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SOUTH WESTERN RAILWAY

**ELECTRICAL TRACTION
DISTRIBUTION BRANCH HUBBALLI
DIVISION**

**E-TENDER DOCUMENT AGAINST
E-TENDER NOTICE NO. HE-TRD-2025-26-OT-29-01**

Tender for

Design, supply, erection, testing and commissioning of 220kv/25kv additional Traction Transformer at GKK Traction Sub Station.

TENDER VALUE (APPROX.)	1,50,17,212.54 (One Crore Fifty Lakhs Seventeen Thousand Two Hundred Twelve Rupees and Fifty-Four Paisa)
EARNEST MONEY DEPOSIT	300400.00
PERIOD OF COMPLETION	12 months

Issued by:

**Sr. Divisional Electrical Engineer (Traction Distribution)
Hubballi Division
South Western Railway
Hubballi – 580020.**

TENDER NOTICE**SOUTH WESTERN RAILWAY**

For and on behalf of the President of India, the Divisional Railway Manager, Traction Distribution, South Western Railway, Hubballi – 580020 invites online E-tenders from experienced contractors for the under mentioned work. Submission of offers manually is not permissible and manual offers if any, received even within the closing time of the tender, will be summarily rejected.

Tender Notice No.	:	HE-TRD-2025-26-OT-29-01
Name of work	:	Design, supply, erection, testing and commissioning of 220kv/25kv additional Traction Transformer at GKK Traction Sub Station.
Estimated tender value	:	1,50,17,212.54
Earnest Money Deposit	:	300400.00
Cost of E-Tender Form	:	Nil
Period of validity of offer	:	90 days from the date of tender opening.
Completion period	:	12 months

NOTE:

The prospective tenderers / bidders are requested to register themselves with IREPS (Indian Railway Electronic Procurement System), if not done already, for participating in E-Tenders. Registration form is available on IREPS site (Quick link New Vendors / Contractors (E-Tender)).

Contractors / