



**इरकॉन इंटरनेशनल लिमिटेड**  
(भारत सरकार का उपक्रम)  
**IRCON INTERNATIONAL LIMITED**  
(A Govt. of India Undertaking)  
An Integrated Engineering and Construction Company



हरिद्वार बाईपास परियोजना  
बैरागी कैम्प, दक्षेश्वर विहार शेखुपुरा  
कनखल, हरिद्वार-249408 (उत्तराखण्ड)  
ईमेल: ircon.1039@ircon.org

**NAVRATNA COMPANY**

**Haridwar Bypass Project**  
Bairagi Camp, Daksheshwar Vihar  
Shekhupura, Kankhal  
Haridwar-249408 (Uttarakhand)  
Email: ircon.1039@ircon.org

No. IRCON/1039/HRBP/e-TN/BIM/2023/01/ 1549

Dated: 11.01.2024

**ORIGINAL**

M/s. Techtur Structures Pvt Ltd.,  
Plot No 85, Flat No 400, 4<sup>th</sup> Floor,  
Mantra Apartment, Shankar Nagar,  
Nagpur- 440011, Maharashtra.  
Mob. No 81499-06242  
Email Id: [Viraj.voditel@techtur.global](mailto:Viraj.voditel@techtur.global)

By Courier/E-mail

**Kind Attn. Mr. Viraj Voditel, Director**

Dear Sir,

**Subject:** Implementation of Digital Project Management through 4D BIM (Building Information Modeling) for Haridwar Bypass Package-1 from KM 0+000 (KM 188+100 of NH-58) to KM 15+100 (KM 5+100 of NH-74) Project in the state of Uttarakhand - **Letter of Acceptance (LOA)**

**Ref:-**

1. E-Tender No: IRCON/1039/HRBY/e-TN/BIM/2023/01 Dated 22.11.2023.
2. Corrigendum no 1 dated 01.12.2023, Corrigendum 2 dated 09.12.2023, Corrigendum no 3 dated 16.12.2023 & Corrigendum 4 dated 21.12.2023
3. Your offer forwarding letter dated 09.12.2023.
4. Technical Bid Opened on 27.12.2023.
5. This office Letter no IRCON/1039/HRBP(BIM)/1/2023/1508 dt 29.12.2023.
6. Your office letter 30.12.2023
7. Financial Bid Opened on 30.12.2023.

1. In reference to the above, we are pleased to inform you that your offer for the subject work, submitted under reference 2, has been accepted on terms and conditions contained in the tender documents without any deviation at 11% (Eleven percent) below the tender value at a total cost of Rs 39,38,250/- (Rupees Thirty-Nine lakhs Thirty-Eight Thousand Two Hundred and Fifty only) inclusive of GST @18%. The accepted BOQ is enclosed as **Annexure-A**.
2. In term of para 7.1 of Conditions of Contract (Terms of Reference), Performance Security by way of an irrevocable and unconditional Bank Guarantee in favour of '**Ircon International Limited**' in the enclosed format from Scheduled Commercial Bank in India for an amount of Rs 1,99,347/- (Rupees One lakhs Ninety-Nine Thousand Three Hundred and Forty-Seven only), shall be submitted within 21 days of issue of this Letter of Acceptance (LOA).
3. The date of Commencement of this work shall be the date of Issue of this LOA and the contract period for the above work shall be 09 months.
4. In terms of clause 11.3 of Conditions of Contract, detailed work Schedule is to be submitted to the Engineer-In-Charge covering all activities related to BIM Work under the Scope of work.
5. In terms of clause no. 16 of Conditions of Contract, you are requested to attend this office for signing of the Contract Agreement within 28 days after issue of this LOA. The stamp papers of

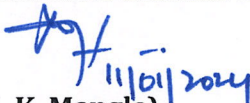
requisite value as per the prevailing laws shall be provided by you. Original agreement shall be retained by us and a certified copy shall be made available to you.

6. In terms of Annexure VII of ITT, you are requested to submit all original uploaded Bid Documents before signing of the Contract Agreement.
7. This Letter of Acceptance shall constitute a legal binding Contract between Ircon International Limited and M/s Techtur Structures Pvt Ltd, till a formal agreement is drawn and executed.
8. This Letter of Acceptance is being issued in duplicate and you are requested to return one copy of this Letter of Acceptance duly accepted, signed & stamped on each page by your authorized representative.

Please acknowledge the receipt of this LOA.

**Thanking You,**

**For & on behalf of  
Ircon International Limited,**

  
(N. K. Mangla)

General Manager/Civil



**Encl: -      1. Annexure-A (BOQ)  
                 2. PBG Format**

**Copy to: - JGM/F & DGM/C – For information and necessary action, please.**

## Bill of Quantities

**Name of the Work: Implementation of Digital Project Management through 4D BIM (Building Information Modeling) for Haridwar Bypass Project in the state of Uttarakhand**

