

BOQ and Technical Specification

TENDER No. 04-TRD-JU-ETENDER-26-27

Name of work: - Geo-Spatial Mapping & Condition assessment of TRD Assets of Jodhpur Division.

S. No.	Description	Unit	Qty	Rate	Amount
1	Geo-Spatial Mapping and Condition Assessment of TRD Assets	Per TKM	1000	3261.67	3261670
2	Supply, installation & Commissioning of Intel Core i7 14 Inch Laptop (Windows 11 Professional) for analyzing of Geo spatial mapping images etc.	Nos.	2	77428.26	154856.52
	Total				3416526.52

Note: -

1. Rates should be inclusive of GST as applicable and other applicable expenses.
2. The work should be carried out as per applicable rules & regulations, manuals and applicable code of practices.
3. The tender offer submitted should be complete with financial status, previous experience, and other documents.
4. Contractor/s is/are bound to execute formal agreement on the documents available in this office.

**Sr. Divisional Electrical Engineer/TRD&GSU
North Western Railway, Jodhpur**

TECHNICAL SPECIFICATION AND OTHER CONDITIONS

(A) GENERAL TECHNICAL SPECIFICATIONS

1.0 Scope of Work: Geo-Spatial Mapping & Condition assessment of TRD Assets of Jodhpur Division.

1.1 The work should be carried out as per applicable rules & regulations, manuals and applicable code of practices.

1.2 The material supplied shall be of good quality and of OEM/reputed make / approved sources if any.

2.0 Additional Specification

2.1 If any minor alterations are found necessary the contractor will do the same within the quoted rates.

2.2 The work shall be carried out in best workman like manner and any defect in the work of changes in the design etc. as pointed out by Inspecting authority shall be carried out by the contractor within quoted rates.

2.3 Proper shutdown of OHE supply if required to be approved from concern JE/SSE.

2.4 In case of any dispute regarding the lay out and any other technical matter, the decision of Sr. Divisional Electrical Engineer (TRD) will be final and binding on the contractor.

2.5 Contractor may be required to work at night time also depending upon site condition and traffic movement at site for which no extra payment will be made by Railway.

3.0 Procurement and inspection of material

3.1 All material shall be procured from OEM/RDSO/CORE approved vendors wherever approved sources are available.

3.2 All the equipment, material, fittings etc. shall be subjected to inspection by RDSO/RITES/Railways. The inspection authority (RDSO/RITES/Railways) will be nominated by Sr. DEE (TRD), normally in accordance with Rly. Bd. letter no. 2000/RS(G)/379/2 dt. 06.09.2017 (Pre-inspection of material by RITES/RDSO – Minimum value of Stores), however in the event of exigencies Railway reserves the right to change the inspecting authority from RITES/RDSO to consignee.

3.3 The contractor will seek nomination of inspecting authority & inspection site from Sr. DEE (TRD) duly submitting the details of order given to concern vendor.

3.4 RITES/RDSO inspection charges shall be borne by the Railways.

3.5 Inspection of material may be done at manufacturer's premises/ manufacturer's test facilities /Contractor's Depot / work site as decided by Sr. DEE (TRD).

3.6 Contractor shall provide at his own cost all necessary assistance, T&P and bear the cost for carrying out testing of material at nominated location as per requirement.

3.7 Any sample, if necessary, may be sent by Railway's representative to manufacturer/test house for ascertaining originality/parameters as per specifications and cost of test shall be borne by the contractor.

3.8 Pre commissioning test if needed on various equipment may be carried out jointly by the contractor.

4.0 Progress and time of completion

4.1 The work will commence immediately after receipt of the detail acceptance letter and currency of contract is **08 months** from the date of issue of advance acceptance letter.

4.2 The agreement is to be signed within SEVEN DAYS after receipt of detailed acceptance letter.

5.0 Completion Test

On completion of installation, the following tests confirming to the relevant specification, I.E. Rules, applicable code of practices and manuals shall be carried out.

6.0 If any damage is caused to the railway assets/properties during execution of schedule work, it shall be the responsibility of the contractor to repair/make good the loss promptly at his own cost to the entire satisfaction of the Electrical Engineer (TRD)/SSE/JE/ In charge.

7.0 All the waste material shall have to be removed on the same day after execution of work, by the contractor.

8.0 All the rejected material should be removed from the site immediately by the contractor.

9.0 No part of work shall be got executed from any alternative Agency.

10.0 Bad workmanship pointed out by the Sr. Divisional Electrical Engineer (TRD) or his representative shall be rectified by the contractor at his own cost.

11.0 The contractor shall sign the site order.

12.0 Inspection: After completion of work, the same shall be inspected by the Sr. Divisional Electrical Engineer (TRD), or his representative for the quality, and completion of the work.

In addition, the Railway's representative/ officers for checking the progress and quality of work could inspect the work site at any time. Any defects as may be noticed by the inspecting officials will have to be rectified by the contractor at his cost. In case the inspecting officer finds the progress unsatisfactory or the quality of work inferior, he may immediately order the contractor to suspend the work. The defects noticed should be got attended immediately, failing which the defects could be got rectified and the balance work got completed through any other agency at risk and cost of the defaulting contractor.

