

# HARYANA RAIL INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED

(A Joint Venture Govt. of Haryana and Ministry of Railways)

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**Bid No.:** HORC/HRIDC/TPC-01/2023

**Date:** 05.12.2023

**Reference:** Specific Procurement Notice dated 03.11.2023.

## CORRIGENDUM NO. 1

**Name of Work: TPC-01:** Third Party Consultancy for checking of Detailed Design and Drawings of Twin NATM and Cut & Cover Tunnels from Km 24.850 to Km 29.580 including associated structures and Third Party Consultant's association during construction of NATM and Cut & Cover Tunnels for Haryana Orbital Rail Corridor (HORC) Project in the State of Haryana.

S. No.	Tender Document Part / Section/ Clause No.	Description of Existing Clause	Modified Description of Existing Clause / New Clause
1.	Part 1, Section 3 - EQC, Sub-Clause 3.3, Specific Consultancy Experience, Column 3, Requirement	<p>The Consultant must have successfully/substantially completed any of the following during last 10 (ten) years ending last day of month previous to the one in which Bid is invited:</p> <p>(i) One "Similar work" costing not less than the amount equal to <b>INR 85.00 lacs</b>.</p> <p>The above work must involve design/proof checking of minimum <b>1.0 km</b> length of tunnel by New Austrian Tunnelling Method (NATM) or <b>1 (one)</b> building by NATM.</p> <p style="text-align: center;"><b>OR</b></p> <p>(ii) Two "Similar works" each costing not less than the amount equal to <b>INR 56.00 lacs</b>.</p> <p>Both the above works combined together must involve design/proof checking of minimum <b>1.0 km</b> length of</p>	<p>The Consultant must have successfully/substantially completed any of the following during last 10 (ten) years ending last day of month previous to the one in which Bid is invited:</p> <p>(i) One "Similar work" costing not less than the amount equal to <b>INR 85.00 lacs</b>.</p> <p>The above work must involve design/proof checking of minimum <b>1.0 km</b> length of tunnel by New Austrian Tunnelling Method (NATM) or <b>1 (one)</b> <i>Under Ground station</i> by NATM.</p> <p style="text-align: center;"><b>OR</b></p> <p>(ii) Two "Similar works" each costing not less than the amount equal to <b>INR 56.00 lacs</b>.</p> <p>Both the above works combined together must involve design/proof checking of minimum <b>1.0 km</b> length of</p>

S. No.	Tender Document Part / Section/ Clause No.	Description of Existing Clause	Modified Description of Existing Clause / New Clause
		<p>tunnel by New Austrian Tunnelling Method (NATM) or <b>1 (one)</b> building by NATM.</p> <p><b>Where,</b></p> <p>(a) ‘<b>Similar Work</b>’ means “Design/Proof checking of tunnel/building by New Austrian Tunnelling Method (NATM)” in Rail/Road projects.</p> <p>‘<b>Substantial completion</b>’ shall be based on 80% or more of the original value of works completed under the contract.</p>	<p>tunnel by New Austrian Tunnelling Method (NATM) or <b>1 (one)</b> <i>Under Ground station</i> by NATM.</p> <p><b>Where,</b></p> <p>(a) ‘<b>Similar Work</b>’ means “Design/Proof checking of tunnel <i>or Under Ground station</i> by New Austrian Tunnelling Method (NATM)” in <i>Railway/Road</i> projects.</p> <p>‘<b>Substantial completion</b>’ shall be based on 80% or more of the original value <i>or revised value (whichever is lower)</i> of works completed under the contract.</p> <p><i>Note: Railway Projects includes projects of Railway/ Metro Rail / Regional Rapid Transit System (RRTS) / High Speed Rail / Dedicated Freight Corridor (DFC).</i></p>
2.	Part 1, Section 4 - Bidding Forms, Form EXP-1	Form EXP-1	Form EXP-1 is replaced and annexed as “ <b>Attachment 1</b> ” of this Corrigendum No. 1.
3.	Part 1, Section 4, Bidding Forms, Preamble, Clause 4 and Financial Part Pdf file, Preamble Clause 4	The rates and prices quoted in the Price Schedule shall include all costs associated with the assignment. These normally cover all checking of design and drawings, remuneration for staff (foreign and local, in the field and at headquarters), accommodation (per diem, housing), include all checking of design, Consultant’s equipment, transportation, mobilization, demobilization of equipment, machinery, tools & plants, labour, supervision, materials; and equipment (vehicles, office equipment, furniture and supplies), printing of documents, surveys, remedy of any defects during the Defects Notification Period etc., Consultant’s profit, all taxes including GST, insurance, royalties, duties, cess, octroi, other levies and other charges together with all general risks, liabilities and obligations set out or implied in the Contract.	The rates and prices quoted in the Price Schedule shall include all costs associated with the assignment. These normally cover all checking of design and drawings, remuneration for staff (foreign and local, in the field and at headquarters), accommodation (per diem, housing), include all checking of design, Consultant’s equipment, transportation, mobilization, demobilization of equipment, machinery, tools & plants, labour, supervision, materials; and equipment (vehicles, office equipment, furniture and supplies), printing of documents, etc., Consultant’s profit, all taxes including GST, insurance, royalties, duties, cess, octroi, other levies and other charges together with all general risks, liabilities and obligations set out or implied in the Contract.

