall be as specified in the relevant IRC Codes and Specifications

7.3 Bridges

7.3.1 Existing bridges to be re-constructed/widened

(i) The existing bridges at the following locations shall be re-constructed as new Structures.
   a) Major Bridges

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Design Chainage (km)</th>
<th>Existing Str. No.</th>
<th>Type</th>
<th>Span (m)</th>
<th>Length of Bridge (m)</th>
<th>Total Width (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Kaletwa to Zorinpui /India-Myanmar Border)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NIL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b) Minor Bridges

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Design Chainage (km)</th>
<th>Existing Str. No.</th>
<th>Type</th>
<th>Span (m)</th>
<th>Length of Bridge (m)</th>
<th>Total Width (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Kaletwa to Zorinpui /India-Myanmar Border)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NIL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(i) The following narrow bridges shall be widened:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Location (km)</th>
<th>Existing width (m)</th>
<th>Extent of widening (m)</th>
<th>Cross-section at deck level for widening @</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Kaletwa to Zorinpui /India-Myanmar Border)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NIL</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 7.3.2 Additional new bridges

New bridges at the following locations on the Project Highway shall be constructed. GADs for the new bridges are attached in the drawings folder.  

#### a) Major Bridges

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Chainage (km)</th>
<th>Span Arrangement (m)</th>
<th>Superstructure</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10.360</td>
<td>1x20.0</td>
<td>RCC I-beam with cast-in-situ deck slab</td>
<td>Twaose Chaung</td>
</tr>
<tr>
<td>2</td>
<td>14.075</td>
<td>1x30.0</td>
<td>PSC I-beam with cast-in-situ deck slab</td>
<td>Thala Chaung</td>
</tr>
<tr>
<td>3</td>
<td>17.200</td>
<td>1x30.0</td>
<td>PSC I-beam with cast-in-situ deck slab</td>
<td>Satchaing Chaung</td>
</tr>
<tr>
<td>4</td>
<td>21.125</td>
<td>1x20.0</td>
<td>RCC I-beam with cast-in-situ deck slab</td>
<td>Dou Chaung</td>
</tr>
<tr>
<td>5</td>
<td>25.227</td>
<td>1x20.0</td>
<td>RCC I-beam with cast-in-situ deck slab</td>
<td>Tangbel Chaung</td>
</tr>
<tr>
<td>6</td>
<td>27.200</td>
<td>1x20.0</td>
<td>RCC I-beam with cast-in-situ deck slab</td>
<td>Sulahi chaung</td>
</tr>
<tr>
<td>7</td>
<td>31.900</td>
<td>1x20.0</td>
<td>RCC I-beam with cast-in-situ deck slab</td>
<td>Sulewvi Chaung</td>
</tr>
<tr>
<td>8</td>
<td>36.900</td>
<td>1x30.0</td>
<td>PSC I-beam with cast-in-situ deck slab</td>
<td>Phuhlai Chaung</td>
</tr>
</tbody>
</table>

#### b) Minor Bridges

Nil.

(Kaletwa to Zorinpui /India-Myanmar Border)
7.3.3 The railings of existing bridges shall be replaced by crash barriers at the following locations:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Bridge Location</th>
<th>Remarks, if any</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Kaletwa to Zorinpui /India-Myanmar Border)</td>
<td>NIL</td>
</tr>
</tbody>
</table>

7.3.4 Repairs/replacements of railing/parapets of the existing bridges shall be undertaken as follows:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Location at km</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Kaletwa to Zorinpui /India-Myanmar Border)</td>
<td>NIL</td>
</tr>
</tbody>
</table>

7.3.5 Drainage system for bridge decks
An effective drainage system for bridge decks shall be provided as specified in paragraph 7.21 of the Manual.

7.3.6 Structures in marine environment

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Location at km</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Kaletwa to Zorinpui /India-Myanmar Border)</td>
<td>NIL</td>
</tr>
</tbody>
</table>

7.4. Rail-road bridges
Not Required.

7.4.1 Road over-bridges
Road over-bridges (road over rail) shall be provided at the following level crossings, as per GAD drawings attached:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Location of Level crossing</th>
<th>Length of bridge</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Kaletwa to Zorinpui /India-Myanmar Border)</td>
<td>NIL</td>
</tr>
</tbody>
</table>
7.4.2 Road under-bridges

Road under-bridges (road under railway line) shall be provided at the following level crossings, as per GAD drawings attached:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Location of Level crossing (chainage km)</th>
<th>Number and length of span (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Kaletwa to Zorinpui /India-Myanmar Border)</td>
<td>NIL</td>
<td></td>
</tr>
</tbody>
</table>

7.5 Grade separated structures

The grade separated structures shall be provided at the locations and of the type and length specified below.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Type of Structure</th>
<th>Location of structure</th>
<th>Length (m)</th>
<th>Span Arrangement c/c of expansion joint (m)</th>
<th>Approach Gradient</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Kaletwa to Zorinpui /India-Myanmar Border)</td>
<td>NIL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7.6 Repairs and strengthening of bridges and structures

The existing bridges and structures to be repaired/strengthened, and the nature and extent of repairs/strengthening required are given below:

A. Bridges

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Location of Bridge (km)</th>
<th>Nature and extent of repairs / strengthening to be carried out</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Kaletwa to Zorinpui /India-Myanmar Border)</td>
<td>NIL</td>
<td></td>
</tr>
</tbody>
</table>

[Type here]
### B. ROB / RUB

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Location of ROB/RUB (km)</th>
<th>Nature and extent of repairs /strengthening to be carried out</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Kaletwa to Zorinpui /India-Myanmar Border)</td>
<td>NIL</td>
</tr>
</tbody>
</table>

### C. Overpasses/Underpasses and other structures

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Location of Structure (km)</th>
<th>Nature and extent of repairs /strengthening to be carried out</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Kaletwa to Zorinpui /India-Myanmar Border)</td>
<td>NIL</td>
</tr>
</tbody>
</table>

#### 7.7 List of Major & Minor Bridges and Structures

The following is the list of the Major & minor Bridges and Structures:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Design Chainage (km)</th>
<th>Span Arrangement (m)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Kaletwa to Zorinpui /India-Myanmar Border)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>10.360</td>
<td>1x20.0</td>
<td>Twaose Chaung</td>
</tr>
<tr>
<td>2</td>
<td>14.075</td>
<td>1x30.0</td>
<td>Thala Chaung</td>
</tr>
<tr>
<td>3</td>
<td>17.200</td>
<td>1x30.0</td>
<td>Satchaing Chaung</td>
</tr>
<tr>
<td>4</td>
<td>21.125</td>
<td>1x20.0</td>
<td>Dou Chaung</td>
</tr>
<tr>
<td>5</td>
<td>25.227</td>
<td>1x20.0</td>
<td>Tangbel Chaung</td>
</tr>
<tr>
<td>6</td>
<td>27.200</td>
<td>1x20.0</td>
<td>Sulahi Chaung</td>
</tr>
<tr>
<td>7</td>
<td>31.900</td>
<td>1x20.0</td>
<td>Sulewvi Chaung</td>
</tr>
<tr>
<td>8</td>
<td>36.900</td>
<td>1x30.0</td>
<td>Phuhlai Chaung</td>
</tr>
</tbody>
</table>
8 TRAFFIC CONTROL DEVICES AND ROAD SAFETY WORKS

8.1 Traffic control devices and road safety works shall be provided in accordance with Section 9 of the Manual.

a) Traffic Signs: Traffic signs include roadside signs, overhead signs and kerb mounted signs along the entire project road.

(b) Pavement Marking: Pavement marking shall cover road marking for entire project road.

(c) Safety Barrier: Provide W-beam crash barrier along the project highway at the locations suggested in Schedule D.

8.2 Specifications of the reflective sheeting. [Refer to paragraph 9.3 of the Manual and specify]

9 ROADSIDE FURNITURE

9.1 Roadside furniture shall be provided in accordance with the provisions of Section 11 of the Manual.

9.2 Road Boundary Stone: for the entire Project road.

9.3 Pedestrian Guard Rail: The pedestrian facilities shall include the provision of the Pedestrian guardrail at each bus stop location.

9.4 Overhead traffic signs: location and size

   Full width Overhead signs: 1 Nos (End of Project)

9.5 Delineators: Delineators for the entire Project Highway at the locations as suggested in Schedule D.

10 COMPULSORY AFFORESTATION

The number of trees which are required to be planted by the contractor as compensatory afforestation are 17000. The trees to be planted should be similar to those required to cut. Around 9000 tress having varieties of mango, jack fruit & teak are falling in the alignment (Present status be confirmed by the Bidder before submitting bid). Any variation in numbers of existing trees shall not be considered as a change in scope.
HAZARDOUS LOCATIONS

The safety barriers shall also be provided at the following hazardous locations:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Location stretch (km)</th>
<th>LHS/ RHS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Shall be Provided both sides at High Embankment and at Sharp curve locations.

11 Special Requirement for Hill Roads

11.1 Breast Wall

The provision for breast wall will be made as per manual. The minimum length of breast wall to be provided would be.