| S.N. | Deliverables                                                                                                                                                                                                                                                                                                                                         | Unit                                                      | Qty | Unit Rate (INR) | Amount (INR) |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-----|-----------------|--------------|
| 1.   | <b>3D BIM Modelling:</b><br>Creation of LOD 300 BIM Model. The BIM Model will be a direct representation of the 2D drawings provided by IRCON                                                                                                                                                                                                        | LS<br>(To be completed in first three months of LOA)      | 1.0 | 24,00,000       | 24,00,000.00 |
| 2.   | <b>Clash Detection &amp; Coordination:</b><br>Clash detections will be carried out between various disciplines in the BIM model and the clashes and issues will be raised to IRCON.                                                                                                                                                                  |                                                           |     |                 |              |
| 3.   | <b>Quantity Estimation:</b><br>Quantity extraction of modelled elements from the BIM model in a BOQ format as per IRCON's Standards.                                                                                                                                                                                                                 |                                                           |     |                 |              |
| 4.   | <b>Planned construction simulation (4D):</b><br>Creation of Planned construction simulation through the integration of 4D BIM model and the baseline schedule of the project. The simulation will also, consist s-curve showcasing the quantities of major elements throughout the construction phase. The final deliverable will be in .mp4 format. |                                                           |     |                 |              |
| 5.   | <b>Implementation of Digital Project Management System:</b><br>Implementation of cloud- based BIM enabled project management system to monitor progress, critical issues/ items/ activities related to project progress including supplying of software Licenses (min 5 nos.) and cloud storage (min 2 TB)                                           |                                                           |     |                 |              |
| 6.   | <b>Planned VS Actual Construction Simulation:</b><br>Creation of Planned vs actual construction simulation through the integration of 4D BIM model and the updated schedule of the project provided by IRCON. To be submitted on a monthly basis. The final deliverable will be in .mp4 format.                                                      | Per Month<br>(After completion of Items from S.N. 1 to 5) | 6   | 1,50,000        | 9,00,000.00  |
| 7.   | <b>BIM Enabled BI Dashboards:</b><br>Setting up of BIM enabled dashboards for daily/ weekly/ monthly progress updates in 4D format with construction updates.<br>Dashboards shall be customized as per IRCON's requirements                                                                                                                          |                                                           |     |                 |              |
| 8.   | <b>Construction Stage Model Updates - Including clash detection and coordination:</b><br>Updating LOD 300 BIM model created in the previous stage into LOD 400 through the incorporation of RFIs, vendor-specific shop drawings, and site changes.                                                                                                   |                                                           |     |                 |              |



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| S.N.                                             | Deliverables                                                                                                                                                                                                                                                                                                                                              | Unit     | Qty | Unit Rate (INR) | Amount (INR)        |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----|-----------------|---------------------|
| 9.                                               | <b>Resource deployment:</b><br>Deployment of one Sr. BIM Engineer/Expert for updating the planning, progress and incorporating site-level design updates including hardware, software, overheads etc.<br>To provide user training & handholding support on the system usage and feeding site data                                                         |          |     |                 |                     |
| 10.                                              | <b>Supply and Installation of Cloud based DMS (Document Management System):</b><br>Considering minimum 5 licenses for a duration of 1 year, including the following modules: -<br>1. Document Management<br>2. CAD & BIM Viewer<br>3. Issue Management<br>4. Cloud Storage<br>Online training for 10 hours supplemented with 2 copies of the user manual. | Per Year | 1   | 4,50,000        | 4,50,000.00         |
| <b>TOTAL Amount of BOQ excluding GST</b>         |                                                                                                                                                                                                                                                                                                                                                           |          |     |                 | <b>37,50,000.00</b> |
| <b>Add GST @18%</b>                              |                                                                                                                                                                                                                                                                                                                                                           |          |     |                 | <b>6,75,000.00</b>  |
| <b>Total Amount Inclusive of GST</b>             |                                                                                                                                                                                                                                                                                                                                                           |          |     |                 | <b>44,25,000.00</b> |
| <b>Quoted Rate below 11%</b>                     |                                                                                                                                                                                                                                                                                                                                                           |          |     |                 | <b>-4,86,750.00</b> |
| <b>Total Awarded Amount inclusive of GST@18%</b> |                                                                                                                                                                                                                                                                                                                                                           |          |     |                 | <b>39,38,250.00</b> |



11/01/2024  
GM/ci

**ANNEXURE – II to COC  
(Ref. Clause 7 of COC)**

(To be executed on a non-judicial stamp paper of ₹100/- only)

**PERFORMANCE BANK GUARANTEE (UNCONDITIONAL)**

To  
IRCON INTERNATIONAL LIMITED

[Acting through \_\_\_\_\_ (Project In charge) & Address of the Project]

WHEREAS \_\_\_\_\_ [name and address of Consultant] (hereinafter called "the Consultant") has undertaken, in pursuance of Contract No. \_\_\_\_\_ dated \_\_\_\_\_ to execute the work of " \_\_\_\_\_ "[name of Contract and brief description of Works] (hereinafter called "the Contract.");

AND WHEREAS it has been stipulated by you in the said Contract that the Consultant shall furnish you with a Bank Guarantee by any Scheduled Bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Consultant such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Consultant, up to a total of \_\_\_\_\_ [amount of Guarantee], \_\_\_\_\_ [amount in words], such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of \_\_\_\_\_ [amount of Guarantee] as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Consultant before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between you and the Consultant shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.



This guarantee shall be valid up to \_\_\_\_\_ (a date 60 days from the date of completion of the work).

We, the \_\_\_\_\_ Bank further agree that, this guarantee shall be invokable at our place of business at New Delhi/NCR/Project HQ (Indicate detail address of branch with code No.)\*. The branch at New Delhi/NCR/Project HQ is being advised accordingly.

This Bank Guarantee shall be operative only if it is accompanied by a separate advice sent by \_\_\_\_\_ (Name of issuing Bank, with address) on \_\_\_\_\_ (Name of Employer's Bank, with address) IFS Code \_\_\_\_\_ through Structured Financial Messaging system (SFMS) and authenticated by the Employer's Bank.

#### SIGNATURE AND SEAL OF THE GUARANTOR

Name of Bank:

Address:

Date:

\*The Bank should indicate detailed address of New Delhi/NCR/project HQ branch along with its Code No.