S. No.	Tender Document Part / Section/ Clause No.	Description of Existing Clause	Modified Description of Existing Clause / New Clause
4.	Part 1, Section 4, Bidding Forms, Sub-Clause 1.1.2 and Financial Part Pdf file Sub-Clause 1.1.2	<p><b>1.1.2. Payment for cost centre ‘C’ (Consultant Association during Construction)</b></p> <p>Consultant’s association during execution of works (Part-B of Completion Period) shall be paid quarterly on pro rata basis.</p> <p>If additional visits beyond 48 visits are required as per instructions of the Engineer/Employer, each visit shall be paid @ half the lumpsum quoted price of the Consultant multiplied by 0.3 and divided by 48 (i.e., 0.5 x Lump sum Quoted Price x0.3/ 48).</p>	<p><b>1.1.2. Payment for cost centre ‘C’ (Consultant Association during Construction)</b></p> <p>Consultant’s association during execution of works (Part-B of Completion Period) shall be paid quarterly on pro rata basis.</p> <p>If additional visits beyond 48 visits are required as per instructions of the Engineer/Employer, each visit shall be paid @ the lumpsum <i>accepted</i> price of the Consultant multiplied by 0.3 and divided by 48 [i.e.,(Lump sum accepted Price x0.3)/ 48].</p>
5.	Part 2, Section 5 - Employer’s Requirements (Scope of Services)	Section 5 - Employer’s Requirements (Scope of Services)	The existing Section 5 - Employer’s Requirements (Scope of Services) is replaced and annexed as “ <b>Attachment 2</b> ” of this Corrigendum No. 1.
6.	Part 3, Section 7 General Conditions of Contract (GCC), Clause 1, Definitions, (xviii)	(xviii) “Key Personnel” means persons specified in Clause 6 of Section 5, Employer’s Requirements of Bidding Document.	(xviii) “Key Personnel” means persons specified in <i>Clause 5</i> of Section 5, Employer’s Requirements of Bidding Document.
7.	Part 3, Section 7 General Conditions of Contract (GCC), Clause 10, Changes in Personnel, (a)	(a) Except as the Employer may otherwise agree, no changes shall be made in the Key Personnel as stipulated in Clause 6 of Section 5 for the initial one year from the date of commencement of consultancy services. If, for any reason beyond the reasonable control of the Consultants, it becomes necessary to replace any of the Personnel, the Consultant shall forthwith, provide as a replacement a person of equivalent or better qualifications with the approval of the Engineer.	(a) Except as the Employer may otherwise agree, no changes shall be made in the Key Personnel as stipulated in <i>Clause 5</i> of Section 5 for the initial one year from the date of commencement of consultancy services. If, for any reason beyond the reasonable control of the Consultants, it becomes necessary to replace any of the Personnel, the Consultant shall forthwith, provide as a replacement a person of equivalent or better qualifications with the approval of the Engineer.
8.	Part 3, Section 9 - Contract Forms, Form No. COF/4	Form No. COF/4	Form No. COF/4 is replaced and annexed as “ <b>Attachment 3</b> ” of this Corrigendum No. 1.