<table>
<thead>
<tr>
<th>Project Road</th>
<th>Length of Proposed Breast Wall (in m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2m Height</td>
</tr>
<tr>
<td>(Kaletwa to Zorinpui /India-Myanmar Border)</td>
<td>8136</td>
</tr>
</tbody>
</table>

*Any increase in the length of breast wall due to any reason will not be considered as change scope.

11.2 Retaining Wall

The provision for retaining wall will be made as per manual. The minimum length of retaining wall to be provided would be.

<table>
<thead>
<tr>
<th>Project Road Package</th>
<th>Length of Proposed Retaining Wall (in m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5m</td>
</tr>
<tr>
<td>(Kaletwa to Zorinpui /India-Myanmar Border)</td>
<td>665</td>
</tr>
</tbody>
</table>
*Any increase in the length of retaining wall due to any reason will not be considered as change scope.

12 CHANGE OF SCOPE

The length of Structures and bridges 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 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 or any deviation thereof.
SCHEDULE - C

(See Clause 2.1)

PROJECT FACILITIES

1 Project Facilities

The Contractor shall construct the Project Facilities in accordance with the provisions of this Agreement. Such Project Facilities shall include:

(a) Roadside furniture;
(b) Pedestrian facilities;
(c) Tree plantation;
(d) Truck lay-byes;
(e) Bus-bays and bus shelters;
(f) Others to be specified

2 Description of Project Facilities

Each of the Project Facilities is described below:

(a) Roadside furniture
The roadside furniture shall include

i. Traffic Signs
Traffic signs include roadside signs, overhead signs and kerb mounted signs along the entire Project highway.

ii. Pavement Markings
Pavement marking shall cover road marking for the entire Project highway

iii. Crash barrier
Provide W-beam crash barrier along the Project highway at the location as suggested in schedule D

iv. Delineator
Delineators for the entire Project Highway at the locations as suggested in Manual.
v. **Boundary Stones**  
For Entire Project highway

vi. **Hectometer / Kilometer stones**  
For the entire Project Road.

(b) **Pedestrian facilities:**  
Pedestrian Guard Rail: The pedestrian facilities shall include the provision of the Pedestrian guardrail at bus stop location.

(c) **Location: Truck lay-bye-**  
One truck lay bay has been proposed.

(d) **Bus-bays and bus shelters table is given below:**  
Bus Lay bye shall be provided at below mentioned locations

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Location (km)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Kaletwa to Zorinpui /India-Myanmar Border)</td>
</tr>
<tr>
<td>1</td>
<td>11+500</td>
</tr>
<tr>
<td>2</td>
<td>14+400</td>
</tr>
<tr>
<td>3</td>
<td>16+400</td>
</tr>
<tr>
<td>4</td>
<td>22+600</td>
</tr>
<tr>
<td>5</td>
<td>28+500</td>
</tr>
<tr>
<td>6</td>
<td>31+800</td>
</tr>
<tr>
<td>7</td>
<td>38+800</td>
</tr>
</tbody>
</table>
3 Facilities for Authority/Authority’s Engineer/Employer

The Sub-Contractor is required to provide following facilities for Authority or Authority’s Engineer and Employer at project site. The contractor should consult Authority Engineer & seek its approval for convenient locations for providing following facilities:-

3.1 Construct and provide suitable fully furnished office(s) for Engineer and his staff equipped with Computers, Printers & telephone, fax, photocopy machine, internet facility including its repair & maintenance and stationary/consumables etc. for functioning of the office with 24 hours supply of electricity and potable water. (Minimum requirement given at Annexure C-1)

3.2 Construct and provide suitable fully furnished accommodation(s) for Engineer and his staff, equipped with hard furnishing to International Standards with 24 hours supply of electricity and potable water. (Minimum requirement given at Annexure C-2)

3.3 Construct and provide suitable fully equipped material testing laboratory with equipments for Engineer with ASTM/BS/BIS specification/Standards with 24 hours supply of electricity, potable water and supporting staffs/labors. (Minimum requirement given at Annexure C-3)

3.4 Supply and maintenance of Suitable four wheel drive vehicle(s) with driver including POL and/or speed boats with Operator & consumables for Engineer and his staff. (Minimum requirement given at Annexure C-4)

Within 1 month of Letter of Acceptance, the Sub-Contractor shall submit detail plans & drawings along with proposed location for above facilities for approval of Employer.

Sub-Contractor shall construct and provide above facilities within 02 months from date of approval accorded by Employer, till then the Contractor may provide rented accommodation(s) for smooth functioning of Engineer. In case of any delay beyond 02 (two) months of Employer approval, the Sub-Contractor will be levied penalty @ 0.01% of Contract Price per month (on pro-rata basis in case of days or area delayed
# Minimum Requirement of Authority/Authority Engineer’s Office

<table>
<thead>
<tr>
<th>Descriptions</th>
<th>Unit</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing site offices for employer/engineer and Staff including furnishing complete</td>
<td>Sq. m.</td>
<td>315X1=315</td>
</tr>
<tr>
<td>Maintaining site office for Employer/Engineer complete</td>
<td>Month</td>
<td>24 x 1 offices</td>
</tr>
<tr>
<td>[In case contract period is extended due to any reason, the Contractor shall maintain office(s) for extended period without any remuneration]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supply of Furniture and equipment for Engineer/Employer office as per Technical specification clause 120.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Executive Table (Make-Godrej Model No. T-108 or equivalent)</td>
<td>No.</td>
<td>4x1</td>
</tr>
<tr>
<td>(b) Executive Chair (Make-Godrej Model No. PCH-701 or equivalent)</td>
<td>No.</td>
<td>4x1</td>
</tr>
<tr>
<td>(c) Table (Make-Godrej Model No. 104 or Equivalent)</td>
<td>No.</td>
<td>6x1</td>
</tr>
<tr>
<td>(d) Ordinary chair Type I (Make-Godrej Model No. CHR-6 or equivalent)</td>
<td>No.</td>
<td>20x1</td>
</tr>
<tr>
<td>(e) Table (Make-Godrej Model No.T-101 or equivalent)</td>
<td>No.</td>
<td>8x1</td>
</tr>
<tr>
<td>(f) Ordinary chair-Type II (Make-Godrej Model No.CHR-6 or equivalent.)</td>
<td>No.</td>
<td>20x1</td>
</tr>
<tr>
<td>(g) Steel Almirah 980mmx 90015mm x375 mm (Make-Godrej Model No.1 Storewel plan or equivalent.)</td>
<td>No.</td>
<td>10x1</td>
</tr>
<tr>
<td>(h) Steel Almirah 27 mm x 765 mm x440mm (Make -</td>
<td>No.</td>
<td>10x1</td>
</tr>
<tr>
<td>Item Description</td>
<td>Quantity</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>Godrej Model Minor Plain or equivalent.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Racks - 5 Tier 800mm x 900 mm x 375mm (Make of slotted angles and M.S. Sheets of Godrej make)</td>
<td>15x1</td>
<td></td>
</tr>
<tr>
<td>(j) Typewriter Electronic - Bilingual English &amp; Hindi) Network make or equivalent.</td>
<td>1x1</td>
<td></td>
</tr>
<tr>
<td>(k) Steel Cash Chest of size 1.5' x 1.5' (450mm x 450mm) (approx). Make-Godrej Storewel or equivalent</td>
<td>1x1</td>
<td></td>
</tr>
<tr>
<td>(l) A/C for office cabins of Godrej make or equivalent</td>
<td>16x1</td>
<td></td>
</tr>
<tr>
<td>(m) Air Coolers (The coolers shall have 24” (60 cm) size fan with suitable pump and shall be of either GEC, Khaitan or Cool Home make or equivalent)</td>
<td>15x1</td>
<td></td>
</tr>
<tr>
<td>(n) Room Heaters. The heaters shall be of 2000W capacity – Bajaj make or equivalent</td>
<td>16x1</td>
<td></td>
</tr>
<tr>
<td>(o) Ceiling Fans 1400 mm size (Ceiling fans shall be of approved make and colour)</td>
<td>30x1</td>
<td></td>
</tr>
<tr>
<td>(p) Computer with window operating system and Microsoft Office &amp; AutoCAD(PC Pentium-4 with hard disc capacity 40 GB, Intel processor 2.4 GHZ, Intel original motherboard,125 MB RD RAM, Logistic three pines with scrolling mouse, 52X Samsung CDROM, 52X Samsung CD Writer, Floppy disc drives 3.5 inch, 14 inch size Digital colour monitor letter quality laser jet printer A4 size and 101 Key board)</td>
<td>5x1</td>
<td></td>
</tr>
<tr>
<td>(q) Laser Multi-function Printer Canon MF 416DW or equivalent</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>I Computer Accessories</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) UPS (1.5KVA)</td>
<td>3x2</td>
<td></td>
</tr>
<tr>
<td>(ii) Hardware (As per annual maintenance contract)</td>
<td>3x2</td>
<td></td>
</tr>
<tr>
<td>(iii) Software Packages (Auto CAD and MS Project)</td>
<td>No.</td>
<td>3x2</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>-------</td>
<td>-----</td>
</tr>
<tr>
<td>(s) Photocopier (Make RICOH Model FT 4065 or equivalent.)</td>
<td>No.</td>
<td>3x1</td>
</tr>
<tr>
<td>(t) TEN Dual Sim Mobile phones for communication purpose</td>
<td>No.</td>
<td>05</td>
</tr>
<tr>
<td>(u) One Digital Camera, Nikon D3400 with (18-55mm &amp; 70-300mm Lens) DSLR Camera or equivalent</td>
<td>No.</td>
<td>01</td>
</tr>
<tr>
<td>(v) Laptops for Engineer In Charge and other Executives.</td>
<td>Nos.</td>
<td>03</td>
</tr>
</tbody>
</table>
Annexure C 2

Minimum Requirement of Employer/Authority/Authority Engineer's Residential Accommodation

<table>
<thead>
<tr>
<th>Descriptions</th>
<th>Unit</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing Furnished (Beds with Mattresses, Study Table &amp; chair, Ceiling fans, A/C, Amirah’s, for each room) site residential Bachelor accommodation for at least 15 Nos. Employer/Engineers, with DiningTables with Chairs, Sofa set, One TV Sets, DG Sets with POL, Operator, Cook utensils, cooking oven, washing Machine etc.).</td>
<td>Sq. m.</td>
<td>1 x 805 = 805</td>
</tr>
<tr>
<td>Fully Furnished Guest House for at least 10 persons (Beds with Mattresses, Table &amp; chair, Ceiling fans, A/C, air cooler, Dining Tables with Chairs, Sofa set, One TV Set, DG Sets with POL, Operator, Cook, utensils, cooking oven, washing Machine etc.).</td>
<td>Sq. m</td>
<td>1 x 200</td>
</tr>
<tr>
<td>Fully Furnished Family accommodation for at least three families with all basic facilities</td>
<td>Sq. m</td>
<td>3 x 51</td>
</tr>
<tr>
<td>Maintaining all (a, b and c of Annexure C2) site residential accommodation for the Employer complete</td>
<td>month</td>
<td>24</td>
</tr>
</tbody>
</table>

Note: In addition to above, one guest house of 85 sqmtrs at Paletwa will be provided by the sub-contractor. If in the process of finalization of tender the Employer will construct the guest house at Paletwa the amount of Approx. Rs 21,00,000/- will be recovered from the Sub-Contractor.
## Minimum Requirement of Laboratory equipment's & Operation thereof

### A. General

<table>
<thead>
<tr>
<th>No.</th>
<th>Unit</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>i)</td>
<td>No.</td>
<td>1x1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii)</td>
<td>No.</td>
<td>1x1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iii)</td>
<td>No.</td>
<td>1x1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iv)</td>
<td>No.</td>
<td>2x1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v)</td>
<td>No.</td>
<td>1x1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vi)</td>
<td>No.</td>
<td>2x1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b)</td>
<td>No.</td>
<td>2x1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vii)</td>
<td>No.</td>
<td>2x1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>viii)</td>
<td>LS.</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ix)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a)</td>
<td>set</td>
<td>1x1</td>
</tr>
<tr>
<td>b)</td>
<td>set</td>
<td>2x1</td>
</tr>
<tr>
<td>x)</td>
<td>set</td>
<td>2x1</td>
</tr>
<tr>
<td>xi)</td>
<td>set</td>
<td>1x1</td>
</tr>
</tbody>
</table>

### B. For Soils & Aggregates

<table>
<thead>
<tr>
<th>No.</th>
<th>Unit</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>i)</td>
<td>No.</td>
<td>1x1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>ii)</td>
<td>Atterberg limit determination apparatus</td>
<td>set</td>
</tr>
<tr>
<td>iii) a)</td>
<td>Compaction test apparatus for light compaction</td>
<td>set</td>
</tr>
<tr>
<td>b)</td>
<td>Compaction test apparatus for heavy compaction</td>
<td>set</td>
</tr>
<tr>
<td>iv)</td>
<td>Dry Bulk Density Test Apparatus (Sand pouring cylinder, tray, can etc.)</td>
<td>set</td>
</tr>
<tr>
<td>v)</td>
<td>Speedy moisture meter complete with chemicals</td>
<td>set</td>
</tr>
<tr>
<td>vi)</td>
<td>Post-hole auger with extensions</td>
<td>set</td>
</tr>
<tr>
<td>vii)</td>
<td>Core cutter apparatus 10cm dia, 10/1 5cm height,</td>
<td>set</td>
</tr>
<tr>
<td>viii)</td>
<td>Aggregate impact test apparatus or, Los angeles abrasion apparatus</td>
<td>set</td>
</tr>
<tr>
<td>ix)</td>
<td>Flakiness &amp; elongation test gauges</td>
<td>set</td>
</tr>
<tr>
<td>x)</td>
<td>Standard measures of 30, 15 and 3 litres capacity alongwith standard tamping rod</td>
<td>set</td>
</tr>
<tr>
<td>xi)</td>
<td>Lab. C.B.R. testing equipment</td>
<td>set</td>
</tr>
<tr>
<td>a)</td>
<td>CBR mouldes 150mm dia</td>
<td>No.</td>
</tr>
<tr>
<td>b)</td>
<td>Tripod stands</td>
<td>No.</td>
</tr>
<tr>
<td>c)</td>
<td>CBR plunger</td>
<td>No.</td>
</tr>
<tr>
<td>d) i-</td>
<td>Surcharge weight 147mm dia, 2.5kg</td>
<td>No.</td>
</tr>
<tr>
<td>ii-</td>
<td>Surcharge weight 147mm dia, 1.5kg</td>
<td>No.</td>
</tr>
<tr>
<td>e)</td>
<td>Spacer disc 148mm dia</td>
<td>No.</td>
</tr>
<tr>
<td>f)</td>
<td>Perforated plate (brass)</td>
<td>No.</td>
</tr>
<tr>
<td>g)</td>
<td>Soaking tank</td>
<td>No.</td>
</tr>
<tr>
<td>h)</td>
<td>Proving rings of</td>
<td></td>
</tr>
<tr>
<td>i- 100kg</td>
<td>No.</td>
<td>2x1</td>
</tr>
<tr>
<td>ii- 2500kg</td>
<td>No.</td>
<td>2x1</td>
</tr>
<tr>
<td>iii- 5000kg and above</td>
<td>No.</td>
<td>2x2</td>
</tr>
<tr>
<td>i) Dial gauges</td>
<td>No.</td>
<td>12x1</td>
</tr>
<tr>
<td>xii) Unconfined compression test apparatus set</td>
<td>2x1</td>
<td></td>
</tr>
</tbody>
</table>

### C. For Bitumen & Bituminous mixes

| i) Penetrometer with standard needles | set | 1x1 |
| ii) Riffle box -small size | No. | 1x1 |
| iii) Centrifuge type bitumen extractor, electric operated , complete. | set | 2x1 |
| iv) Marshall stability test apparatus with all accessories | set | 1x1 |
| v) Field density bottle alongwith cutting tray, chisel, hammer and standard sand | No. | 2x1 |
| vi) 3m straight edge | No. | 2x1 |
| vii) Camber board | No. | 2x2 |
| viii) Core cutting machine | sets | 1x1 |
| ix) Vacuum pump | sets | 1x1 |

### D. For Cement and Cement Concerte

<p>| i) Specific gravity bottle | No. | 3x1 |
| ii) Vicat needle apparatus | sets | 1x1 |
| iii) Equipment for slump test | sets | 4x1 |
| iv) Compression &amp; flexural strength testing machine | No. | 1x1 |
| v) Needle vibrator | No. | 4x1 |
| vi) Air meter | No. | 1x1 |</p>
<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Unit</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>vii) Vibrating hammer</td>
<td></td>
<td>1x1</td>
</tr>
<tr>
<td></td>
<td>Construction of laboratory (covered area assumed as 150sqm for each laboratory)</td>
<td>sqm</td>
<td>150x1</td>
</tr>
<tr>
<td></td>
<td>Running cost and maintenance of laboratory equipment's (2 Numbers)</td>
<td>per month</td>
<td>24 #</td>
</tr>
</tbody>
</table>

# In case contract period is extended due to any reason, the Contractor shall maintain office (s) for extended period without any remuneration
<table>
<thead>
<tr>
<th>Descriptions</th>
<th>Unit</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing and maintaining vehicles for the Engineer and the employer including</td>
<td></td>
<td></td>
</tr>
<tr>
<td>providing of driver, POL etc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Hard Top passenger cars (4x4) 02 Nos.</td>
<td>Veh monthly</td>
<td>24 #</td>
</tr>
<tr>
<td>(b) Hard top jeeps 4w drive (4x4) 02 Nos</td>
<td>Veh monthly</td>
<td>108 #</td>
</tr>
<tr>
<td>Supply of colour record photographs with negatives and two colour prints</td>
<td></td>
<td>10,000</td>
</tr>
<tr>
<td>there from mounted in album as per Technical Specifications Clause 125.</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>Supply of additional prints of coloured photographs as per Technical</td>
<td></td>
<td>4,000</td>
</tr>
<tr>
<td>Specifications Clause 125.</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>Supplying colour video cassette records of various activities during</td>
<td></td>
<td>8,000</td>
</tr>
<tr>
<td>construction complete as per Technical Specification Clause 120.</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>Providing and installation of wireless system complete as per Technical</td>
<td>Per system</td>
<td>1 x 1</td>
</tr>
<tr>
<td>specification clause123.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance the wireless system as per Technical Specification</td>
<td>per month</td>
<td>24 #</td>
</tr>
<tr>
<td>One speed Boat Eight seated with fuel</td>
<td>Per Month</td>
<td>24#</td>
</tr>
</tbody>
</table>

*In case contract period is extended due to any reason, the Contractor shall maintain office(s) for extended period without any remuneration*
SCHEDULE – D

(See Clause 2.1)

SPECIFICATIONS AND STANDARDS

1 Construction

The Sub-Contractor shall comply with the Specifications and Standards set forth in Annex-I of this Schedule-D for construction of the Project Highway.