B. EXPLANATORY NOTES OF NS ITEMS

Scope of Work

NS-01 Geo-Spatial Mapping and Condition Assessment of TRD Assets :

The price shall include the Geo-spatial Mapping of OHE which include the condition of foundation, mast, anchor, Cantilever, ATD, SI etc. Geo-Spatial Mapping and Condition Assessment of TRD Assets is to be carried as per guidelines for Drone Based Inspection of Overhead Equipment in Indian Railways issued by RDSO Instruction No. TI/IN/0060 or latest and Advance correction slip no. 16 to Railway Manual of AC Traction (ACTM) Vol. II Part 1.

NS-02 Supply, installation & Commissioning of Intel Core i7 14 Inch Laptop (Windows 11 Professional) for analyzing of Geo spatial mapping images etc.

The price shall cover Supply, Installation & Commissioning of the price shall cover Supply, Installation & Commissioning of Intel Core i7 14 Inch Laptop (Windows 11 Professional) having processor of Intel core i7 with 12 generation or above, RAM size should 16 GB or above, total SSD capacity of 1024GB or above, with wireless connectivity of HP/DELL/APPLE or similar make. Before supply of item the make, brand, model and technical specification shall be approved from Sr. DEE/TRD/JU.

1.0 Tools and Plants

During the period of maintenance, erecting, testing and commissioning the contractor on his own cost shall make arrangement for necessary tools and plants required for transportation, handling, erecting, testing and commissioning of various equipment at site of work covered under the contract.

2.0 Standard Specification

Wherever a reference to any specification appears in this quotation paper, the same shall be taken as a reference to the latest version of the said specification.

3.0 Other Conditions

- A.** Contractor shall also employ following Qualified Engineers during execution of the allotted work:
 - (i) One Qualified Graduate Engineer when cost of work to be executed is Rs 200 lakh and above.
 - (ii) One Qualified Diploma Holder Engineer when cost of work to be executed is more than Rs 25 lakh, but less than 200 lakh.
- B.** GST/Sales tax octroi, Royalty, Toll Tax or any other taxes levied/leviable by the central or State Govt. Local Bodies shall be borne by the contractor. No such other taxes on contractor's labour or material will be paid by Railway. This should be kept in view while tendering.
- C.** The quantities given above are approximate and are subject to variation plus/minus as per variation clause mentioned in GCC applicable at the time of opening of tender.

4.0 Definition of similar nature of work: Nil

5.0 Procedure for undertaking digging work in the vicinity of Signaling, Electrical and Telecommunication cables:-

Earth digging and soil excavation to be carried out very cautiously so that Electrical/Telecommunication/Signaling underground cables do not get damaged. If any Electrical/Telecommunication/Signaling underground cable gets damaged during work, then as per HQ/RB guidelines penalty amount of the same shall be borne by the contractor.

6.0 Warranty: -

Items for which the warranty offered by manufacturer is more than one year, contractor will submit the warranty card of the item duly filled in all respect to consignee.

- A** The contractor shall warranty that all materials & equipments to be supplied and installed as per this tender shall be free from defects and faults in design, material, workmanship and manufacture and shall be of the highest quality and consistent with the established and generally accepted standard for materials of the type ordered and in full conformity with the contract specifications.
- B** The contractor shall give warranty / provide maintenance for satisfactory working of all the equipments & installations erected & commissioned by him in this tender, for a period of ONE YEAR from the date of commissioning.
- C** During the period of Warranty, the contractor shall keep available experienced engineer & technician and necessary equipment to attend to any defective installation. The Contractor shall bear the cost of all modifications, additions or

substitutions that may be considered necessary due to faulty material, decision regarding this shall rest with the Sr.DEE/TRD/NWR/Jodhpur.

- D** During the period of Warranty, the contractor shall be liable for the replacement of any equipment & any parts which may be found defective, whether such equipment be of his own manufactured or those of his sub contractor, whether defect arising from faulty design, material, workmanship or negligence in any manner on the part of the Contractor, at his (Contractor's) own expenses. In case of defect of similar type detected in contractor's equipment & components during the warranty period, the contractor shall replace complete lot of the items irrespective of the fact that whether all such items have failed or not. The Contractor shall bear the cost of repair carried out on his behalf by the Purchaser at site due to urgent requirement. In such a case, the Contractor shall be informed in advance of the repair proposed to be carried out by the Purchaser.
- E** If it becomes necessary for the contractor to replace or renew any defective portion/s of the system under this clause, the provisions of this clause shall apply to the portion of equipment/component/system so replaced for further period of 12 months from the date of such replacement or renewal or until the end of the warranty period whichever may be later. If any defect is not remedied within reasonable time, the Railway may proceed to do the work at contractor's risk and expense, but without prejudice to any other rights, which the Railway may have against the contractor in respect of such defects.
- F** The repaired or renewed part shall be delivered and erected on site free of charge to the purchaser.
- G** The Railway shall have right for acceptance, rejection of materials at site if the same are not in accordance with the specifications.
- H** The terms and conditions of this contract shall also be governed with G.C.C. of Railways.
- I** SD will be release to tenderer after completion of warranty period of 1 year.

7.0 Payment Term

- (a) Contractor can claim running payments of 90% against executed work, submission of all required data & reports and after satisfactory inspection carried out by the authority.
- (b) Balance 10 % during finalization of tender.

**Sr. Divisional Electrical Engineer/TRD&GSU
North Western Railway, Jodhpur**

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