**Bid No. HORC/HRIDC/TPC-01/2023**  
**Attachment 1**  
**to**  
**Corrigendum No. 1**

**Part 1, Section 4: Bidding Forms**

**1. Form EXP-1/R1**

**Form EXP-1/R1****Specific Consultancy Experience**

[Ref. ITC Sub-Clause 17.2 and EQC Sub-Clause 3.3.1 ]

*[The following table shall be filled in for the Consultant]*

Bid No.: HORC/HRIDC/TPC-01/2023

Consultant's Name: \_\_\_\_\_

Page \_\_\_\_\_ of \_\_\_\_\_ pages

<b>Similar Contract No.</b>	<b>Information</b>		
Contract Identification			
Award date			
Completion date			
Role in Contract as Design Consultant OR Proof Checking Consultant	<i>[insert the role in Contract]</i>		
Total Contract Amount	<i>[insert Contract amount(s) and currency(ies)]</i>		INR <i>[insert *exchange rate and total Contract amount in INR equivalent]</i>
If member in a JV, specify participation in total Contract amount	<i>[insert Percentage participation]</i>	<i>[insert amount(s) and currency) of participation]</i>	INR <i>[insert exchange rate(i) and amount of participation in INR equivalent]</i>
Employer's Name			
Address: Mobile: Telephone/fax number: E-mail:			
Description of the similarity in accordance with Sub-Clause 4.5.1 of Section 1:			
<b>1.</b> Amount (in INR)			
<b>2.</b> Length of NATM tunnel designed/proof checked (Km) <i>in Railway/Road Projects</i> <b>OR</b>			
<b>3.</b> No. of <i>Underground station (s)</i> designed/proof checked by NATM <i>in Railway/Road Projects</i>			

**Consultant’s Authorized Representative**

Signature: .....

Date: .....

Company stamp: .....

*Notes:*

- (i) Value of completed work done by a Consultant in an earlier JV shall be reckoned only to the extent of the Consultant’s share in that JV for purpose of satisfying their experience criteria mentioned in Sub-Clause 3.3.1 of Section 3, EQC.*
- (ii) The Consultant shall submit copy of Completion Certificate issued by the Employer / Concessionaire as documentary proof clearly indicating the similarity of the work as per Sub-Clause 3.3.1 of Section 3, EQC, actual completion cost, actual completion date. Bids submitted without this documentary proof shall not be evaluated.*
- (iii) The copy of Completion Certificate submitted by the Consultants shall be of the legal entity or entities comprising the Consultant and not the Consultant’s parent companies, subsidiaries, or affiliates.*
- (iv) “Railway Projects” includes projects of Railway/ Metro Rail / Regional Rapid Transit System (RRTS) / High Speed Rail / Dedicated Freight Corridor (DFC).*

**Bid No. HORC/HRIDC/TPC-01/2023**  
**Attachment 2**  
**to**  
**Corrigendum No. 1**  
  
**Part 2, Section 5**  
  
**Employer's Requirements**  
**(Scope of Services)/R1**

## **Section 5**

### **Employer's Requirements (Scope of Services)/R1**



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## Section 5: Employer's Requirements