2 Design Standards

The Project Highway including Project Facilities shall conform to design requirements set out in the following documents:

Specifications and Standards for Construction

1 Specifications and Standards

All Materials, works and construction operations shall conform to the Manual of Specifications and Standards for Two-Laning of Highways (IRC:SP:73-2007) for two laning portion, referred to as the Manual, 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.

2 Deviations from the Specifications and Standards

2.1 The terms “Concessionaire”, “Independent Engineer” and “Concession Agreement” used in the Manual shall be deemed to be substituted by the terms “Contractor”, “Authority’s Engineer” and “Agreement” respectively.

2.2 [Notwithstanding anything to the contrary contained in Paragraph 1 above, the following Specifications and Standards shall apply to the Project Highway, and for purposes of this Agreement, the aforesaid Specifications and Standards shall be deemed to be amended to the extent set forth below:]

The Cross-section for the project road would be as per clause 2.11
SCHEDULE - E
(See Clauses 2.1 and 14.2)

MAINTENANCE REQUIREMENTS

1 Maintenance Requirements

1.1 The Sub-Contractor shall, at all times maintain the Project Highway in accordance with the provisions of this Agreement, Applicable Laws and Applicable Permits, during construction period.

1.2 The Sub-Contractor shall repair or rectify any Defect or deficiency set forth in Paragraph 2 of this Schedule-E within the time limit specified therein and any failure in this behalf shall constitute non-fulfillment of the Maintenance obligations by the Sub-Contractor. Upon occurrence of any breach hereunder, the Employer shall be entitled to effect reduction in monthly lump sum payment as set forth in Clause 14.6 of this Agreement, without prejudice to the rights of the Employer under this Agreement, including Termination thereof.

1.3 All Materials, works and construction operations shall conform to the MORTH Specifications for Road and Bridge Works, and the relevant IRC publications. Where the specifications for a work are not given, Good Industry Practice shall be adopted.

2 Repair/rectification of Defects and deficiencies

The obligations of the Sub-Contractor shall include repair and rectification of the Defects and deficiencies specified in Annex - I of this Schedule-E within the time limit set forth therein.

3 Other Defects and deficiencies

In respect of any Defect or deficiency not specified in Annex - I of this Schedule-E, the Authority’s Engineer may, in conformity with good industry Practice, specify the permissible limit of deviation or deterioration with reference to the Specifications and Standards, and any deviation or deterioration beyond the permissible limit shall be repaired or rectified by the Sub-Contractor within the time limit specified by the Employer.

4 Extension of time limit

Notwithstanding anything to the contrary specified in this Schedule-E, if the nature and extent of any Defect or deficiency justifies more time for its repair or rectification than the time specified herein, the Sub-Contractor shall be entitled to a different time in conformity with Good Industry Practice. Such additional time shall be determined by the Employer and Conveyed to the Sub-Contractor.
5 Emergency repairs/restoration

Notwithstanding anything to the contrary contained in this Schedule-E, if any Defect or deficiency in the Project Highway poses a hazard to safety or risk of damage to property, the Contractor shall promptly take all reasonable measures for eliminating or minimizing such danger.

6 DELETED

7. DELETED

8. DELETED
Annex - I
(Schedule-E)

Repair/rectification of Defects and deficiencies

The Sub-Contractor shall repair and rectify the Defects and deficiencies specified in this Annex-I of Schedule-E within the time limit set forth in the table below.

<table>
<thead>
<tr>
<th>Nature of Defect or deficiency</th>
<th>Time limit for repair/rectification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ROADS</strong></td>
<td></td>
</tr>
<tr>
<td>(a) Carriageway and paved Shoulders</td>
<td></td>
</tr>
<tr>
<td>(i) Pot holes</td>
<td>24 hours</td>
</tr>
<tr>
<td>(ii) Any cracks in road surface</td>
<td>15 (fifteen) days</td>
</tr>
<tr>
<td>(iii) Any depressions, rutting exceeding 10 mm in road surface</td>
<td>30 (thirty) days</td>
</tr>
<tr>
<td>(iv) Bleeding/skidding</td>
<td>7 (seven) days</td>
</tr>
<tr>
<td>(v) Any other defect/distress on the Road</td>
<td>15 (fifteen) days</td>
</tr>
<tr>
<td>(b) Granular earth shoulders, side slopes, drains and culverts</td>
<td></td>
</tr>
<tr>
<td>(i) Variation by more than 1 % in the prescribed slope of camber/cross fall (shall not be less than the camber on the main carriageway)</td>
<td>7 (seven) days</td>
</tr>
<tr>
<td>(ii) Edge drop at shoulders exceeding 40 mm</td>
<td>7 (seven) days</td>
</tr>
<tr>
<td>(iii) Variation by more than 15% in the prescribed side (embankment) slopes</td>
<td>30 (thirty) days</td>
</tr>
<tr>
<td>(iv) Rain cuts/gullies in slope</td>
<td>7 (seven) days</td>
</tr>
<tr>
<td>(v) Railing, parapets, crash barriers</td>
<td>7 (seven) days (Restore immediately if causing safety hazard)</td>
</tr>
<tr>
<td>(c) Road side furniture including road sign and pavement marking</td>
<td>Within reasonable time</td>
</tr>
<tr>
<td>(d) Road lighting</td>
<td></td>
</tr>
<tr>
<td>(i) Any major failure of the system</td>
<td>24 hours</td>
</tr>
<tr>
<td>(ii) Faults and minor failures</td>
<td>8 hours</td>
</tr>
<tr>
<td>(e) Trees and plantation</td>
<td>Within reasonable time</td>
</tr>
<tr>
<td>Nature of Defect or deficiency</td>
<td>Time limit for repair/rectification</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>(f) Rest area</td>
<td></td>
</tr>
<tr>
<td>(i) Defects in electrical, water and sanitary installations</td>
<td>24 hours</td>
</tr>
<tr>
<td>(g) [Toll Plaza]</td>
<td></td>
</tr>
<tr>
<td>(h) Other Project Facilities and Approach roads</td>
<td>Within reasonable time</td>
</tr>
</tbody>
</table>

**Bridges**

<table>
<thead>
<tr>
<th>Nature of Defect or deficiency</th>
<th>Time limit for repair/rectification</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Superstructure</td>
<td></td>
</tr>
<tr>
<td>(i) Any damage, cracks, spalling/scaling</td>
<td>within 48 hours</td>
</tr>
<tr>
<td>Temporary measures Permanent measures</td>
<td>within 15 (fifteen) days or as specified by the Authority’s Engineer</td>
</tr>
<tr>
<td>(b) Foundations</td>
<td>15 (fifteen) days</td>
</tr>
<tr>
<td>(c) Piers, abutments, return walls and wing walls</td>
<td></td>
</tr>
<tr>
<td>(i) Cracks and damages including settlement and tilting, spalling, scaling</td>
<td>30 (thirty) days</td>
</tr>
<tr>
<td>(d) Bearings (metallic) of bridges</td>
<td></td>
</tr>
<tr>
<td>(i) Deformation, damages, tilting or shifting of bearings</td>
<td>15 (fifteen) days Greasing of metallic bearings once in a year</td>
</tr>
<tr>
<td>(e) Joints</td>
<td></td>
</tr>
<tr>
<td>(i) Malfunctioning of joints</td>
<td>15 (fifteen) days</td>
</tr>
<tr>
<td>(f) Other items</td>
<td></td>
</tr>
<tr>
<td>(i) Deforming of pads in elastomeric Bearings</td>
<td>7 (seven) days</td>
</tr>
<tr>
<td>(ii) Rain-cuts or erosion of banks of the side slopes of approaches</td>
<td>7 (seven) days</td>
</tr>
<tr>
<td>(g) Hill Roads</td>
<td>Within reasonable time</td>
</tr>
</tbody>
</table>

[Note: Where necessary, the Authority may modify the time limit for repair/rectification, or add to the nature of Defect or deficiency before issuing the bidding document, with the approval of the competent authority.]
SCHEDULE - F
(See Clause 3.1.7(a))

APPLICABLE PERMITS

1 Applicable Permits

1.1 The Sub-Contractor shall obtain, as required under Applicable Laws, the following permits from the equivalent and Competent Authority of Myanmar Government, as and if required for execution of Work:

(a) Permission for extraction of boulders from quarry;
(b) Permission for installation of crushers;
(c) License for use of explosives;
(d) Permission for drawing water from river/reservoir;
(e) License for setting up batching plant;
(f) Clearance for setting up batching plant;
(g) Clearance for setting up asphalt plant;
(h) Permission for borrow earth; and
(i) Any other permits or clearances required under Applicable Laws.

1.2 Applicable Permits, as required, relating to environmental protection and conservation shall have been procured by the Employer in accordance with the provisions of this Agreement.
SCHEDULE - G  
(See Clauses 7.1.1, 7.5.3 and 19.2)  

FORM OF BANK GUARANTEE  

Annex-I  
(See Clause 7.1.1)  

Performance Security  

Engineering Projects (India) Limited  
Core-3, Scope Complex  
7, Lodhi Road  
New Delhi-110003  

WHEREAS:  

(A) [name and address of sub-contractor] (hereinafter called the “Sub-Contractor”) and Engineering Projects (India) Limited, Core-3, Scope Complex, 7, Lodhi Road, New Delhi-110003 (hereinafter called the “Employer”) have entered into an agreement (hereinafter called the “Agreement”) for the Construction of Balance work of Two Lane Road on NH Specifications From Kaletwa to India-Myanmar Border (Zorinpui) from km 60.700 to km 109.2 in Chin State of Myanmar on Engineering, Procurement and Construction (the “EPC”) basis, subject to and in accordance with the provisions of the Agreement.  

(B) The Agreement requires the Sub-Contractor to furnish a Performance Security for due and faithful performance of its obligations, under and in accordance with the Agreement, during the {Construction Period/ Defects Liability Period and Maintenance Period} (as defined in the Agreement) in a sum of Rs. ……………. (Rupees ……………………………………… Only) (the “Guarantee Amount”).  

(C) We, …………………. through our branch at …………………. (the “Bank”) have agreed to furnish this bank guarantee (hereinafter called the “Guarantee”) by way of Performance Security.  

NOW, THEREFORE, the Bank hereby, unconditionally and irrevocably, guarantees and affirms as follows:  

1. The Bank hereby unconditionally and irrevocably guarantees the due and faithful performance of the Sub-Contractor’s obligations during the {Construction Period/ Defects Liability Period and Maintenance Period} under and in accordance with the Agreement, and agrees and undertakes to pay to the Employer, upon its mere first written demand, and without any demur, reservation, recourse, contest or protest, and without any reference to the Sub-Contractor, such sum or sums up to an aggregate sum of the Guarantee Amount as the Employer shall claim, without the Employer being required to prove or to show grounds or reasons for its demand and/or for the sum specified therein.
2. A letter from the Employer, under the hand of an officer in finance Division that the Sub-Contractor has committed default in the due and faithful performance of all or any of its obligations under and in accordance with the Agreement shall be conclusive, final and binding on the Bank. The Bank further agrees that the Employer shall be the sole judge as to whether the Sub-Contractor is in default in due and faithful performance of its obligations during and under the Agreement and its decision that the Sub-Contractor is in default shall be final and binding on the Bank, notwithstanding any differences between the Employer and the Sub-Contractor, or any dispute between them pending before any court, tribunal, arbitrators or any other Employer or body, or by the discharge of the Sub-Contractor for any reason whatsoever.

3. In order to give effect to this Guarantee, the Employer shall be entitled to act as if the Bank were the principal debtor and any change in the constitution of the Sub-Contractor and/or the Bank, whether by their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the Bank under this Guarantee.

4. It shall not be necessary, and the Bank hereby waives any necessity, for the Employer to proceed against the Sub-Contractor before presenting to the Bank its demand under this Guarantee.

5. The Employer shall have the liberty, without affecting in any manner the liability of the Bank under this Guarantee, to vary at any time, the terms and conditions of the Agreement or to extend the time or period for the compliance with, fulfillment and/or performance of all or any of the obligations of the Sub-Contractor contained in the Agreement or to postpone for any time, any of the rights and powers exercisable by the Employer against the Sub - Contractor, and either to enforce or forbear from enforcing any of the terms and conditions contained in the Agreement and/or the securities available to the Employer, and the Bank shall not be released from its liability and obligation under these presents by any exercise by the Employer of the liberty with reference to the matters aforesaid or by reason of time being given to the Sub - Contractor or any other forbearance, indulgence, act or omission on the part of the Employer or of any other matter or thing whatsoever which under any law relating to sureties and guarantors would but for this provision have the effect of releasing the Bank from its liability and obligation under this Guarantee and the Bank hereby waives all of its rights under any such law.

6. This Guarantee is in addition to and not in substitution of any other guarantee or security now or which may hereafter be held by the Employer in respect of or relating to the Agreement or for the fulfillment, compliance and/or performance of all or any of the obligations of the Sub - Contractor under the Agreement.

7. Notwithstanding anything contained hereinbefore, the liability of the Bank under this Guarantee is restricted to the Guarantee Amount and this Guarantee will remain in force for the period specified in paragraph 8 below and unless a demand or claim in writing is made by the Employer on the Bank under this Guarantee all rights of the Authority under this Guarantee shall be forfeited and the Bank shall be relieved from its liabilities hereunder.

8. The Guarantee shall cease to be in force and effect on ****$. Unless a demand or claim under this Guarantee is made in writing before expiry of the Guarantee, the Bank shall be discharged from its liabilities hereunder.

9. The Bank undertakes not to revoke this Guarantee during its currency, except with the previous express consent of the Employer in writing, and declares and warrants that it has the power to issue this Guarantee and the undersigned has full
powers to do so on behalf of the Bank.

10. Any notice by way of request, demand or otherwise hereunder may be sent by post addressed to the Bank at its above referred branch, which shall be deemed to have been duly authorized to receive such notice and to effect payment thereof forthwith, and if sent by post it shall be deemed to have been given at the time when it ought to have been delivered in due course of post and in proving such notice, when given by post, it shall be sufficient to prove that the envelope containing the notice was posted and a certificate signed by an officer of the Employer that the envelope was so posted shall be conclusive.

11. This Guarantee shall come into force with immediate effect and shall remain in force and effect for up to the date specified in paragraph 8 above or until it is released earlier by the Employer pursuant to the provisions of the Agreement.

Signed and sealed this ........ day of ........, 20........ at ........

SIGNED, SEALED AND DELIVERED For
and on behalf of the Bank by:
(Signature)
(Name)
(Designation)
(Code Number)
(Address)

NOTES:
(i) The bank guarantee should contain the name, designation and code number of the officer(s) signing the guarantee.
(ii) The address, telephone number and other details of the head office of the Bank as well as of issuing branch should be mentioned on the covering letter of issuing bran

$ Insert date being 2 (two) years from the date of issuance of this Guarantee (in accordance with Clause 7.2 of the Agreement).
Annex – II

(Schedule - G) (See Clause 7.5.3)

Form for Guarantee for Withdrawal of Retention Money

Engineering Projects (India) Limited
Core-3, Scope Complex
7, Lodhi Road
New Delhi-110003

WHEREAS:

(A) [name and address of contractor] (Hereinafter called the “Sub-Contractor”) has executed an agreement (hereinafter called the “Agreement”) with the Engineering Projects (India) Limited, having its principal office at Core-3, Scope Complex, 7, Lodhi Road, New Delhi-110003 (hereinafter called the “Employer”) for the **Construction of Balance work of Two Lane Road on NH Specifications From Kalatwa to India-Myanmar Border (Zorinpui) from km 60.700 to km 109.2 in Chin State of Myanmar** on Engineering, Procurement and Construction (the “EPC”) basis, subject to and in accordance with the provisions of the Agreement.

(B) In accordance with Clause 7.5.3 of the Agreement, the Sub-Contractor may withdraw the retention money (hereinafter called the “Retention Money”) after furnishing to the Employer a bank guarantee for an amount equal to the proposed withdrawal.

(C) We, ......................... through our branch at ................. (the “Bank”) have agreed to furnish this bank guarantee (hereinafter called the “Guarantee”) for the amount of Rs. --------- cr. (Rs.------------crore) (the “Guarantee Amount”).

NOW, THEREFORE, the Bank hereby unconditionally and irrevocably guarantees and affirms as follows:

1. The Bank hereby unconditionally and irrevocably undertakes to pay to the Employer, upon its mere first written demand, and without any demur, reservation, recourse, contest or protest, and without any reference to the Sub-Contractor, such sum or sums up to an aggregate sum of the Guarantee Amount as the Employer shall claim, without the Employer being required to prove or to show grounds or reasons for its demand and/or for the sum specified therein.

2. A letter from the Employer, under the hand of an officer not below the rank of ----- ------------------- in the Engineering Projects (India) Limited, , that the Sub-Contractor has committed default in the due and faithful performance of all or any of its obligations for under and in accordance with the Agreement shall be conclusive, final and binding on the Bank. The Bank further agrees that the Employer shall be the sole judge as to whether the Sub -Contractor is default in due and faithful performance of its obligations during and under the Agreement and its decision that the Sub-Contractor is in default shall be final, and binding on the Bank, notwithstanding any differences between the Employer and the Sub -
Contractor, or any dispute between them pending before any court, tribunal, arbitrators or any other authority or body, or by the discharge of the Sub-Contractor for any reason whatsoever.