### 1. Project Profile and Background

The state of Haryana is strategically located bordering the National capital of Delhi. NCT, Delhi shares three fourth of its border with Haryana alone and remaining with Uttar Pradesh. The development of the Haryana region, bordering Delhi is very important for balanced growth of NCR as it acts as buffer zone against rampant migration and other support infrastructure. At present on account of growth of Metro network in Delhi & NCR, there is radial movement of commuters to and from, Delhi being in centre. This "Hub and Spoke" traffic planning has resulted in rapid growth of Noida, Greater Noida, Faridabad and Gurugram. However, for hub and spoke concept to sustain it is necessary to link the ends of spoke by ring connectivity. There will be natural demand for commuter movement within these towns like Gurugram, Faridabad, Ballabgarh, Palwal, Sohna, Manesar etc. Peripheral roads have been commissioned recently, linking these towns around Delhi but Rail link provides economical, sustainable, eco-friendly, and bulk freight transport option. The peripheral Rail link will also help in growth of other cities within the same distance from Delhi like Sonapat, Panipat, and Rohtak. This will also help in easing the pressure on the transport network of Delhi as some of the commuter traffic moving on the radials will get shifted to HORC. Western DFC originating from Dadri station passes through Asaoti Station on Delhi- Mathura route, providing connectivity to Haryana Orbital Rail Corridor (HORC).

Apart from passenger traffic, a substantial amount of freight traffic, which is entering the Delhi area of rail network but is not meant to be consumed in Delhi, will also get diverted via this corridor. Apart from this, there are major goods sheds in the heart of Delhi causing endless avoidable traffic jams. The goods sheds in west Delhi are Azadpur, Shakurbasti, Dayabasti, Sabzi Mandi which are located on prime commercial land and are black spots of the urban planning. Previously moving out commercial activity to other states had interstate taxation issues but now with GST in place, there is no reason for not shifting these activities to the peripheral region. In any case, if freight traffic movement through Delhi is restricted, then these goods sheds or alternatives will be serviced via the proposed HORC.

Haryana Orbital Rail Corridor (HORC) from Palwal to Sonapat Via Sohna, Manesar, Kharkhoda and Harsana Kalan is to be constructed as an Electrified (2X25 kV AC-50Hz) double line track, capable of operating at a maximum train speed of 160 kmph.

### 2. Objective of Services

HORC project crosses Aravalli Range between Sohna and Dhulawat stations through a tunnel, to be constructed in C-4 Package from Ch.24850 m to Ch.29580 m. The tunnelling is required to be done in rock as well as in soil. It involves tunnelling by NATM method and Cut & Cover method. Two separate tunnels are to be constructed - **one for the UP Line and one for Down Line**. The tunnel is to be provided with Ballastless track (BLT). NATM work is proposed to be carried out from fourteen faces as shown in Bid drawings. The tunnel has got four permanent ventilation shafts and one

construction cum utility shaft.

The objective of the services is to ensure safe design of the tunnel, shafts and other related structures fulfilling all the functional requirements and proper commissioning of the works by the EPC tunnel Contractor (including without limitation, the design, installation, and removal of the Temporary Works) with minimum life cycle cost and maintenance. In full recognition of these objectives, and with full acceptance of the obligations, liabilities and risks which may be involved, the Third Party *Consultant* (TPC) shall undertake the checking of design of the Works.

The Services to be provided under this contract is of Third Party checking of the detailed design and drawing of tunnel and other associated structures submitted by the EPC tunnel Contractor and association of the Third Party Checking consultant during construction of civil works of tunnel.

Preliminary site information as available with the Employer are given in Section 6, Bid Drawings and Documents for only general appreciation of the Works. All site data and other information considered in the design of the work, shall be provided by EPC tunnel Contractor.

The TPC shall ensure that the Permanent Works *are designed* to the highest standards available using proven up-to-date good Engineering practices. The construction procedures, Quality Assurance & Quality Control plan established by the Contractor shall be reviewed and approved by the TPC.