3. In order to give effect to this Guarantee, the Employer shall be entitled to act as if the Bank were the principal debtor and any change in the constitution of the Sub-Contractor and/or the Bank, whether by their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the Bank under this Guarantee.

4. It shall not be necessary, and the Bank hereby waives any necessity, for the Employer to proceed against the Sub-Contractor before presenting to the Bank its demand under this Guarantee.

5. The Employer shall have the liberty, without affecting in any manner the liability of the Bank under this Guarantee, to vary at any time, the terms and conditions of the Retention Money and any of the rights and powers exercisable by the Employer against the Sub-Contractor, and either to enforce or forbear from enforcing any of the terms and conditions contained in the Agreement and/or the securities available to the Employer, and the Bank shall not be released from its liability and obligation under these presents by any exercise by the Employer of the liberty with reference to the matters aforesaid or by reason of time being given to the Sub-Contractor or any other forbearance, indulgence, act or omission on the part of the Employer or of any other matter or thing whatsoever which under any law relating to sureties and guarantors would but for this provision have the effect of releasing the Bank from its liability and obligation under this Guarantee and the Bank hereby waives all of its rights under any such law.

6. This Guarantee is in addition to and not in substitution of any other guarantee or security now or which may hereafter be held by the Employer in respect of or relating to the Retention Money.

7. Notwithstanding anything contained hereinbefore, the liability of the Bank under this Guarantee is restricted to the Guarantee Amount and this Guarantee will remain in force for the period specified in paragraph 8 below and unless a demand or claim in writing is made by the Employer on the Bank under this Guarantee all rights of the Employer under this Guarantee shall be forfeited and the Bank shall be relieved from its liabilities hereunder.

8. The Guarantee shall cease to be in force and effect 90 (ninety) days after the date of the Completion Certificate specified in Clause 12.4 of the Agreement.

9. The Bank undertakes not to revoke this Guarantee during its currency, except with the previous express consent of the Authority in writing, and declares and warrants that it has the power to issue this Guarantee and the undersigned has full powers to do so on behalf of the Bank.

10. Any notice by way of request, demand or otherwise hereunder may be sent by post addressed to the Bank at its above referred branch, which shall be deemed to have been duly authorized to receive such notice and to effect payment thereof forthwith, and if sent by post it shall be deemed to have been given at the time when it ought to have been delivered in due course of post and in proving such notice, when given by post, it shall be sufficient to prove that the envelope containing the notice was posted and a certificate signed by an officer of the Authority that the envelope was so posted shall be conclusive.

11. This Guarantee shall come into force with immediate effect and shall remain in force and effect up to the date specified in paragraph 8 above or until it is released earlier by the Authority pursuant to the provisions of the Agreement.
Signed and sealed this .......... day of .........., 20......... at ..........

SIGNED, SEALED AND DELIVERED For
and on behalf of the Bank by:
(Signature)
(Name)
(Designation)
(Code Number)
(Address)

NOTES:
(i) The bank guarantee should contain the name, designation and code number of the officer(s) signing the guarantee.

(ii) The address, telephone number and other details of the head office of the Bank as well as of issuing branch should be mentioned on the covering letter of issuing branch.
Annex – III
(Schedule - G) (See Clause 19.2)

Form for Guarantee for Advance Payment

Engineering Projects (India) Limited
Core-3, Scope Complex
7, Lodhi Road
New Delhi-110003

WHEREAS:

(A) [name and address of Sub-contractor] (Hereinafter called the “Sub-Contractor”) has executed an agreement (hereinafter called the “Agreement”) with the Engineering Projects (India) Limited, having its principal office at Core-3, Scope Complex, 7, Lodhi Road, New Delhi-110003 (hereinafter called the “Employer”) for the Construction of Balance work of Two Lane Road on NH Specifications From Kaletwa to India-Myanmar Border (Zorinpui) from km 60.700 to km 109.2 in Chin State of Myanmar on Engineering, Procurement and Construction (the “EPC”) basis, subject to and in accordance with the provisions of the Agreement.

(B) In accordance with Clause 19.2 of the Agreement, the Employer shall make to the Sub-Contractor an interest free advance payment (hereinafter called “Advance Payment”) equal to 10% (ten per cent) of the Contract Price; and that the Advance Payment shall be made in three installments subject to the Sub-Contractor furnishing an irrevocable and unconditional guarantee by a scheduled bank for an amount equal to the amount of each installment to remain effective till the complete and full repayment of the installment of the Advance Payment as security for compliance with its obligations in accordance with the Agreement. The amount of {first/second/third} installment of the Advance Payment is Rs. ------ cr. (Rupees ------ crore) and the amount of this Guarantee is Rs. ------ cr. (Rupees ------ crore) (the “Guarantee Amount”).

(C) We, ………………….. through our branch at …………………. (the “Bank”) have agreed to furnish this bank guarantee (hereinafter called the “Guarantee”) for the Guarantee Amount.

NOW, THEREFORE, the Bank hereby, unconditionally and irrevocably, guarantees and affirms as follows:

1. The Bank hereby unconditionally and irrevocably guarantees the due and faithful repayment on time of the aforesaid installment of the Advance Payment under and in accordance with the Agreement, and agrees and undertakes to pay to the Authority, upon its mere first written demand, and

The Guarantee Amount should be equivalent to 110% of the value of the applicable installment. Without any demur, reservation, recourse, contest or protest, and without any...
reference to the Contractor, such sum or sums up to an aggregate sum of the Guarantee Amount as the Authority shall claim, without the Authority being required to prove or to show grounds or reasons for its demand and/or for the sum specified therein.

2. A letter from the Employer, under the hand of an officer not below the rank of Deputy Secretary in the Ministry of External Affairs, that the Sub-Contractor has committed default in the due and faithful performance of all or any of its obligations for the repayment of the installment of the Advance Payment under and in accordance with the Agreement shall be conclusive, final and binding on the Bank. The Bank further agrees that the Employer shall be the sole judge as to whether the Sub-Contractor is in default in due and faithful performance of its obligations during and under the Agreement and its decision that the Sub-Contractor is in default shall be final and binding on the Bank, notwithstanding any differences between the Employer and the Sub-Contractor, or any dispute between them pending before any court, tribunal, arbitrators or any other authority or body, or by the discharge of the Sub-Contractor for any reason whatsoever.

3. In order to give effect to this Guarantee, the Employer shall be entitled to act as if the Bank were the principal debtor and any change in the constitution of the Sub-Contractor and/or the Bank, whether by their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the Bank under this Guarantee.

4. It shall not be necessary, and the Bank hereby waives any necessity, for the Employer to proceed against the Sub-Contractor before presenting to the Bank its demand under this Guarantee.

5. The Employer shall have the liberty, without affecting in any manner the liability of the Bank under this Guarantee, to vary at any time, the terms and conditions of the Advance Payment or to extend the time or period of its repayment or to postpone for any time, and from time to time, any of the rights and powers exercisable by the Employer against the Sub-Contractor, and either to enforce or forbear from enforcing any of the terms and conditions contained in the Agreement and/or the securities available to the Employer, and the Bank shall not be released from its liability and obligation under these presents by any exercise by the Employer of the liberty with reference to the matters aforesaid or by reason of time being given to the Sub-Contractor or any other forbearance, indulgence, act or omission on the part of the Employer or of any other matter or thing whatsoever which under any law relating to sureties and guarantors would but for this provision have the effect of releasing the Bank from its liability and obligation under this Guarantee and the Bank hereby waives all of its rights under any such law.

6. This Guarantee is in addition to and not in substitution of any other guarantee or security now or which may hereafter be held by the Employer in respect of or relating to the Advance Payment.

7. Notwithstanding anything contained hereinbefore, the liability of the Bank under this Guarantee is restricted to the Guarantee Amount and this Guarantee.
will remain in force for the period specified in paragraph 8 below and unless a demand or claim in writing is made by the Employer on the Bank under this Guarantee all rights of the Employer under this Guarantee shall be forfeited and the Bank shall be relieved from its liabilities hereunder.

8. The Guarantee shall cease to be in force and effect on ****. Unless a demand or claim under this Guarantee is made in writing on or before the aforesaid date, the Bank shall be discharged from its liabilities hereunder.

9. The Bank undertakes not to revoke this Guarantee during its currency, except with the previous express consent of the Employer in writing, and declares and warrants that it has the power to issue this Guarantee and the undersigned has full powers to do so on behalf of the Bank.

10. Any notice by way of request, demand or otherwise hereunder may be sent by post addressed to the Bank at its above referred branch, which shall be deemed to have been duly authorized to receive such notice and to effect payment thereof forthwith, and if sent by post it shall be deemed to have been given at the time when it ought to have been delivered in due course of post and in proving such notice, when given by post, it shall be sufficient to prove that the envelope containing the notice was posted and a certificate signed by an officer of the Employer that the envelope was so posted shall be conclusive.

11. This Guarantee shall come into force with immediate effect and shall remain in force and effect up to the date specified in paragraph 8 above or until it is released earlier by the Employer pursuant to the provisions of the Agreement.

Signed and sealed this ………. day of ……….., 20………. at ………..
Insert a date being 90 (ninety) days after the end of one year from the date of payment of the Advance payment to the Sub-Contractor (in accordance with Clause 19.2 of the Agreement).
1.1 The Contract Price for this Agreement is Rs. ………….Croe

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

<table>
<thead>
<tr>
<th>Item</th>
<th>Weightage in percentage to the Contract Price</th>
<th>Stage for Payment</th>
<th>Percentage weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>67.20%</td>
<td>A- New 2-lane</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) Earthwork up to top of the sub-grade</td>
<td></td>
<td>31.68%</td>
</tr>
<tr>
<td></td>
<td>(2) Granular work (sub-base, base, shoulders)</td>
<td></td>
<td>14.41%</td>
</tr>
<tr>
<td></td>
<td>(3) Bituminous work</td>
<td></td>
<td>27.41%</td>
</tr>
<tr>
<td></td>
<td>B- New culverts, minor bridges:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) Culverts</td>
<td></td>
<td>13.29%</td>
</tr>
<tr>
<td></td>
<td>(2) Minor bridges</td>
<td></td>
<td>13.21%</td>
</tr>
<tr>
<td></td>
<td>A-New Major Bridges</td>
<td>(1) Foundation</td>
<td>0.00%</td>
</tr>
<tr>
<td></td>
<td>(2) Sub-structure</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(3) Super-structure (including crash barriers etc. complete)</td>
<td>(3) Super-structure (including crash barriers etc. complete)</td>
<td>6.08%</td>
</tr>
<tr>
<td></td>
<td>(4) Protection Work</td>
<td>(4) Protection Work</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other works</td>
<td>(i) Road side drains</td>
<td>1.89%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(ii) Road signs, markings, km stones, safety</td>
<td></td>
</tr>
</tbody>
</table>

(See Clauses 10.1.4 and 19.3)
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>
<thead>
<tr>
<th>Stage of Payment</th>
<th>Percentage - weightage</th>
<th>Payment Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>New 2-lane realignment, bypass</td>
<td>21.29</td>
<td>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.</td>
</tr>
<tr>
<td>(1) Earthwork up to top of the sub-grade</td>
<td>9.68%</td>
<td></td>
</tr>
<tr>
<td>(2) Granular work (sub-base, base, shoulders)</td>
<td>6.62%</td>
<td></td>
</tr>
<tr>
<td>(3) Bituminous work</td>
<td>11.80%</td>
<td></td>
</tr>
<tr>
<td>a) BC</td>
<td>6.62%</td>
<td></td>
</tr>
<tr>
<td>b) DBM</td>
<td>11.80%</td>
<td></td>
</tr>
<tr>
<td>B-New culverts, minor bridges, underpasses, overpasses on existing road, realignments, bypasses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Culverts</td>
<td>8.93%</td>
<td></td>
</tr>
<tr>
<td>(2) Minor bridges</td>
<td>8.88%</td>
<td></td>
</tr>
</tbody>
</table>

Cost of each culvert shall be determined on pro rata basis with respect to the total number of culverts. Payment shall be made on the completion of five culverts.

<table>
<thead>
<tr>
<th>C- New Major Bridges</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Road side drains</td>
</tr>
<tr>
<td>(ii) Road signs, markings, km stones, safety devices, …</td>
</tr>
<tr>
<td>(iii) Protection works (Retaining wall/Breast wall/Crash Barrier etc)</td>
</tr>
<tr>
<td>(iv) Safety and traffic management during construction</td>
</tr>
<tr>
<td>(v) Facilities for Engineer</td>
</tr>
<tr>
<td>(vi) Bus Shelter</td>
</tr>
</tbody>
</table>

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 a minor bridge.

Cost of each Major Bridge shall be determined on pro rata basis with respect to the total linear length (m) of the Major Bridges. Payment shall be made on completion of each stage of a Major Bridge as per the weightage given in this table.

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 10% (ten per cent) of the total length.

Payment shall be made on prorate basis every six month.

Payment shall be made on prorate basis every six month.

Payment shall be made on prorate basis every six month.

Payment shall be made for completed items.

Payment shall be made on pro rata basis for completed facilities.
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:

\[
\text{Cost per km} = P \times \text{weightage for road work} \times \text{weightage for bituminous work} \times \left(\frac{1}{L}\right)
\]

Where 
\[P = \text{Contract Price}\]
\[L = \text{Total length in km}\]

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

1.3.2 Major Bridge works

Procedure for estimating the value of Major Bridge works shall be as stated in table 1.3.2:

<table>
<thead>
<tr>
<th>Stage of Payment</th>
<th>Weightage</th>
<th>Payment Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>A- Widening and repairs of Major Bridges</td>
<td>**</td>
<td>Cost of each Major Bridge (widening and repairs) shall be determined on pro rata basis with respect to the total linear length (m) of the Major Bridges (widening and repairs). Payment shall be made on completion of each stage of a Major Bridge as per the weightage given in this table.</td>
</tr>
<tr>
<td>Foundation: On completion of the foundation work including foundations for wing and return walls</td>
<td>**</td>
<td>Cost of each Major Bridge shall be determined on pro rata basis with respect to the total linear length (m) of the Major Bridges. Payment shall be made on completion of each stage</td>
</tr>
<tr>
<td>Sub-structure: On completion of abutments, piers up to the abutment/pier cap</td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>Super-structure: On completion of the super structure in all respects including hand rails/crash barriers, wing walls, return walls, guide bunds, if any, tests on completion etc., bridge complete in all respects and fit for use.</td>
<td>**</td>
<td></td>
</tr>
</tbody>
</table>

Table 1.3.2
## Major Bridges

(1) Foundation: On completion of the foundation work including foundations for wing and return walls

2.06%

(2) Sub-structure: On completion of abutments, piers up to the abutment/pier cap

3.69%

(3) Super-structure: On completion of the super structure in all respects including hand rails/crash barriers, wing walls, return walls, guide bunds, if any, tests on completion etc., complete in all respects and fit for use

4.24%

### 1.3.3 Structures

Procedure for estimating the value of structure work shall be as stated in table 1.3.3:

Table 1.3.3

<table>
<thead>
<tr>
<th>Stage of payment</th>
<th>Weightage</th>
<th>Payment procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Foundation: On completion of the foundation works including foundations for wing and return walls</td>
<td>**</td>
<td>Cost of each structure shall be determined on pro rata basis in respect to the total linear length (m) of all the structures. Payment shall be made on completion of each stage of a structure as per the weightage given in this table.</td>
</tr>
<tr>
<td>(2) Sub-structure: On completion of abutments, piers up to the abutment/pier cap</td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>(3) Super-structure: On completion of the Structure along with super structure, including hand rails/crash barriers, wing walls, return walls, tests on completion etc., elevated structure complete in all respects and fit for use.</td>
<td>**</td>
<td>Payment shall be made on pro rata basis on completion of 25 (twenty five) percent of total area.</td>
</tr>
<tr>
<td>(4) Reinforced earth work</td>
<td>**</td>
<td></td>
</tr>
</tbody>
</table>
1 Drawings

In compliance of the obligations set forth in Clause 10.2 of this Agreement, the Contractor shall furnish to the Authority’s Engineer, free of cost, all Drawings listed in Annex-I of this Schedule-I.

2 Additional Drawings

If the Employer determines that for discharging its duties and functions under this Agreement, it requires any drawings other than those listed in Annex-I, it may by notice require the Sub-Contractor to prepare and furnish such drawings forthwith. Upon receiving a requisition to this effect, the Sub-Contractor shall promptly prepare and furnish such drawings to the Employer, as if such drawings formed part of Annex-I of this Schedule-I.
Annex - I
(Schedule - I)

List of Drawings

[Note: The Employer shall describe in this Annex-I, all the Drawings that the Sub-
Contractor is required to furnish under Clause 10.2.]

A minimum list of drawings of the various components/elements of the Project Highway and
project facilities required to be submitted by the Concessionaire is given below;

a) Drawing of plan, Profile and cross-sections.
b) Drawing of cross-drainage works
c) Drawing of Major intersections, Grade Separator and all type of structures.
d) Drawing of bus –bays and bus shelter.
e) Drawing of road furniture including traffic signage, marking, safety barriers etc.
f) Drawing of traffic diversion plan
g) Drawing of street lighting.
h) Drawing as per instruction of Employer.
i) General arrangement showing area of base camp and administrative block.
SCHEDULE-J

(See Clause 10.3.2)

PROJECT COMPLETION SCHEDULE

1  Project Completion Schedule

During Construction period, the Sub-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 Employer of such compliance along with necessary particulars thereof.

2  Project Milestone-I

2.1  Project Milestone-I shall occur on the date falling on the 85th (Eighty Fifth) day from the Appointed Date (the “Project Milestone-I”).

2.2  Prior to the occurrence of Project Milestone-I, the Sub-Contractor shall have commenced construction of the Project Highway and submitted to the Employer duly and validly prepared Stage Payment Statements for an amount not less than 5% (five per cent) of the Contract Price.