### 3. Scope of Services

The scope of the Services is divided in two parts: -

- **Part-A:** Third Party Consultancy for verification of Detailed design and drawings (including construction methodology) of *Twin* Tunnel and other associated structures
- **Part-B:** TPC's association during execution of the Works

#### **Part-A:**

### **3.1 Third Party Consultancy for verification of Detailed Design & drawings (including construction methodology) of Twin Tunnel and *other* associated structures involves the following, but not limited to:**

- 3.1.1 Third *Party* Consultancy for *verification* of design & drawings of Cut & Cover Tunnels from Ch. 28480 m to Ch. 29580 m including drainage arrangements for catering to surface run off from open cutting of about 1340 m length as shown in Bid drawings.
- 3.1.2 Third *Party* Consultancy for *verification* of design & drawing of NATM twin Tunnels from Ch. 24850 m to Ch. 28480 for UP line and Ch. 24853 m to Ch. 28480 m for DN line in all types of strata (rock and soil) including drainage arrangements for catering to surface run off from open cutting as shown in Bid drawings.
- 3.1.3 Third *Party* Consultancy for *verification* of design & drawing of four (02x02) Nos. of permanent ventilation shafts and other associated structures including roofing system and stairs as specified in Bid drawings.
- 3.1.4 Third *Party* Consultancy for *verification* of design & drawing of one (01) No. construction cum utility shaft and other associated structures including roofing system and stairs. Cross passage between two tunnels at the location of construction cum utility shaft as shown in Bid drawings.

- 3.1.5 Third *Party* Consultancy for *verification of* design & drawing of cross passages between the two tubes along the length including fire stop doors at both ends as shown in the Tender drawings.
- 3.1.6 Third *Party* Consultancy for *verification of* design & drawing of Portal P-2 for both UP & DN lines including drainage arrangement at the interface of Portal P2 and Cut & Cover tunnel for catering to surface runoff from the cutting.
- 3.1.7 Third *Party* Consultancy for *verification of* design & drawing of Portal P-1 for both UP & DN lines including slope stability of rock, boulder fall and protection arrangements.
- 3.1.8 Third *Party* Consultancy for *verification of* design & drawing of drainage system at Palwal end approach of Portal P-1 for both UP & DN lines for disposal of storm water coming out of the tunnel and from adjoining open area and integrating the drainage system with the drainage scheme of DFC.
- 3.1.9 Third *Party* Consultancy for *verification of* the design and drawings of the construction methodology of all the above structures and temporary structures.

The construction methodology shall include all safety precautions during construction and shall be adequate to ensure safety of DFC viaduct and its safety during construction (especially during blasting operations and rock cutting) near proposed Portal P-1.

## 3.2 TASKS TO BE PERFORMED

The broad tasks/activities to be performed by the *TPC* in the Contract are as follows:

### 3.2.1 Study/Review of the data like topographical survey, lithological survey, Geotechnical data, GIR and Design Basis Note

- (i) EPC tunnel Contractor shall conduct detailed Geotechnical & Geological investigations and prepare Geotechnical interpretative report (GIR). *TPC* shall review the reports of various investigations conducted by EPC tunnel Contractor and shall ensure that required investigations have been conducted in sufficient details and parameters used in the designs are reasonably selected.
- (ii) *TPC* shall review the design basis note, design quality assurance plan & any other technical documents submitted by the EPC tunnel Contractor.

### 3.2.2 Review of Preliminary Design and drawings

Drawings of tunnel and other structures shall be prepared by the EPC tunnel Contractor based on preliminary design and feasible – construction methodology and submitted *to the Engineer*. *The Engineer shall in turn provide these details to the TPC, who shall verify preliminary design calculations and drawings and submit his recommendations to the Engineer*. The *TPC* shall attend any meeting/presentation/joint site visit with the Engineer/the Contractor's designer, as per the requirement. Any meeting or site visit will be deemed to be inclusive in the Scope of Work and nothing extra shall be paid on this account.

### 3.2.3 Verification of Detailed Design and Drawings

*The TPC shall review and verify the design and drawings submitted by the Contractor. For this purpose TPC shall carry out independent analysis of the design submitted by the Contractor using alternate software. In case it is not possible to use alternate software, TPC shall submit a proposal to the Engineer, stating detailed justification for not using alternate software, for his approval.*

The TPC shall convey his comments *to the Contractor* for incorporating in the final design and Good for Construction drawings with a copy *to the Engineer*. A copy of all correspondence/clarifications between TPC and the Contractor shall be marked to the Engineer and the Employer for information. *TPC shall submit drawings duly verified as Good For Construction to the Engineer.*

Design calculations done by the *TPC shall be submitted to the Engineer* in MS-Excel along with PDF file. Input files of design software used shall also be submitted to the Engineer. The TPC shall provide latest licensed software used by him in verification of design to the Engineer for the duration of the Contract.