3  Project Milestone-II

3.1  Project Milestone-II shall occur on the date falling on the 128th (one hundred and twenty eight) day from the Appointed Date (the “Project Milestone-II”).

3.2  Prior to the occurrence of Project Milestone-II, the Sub-Contractor shall have continued with construction of the Project Highway and submitted to the Employer duly and validly prepared Stage Payment Statements for an amount not less than 10% (ten per cent) of the Contract Price.

4  Project Milestone-III

4.1  Project Milestone-III shall occur on the date falling on the 260th (Two hundred and sixty) day from the Appointed Date (the “Project Milestone-III”).

4.2  Prior to the occurrence of Project Milestone-III, the Sub-Contractor shall have continued with construction of the Project Highway and submitted to the Employer
duly and validly prepared Stage Payment Statements for an amount not less than 25% (twenty five per cent) of the Contract Price.

5  Project Milestone-IV

5.1 Project Milestone-IV shall occur on the date falling on the 390th (Three hundred and Ninety) day from the Appointed Date (the “Project Milestone-IV”).

5.2 Prior to the occurrence of Project Milestone-IV, the Sub-Contractor shall have continued with construction of the Project Highway and submitted to the Employer duly and validly prepared Stage Payment Statements for an amount not less than 40% (forty per cent) of the Contract Price.

6  Project Milestone-V

6.1 Project Milestone-V shall occur on the date falling on the 519th (Five hundred and Nineteen) day from the Appointed Date (the “Project Milestone-V”).

6.2 Prior to the occurrence of Project Milestone-V, the Sub-Contractor shall have continued with construction of the Project Highway and submitted to the Employer duly and validly prepared Stage Payment Statements for an amount not less than 60% (sixty per cent) of the Contract Price.

7  Project Milestone-VI

7.1 Project Milestone-VI shall occur on the date falling on the 640th (Six Hundred and forty) day from the Appointed Date (the “Project Milestone-VI”).

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

8  Scheduled Completion Date

8.1 The Scheduled Completion Date shall occur on the 780th (Seven hundred and Eighty day) from the Appointed Date.
8.2 On or before the Scheduled Completion Date, the Sub-Contractor shall have completed construction in accordance with this Agreement.

9 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.
SCHEDULE - K

(See Clause 12.1.2)

Tests on Completion

1 Schedule for Tests

1.1 The Sub-Contractor shall, no later than 30 (thirty) days prior to the likely completion of construction, notify the Authority’s Engineer / Employer and the Authority of its intent to subject the Project Highway to Tests, and no later than 10 (ten) days prior to the actual date of Tests, furnish to the Authority’s Engineer / Employer and the Authority detailed inventory and particulars of all works and equipment forming part of Works.

1.2 The Sub-Contractor shall notify the Authority’s Engineer/ Employer of its readiness to subject the Project Highway to Tests at any time after 10 (ten) days from the date of such notice, and upon receipt of such notice, the Authority’s Engineer/ Employer shall, in consultation with the Sub - Contractor, determine the date and time for each Test and notify the same to the Authority who may designate its representative to witness the Tests. The Authority’s Engineer / Employer shall thereupon conduct the Tests itself or cause any of the Tests to be conducted in accordance with Article 12 and this Schedule - K.

2 Tests

2.1 Visual and physical test: The Authority’s Engineer/ Employer shall conduct a visual and physical check of construction to determine that all works and equipment forming part thereof conform to the provisions of this Agreement. The physical tests shall include [to be decided with Authority’s Engineer/ Employer at the time of physical tests as per relevant IRC code Manual].

2.2 Riding quality test: Riding quality of each lane of the carriageway shall be checked with the help of a calibrated bump integrator and the maximum permissible roughness for purposes of this Test shall be [2,000 (two thousand)] mm for each kilometer.

2.3 Tests for bridges: All major and minor bridges shall be subjected to the rebound hammer and ultrasonic pulse velocity tests, to be conducted in accordance with the procedure described in Special Report No. 17: 1996 of the IRC Highway Research Board on Nondestructive Testing Techniques, at two spots in every span, to be chosen at random by the Authority’s Engineer/ Employer. Bridges with a span of 15 (fifteen) meters or more shall also be subjected to load testing.
2.4 Other tests: The Authority’s Engineer/ Employer may require the Sub-Contractor to carry out or cause to be carried additional tests, in accordance with Good Industry Practice, for determining the compliance of the Project Highway with Specifications and Standards.

2.5 Environmental audit: The Authority’s Engineer/ Employer shall carry out a check to determine conformity of the Project Highway with the environmental requirements set forth in Applicable Laws and Applicable Permits.

2.6 Safety Audit: The Authority’s Engineer / Employer shall carry out, or cause to be carried out, a safety audit to determine conformity of the Project Highway with the safety requirements and Good Industry Practice.

3 Agency for conducting Tests

All Tests set forth in this Schedule-K shall be conducted by the Authority’s Engineer or such other agency or person as it may specify in consultation with the Authority.

4 Completion Certificate

Upon successful completion of Tests, the Authority’s Engineer/ Employer shall issue the Completion Certificate in accordance with the provisions of Article 12.
PROVISIONAL CERTIFICATE

1 I, ………………………………. (Name of the Employer), acting as the Employer, under and in accordance with the Agreement dated ………………. (the “Agreement”), for Construction of Balance work of Two Lane Road on NH Specifications From Kaletwa to India-Myanmar Border (Zorinpui) from km 60.700 to km 109.2 in Chin State of Myanmar (the “Project Highway”) on Engineering, Procurement and Construction (EPC) basis through …………………………. (Name of Sub -Contractor), hereby certify that the Tests in accordance with Article 12 of the Agreement have been undertaken to determine compliance of the Project Highway with the provisions of the Agreement.

2 Works that are incomplete on account of Time Extension have been specified in the Punch List appended hereto, and the Sub-Contractor has agreed and accepted that it shall complete all such works in the time and manner set forth in the Agreement. In addition, certain minor works are incomplete and these are not likely to cause material inconvenience to the Users of the Project Highway or affect their safety. The Sub-Contractor has agreed and accepted that as a condition of this Provisional Certificate, it shall complete such minor works within 30 (thirty) days hereof. These minor works have also been specified in the aforesaid Punch List.

3 In view of the foregoing, I am satisfied that the Project Highway from km ** to km ** can be safely and reliably placed in service of the Users thereof, and in terms of the Agreement, the Project Highway is hereby provisionally declared fit for entry into operation on this the ………… day of ……….. 20……

ACCEPTED, SIGNED, SEALED AND DELIVERED
For and on behalf of SUB-CONTRACTOR by:

(Signature)

SIGNED, SEALED AND DELIVERED
For and on behalf of EMPLOYER by:

(Signature)
COMPLETION CERTIFICATE

1 I, ……………………. (Name of the Employer), acting as the Employer, under and in accordance with the Agreement dated……….. (the “Agreement”), for Construction of Balance work of Two Lane Road on NH Specifications From Kaletwa to India-Myanmar Border (Zorinpui) from km 60.700 to km 109.2 in Chin State of Myanmar (the “Project Highway”) on Engineering, Procurement and Construction (EPC) basis through ……………………. (Name of Sub-Contractor), hereby certify that the Tests in accordance with Article 12 of the Agreement have been successfully undertaken to determine compliance of the Project Highway with the provisions of the Agreement, and I am satisfied that the Project Highway can be safely and reliably placed in service of the Users thereof.

2 It is certified that, in terms of the aforesaid Agreement, all works forming part of Project Highway have been completed, and the Project Highway is hereby declared fit for entry into operation on this the ……… day of ……… 20…..

SIGNED, SEALED AND DELIVERED For and on behalf of the Employer by:

(Signature)

(Name)

(Designation)

(Address)
SCHEDULE - M
(See Clauses 14.6, 15.2 and 19.7)

DELETED
SCHEDULE - N
(See Clause 18.1.1)

Deleted
SCHEDULE - O

(See Clauses 19.4.1, 19.6.1, and 19.8.1)

Forms of Payment Statements

1. Stage Payment Statement for Works

The Stage Payment Statement for Works shall state:

(a) the estimated amount for the Works executed in accordance with Clause 19.3.1 subsequent to the last claim;

(b) amounts reflecting adjustments in price for the aforesaid claim;

(c) the estimated amount of each Change of Scope Order executed subsequent to the last claim;

(d) amounts reflecting adjustment in price, if any, for (c) above in accordance with the provisions of Clause 13.2.3 (a);

(e) total of (a), (b), (c) and (d) above;

(f) Deductions:

(i) Any amount to be deducted in accordance with the provisions of the Agreement except taxes;

(ii) Any amount towards deduction of taxes; and

(iii) Total of (i) and (ii) above.

(g) Net claim: (e) – (f) (iii);
(h) The amounts received by the Contractor upto the last claim:

(i) For the Works executed (excluding Change of Scope orders);

(ii) For Change of Scope Orders, and

(iii) Taxes deducted

2. **DELETED**

3. **DELETED**
Deleted
DELETED

End of the documents