All the designs and drawings shall be *verified* by the TPC within three weeks after submission of design documents by the EPC Contractor. *The Engineer shall accept the designs and drawings duly verified by the TPC within three weeks time.* TPC shall submit design & drawings verification certificate for each submission of the Contractor *as per Form No. COF/4/R1 furnished in Section 9: Contract Forms.*

It is anticipated that *review & verification* of all the major design works and *drawings*, submitted by the EPC Contractor, including investigation for tunnel works shall be completed within six months duration. However, any design or drawing submitted by the EPC Contractor after six months duration shall also be *reviewed & verified* within three weeks of its submission.

#### **Part-B:**

### 3.3 Consultant's Association During Execution

The TPC shall be associated during construction with the Engineer and shall offer support/guidance on Detailed Designs & Drawings during execution of the Works. The Consultant shall provide necessary design support and technical assistance during the construction stages for successful and timely completion of the works.

In cases of change in site conditions, site constraints or the Employer's /stakeholder's requirements during execution, the Contractor's designer will provide amended/revised/modified designs and drawings. The Consultant shall visit site as per the requirement & reverify the modified design & drawings.

The TPC can extend/provide these services from their home office. However, the Consultant (Team leader and Key Personnel as per requirement) will be required to visit project area minimum once in a month (i.e., 48 times in the period of 4 years) as decided by Engineer/Employer. For each visit designer(s) may have to spend more than one day as per the requirement at the site and as directed by the Engineer. The actual date of visit may be decided by the Engineer/Employer as per the site requirements in consultation with the Consultant. The cost of visits shall be in-built in the lump sum rate quoted by the Consultant. Any additional unavoidable site visit, if required, will be paid as per Sub-Clause 1.1.2 of the Price Schedule, Section 2.

#### 4. Duration of work

Total Consultancy assignment duration of this project shall be 48 months from the Effective Date. The Contract for Package C-4 has already been awarded. Out of 48 months, first 6 months (approx) will be the design phase. However, the TPC shall also be associated during the construction phase for support during construction.

In case the project completion is extended beyond a period of 48 months and if association of the TPC is considered necessary, payment will be made for each additional month beyond 48 months, as per pro rata basis based on the rate quoted for 48 months.

#### 5. Consultant's Representative and Key Personnel

- 5.1 The Consultant shall deploy suitably qualified Consultant's Representative and suitably qualified Key Personnel as described in the table below.

**Table-1: Consultant's Representative and Key Personnel**

S. No.	Designation	Qualification	Experience
1.	Consultant's Representative /Team Leader	Graduate in Civil Engineering	Graduate degree in Civil Engineering having experience not less than 10 years and would have handled minimum 02 projects involving design/proof checking of tunnel by NATM as Team Leader.
2.	Tunnel Design Expert (NATM)	Graduate in Civil Engineering	Graduate degree in Civil Engineering with total experience of 08 years and minimum 4 years of relevant experience in design/proof checking of tunnel or underground metro stations by NATM.
3.	Tunnel Design Expert (Cut & Cover)	Graduate in Civil Engineering	Graduate degree in Civil Engineering with total experience of 08 years and minimum 4 years of relevant experience in design/proof checking of Cut & Cover tunnel or Cut & Cover metro stations.
4.	Geologist	Master's degree in Geology	Minimum total experience of 08 years out of which minimum 04 years in tunnel projects.
5.	Geotechnical Engineer	Graduate in Civil Engineering	Minimum total experience of 08 years out of which minimum 04 years in infrastructure projects

- 5.2 Before deployment of Consultant's Representative and the Key Personnel, the Engineer's approval shall be obtained by the Consultant. The Consultant shall require the Engineer's consent to substitute or replace the Consultant's Representative (reference Conditions of Contract Clause 8, 9 and 10 and notes below).
- 5.3 Relaxation in qualifications/Experience can be given by the Engineer in exceptional cases where candidates have got high level of professional competency. The decision of the Engineer in such cases shall be final and binding.
- 5.4 The performance of Key Personnel deployed will be monitored by the Engineer during the Contract period. In case the performance of any of the Consultant's Personnel is not satisfactory, the Consultant shall replace them with good personnel immediately as per directions of the Engineer.
- 5.5 Notwithstanding the above, the substitution of Key Personnel during Contract execution may be considered only based on the Consultant's written request and due to circumstances outside the reasonable control of the Consultant, including but not limited to death or medical incapacity. In such case, the Consultant shall forthwith provide as a replacement, a person of equivalent or better qualifications and experience, meet eligibility requirements.
- 5.6 The associated non-key personnel, if required any, shall be considered by the consultants in their estimation.
- 5.7 The above Key Personnel shall be required for full duration during checking of the design of the tunnel and other related structures. During the construction stage, the TPC's are required to provide necessary support and to visit site along with experts (if needed as per site requirement) every month or as per requirement whichever is less. However, maximum site visits shall be limited to 14 in a year.
- 5.8 *The Consultant Representative shall be deployed from the Effective Date. Key Personnel shall be deployed within 14 days of Effective Date. Non deployment of the Consultant's Representative and Key Personnel within the above specified period shall attract penalty of INR 50,000 and INR 20,000 respectively per week or part thereof.*

*The Consultant shall submit the CVs of Consultant Representative and the Key Personnel specified in Table-1 of Sub-Clause 6.1 above within 14 days of issue of Letter of Acceptance for the approval of the Engineer.*

**Note: The Consultant is not required to submit CVs of Consultant's Representative and Key Personnel with their Bid at the time of submission of their Bid on eProcurement Portal.**

**Bid No. HORC/HRIDC/TPC-01/2023**  
**Attachment 3**  
**to**  
**Corrigendum No. 1**

**Part 3, Section 9: Contract Forms**

**1. Form No. COF/4/R1**



## FORM No. COF/4/R1

**THIRD PARTY CONSULTANT'S DESIGN VERIFICATION  
CERTIFICATE**

This Design *verification* Certificate refers to Submission No. .... which comprises:

**[\*Design No. ..../the Final Detailed Design Submission/Good For Construction Drawings Submission No. ..../]** in respect of:*[description of the Permanent Works to which the submission refers]*

The contents of this submission are scheduled in Section A below.

The documents scheduled in Section A below, *have been reviewed & verified* by us, and *meet* the requirements of the C-4 Contract.

**CONSULTANT'S STATEMENT**

We certify that:

- (a) the design *and drawings* of the Permanent Works, as illustrated and described in the documents scheduled in Section A below, complies with the *Section 5*, Employer's Requirements of C-4 Contract, local regulations and standards;
- (b) a detailed review and *independent* design check has been undertaken and completed to confirm the completeness, adequacy and validity of the design of the Permanent Works as illustrated and described in the documents scheduled in Section A below;
- (c) all necessary and required approvals relating to the design of the Permanent Works, as illustrated and described in the documents scheduled in Section A below, have been obtained by the tunnel contractor and copies of such approvals are annexed in Section B below;

*AND (in the case of a submission covering a part of the Permanent Works only):*

all effects of the design comprising the submission on the design of adjacent or other parts of the Works have been fully taken into account in the design of those parts.

Signed by Authorised Representative  
(For Consultant)

Name  
Position / Designation

Date

**Section A**

Submission no. .... comprises the following:

Drawings: *(Title, drawing number and revision)*

Documents: *(Title, reference number and revision)*

Others:

**Section B**

*[Consultant to attach copies of necessary and required approvals from statutory bodies, etc.]*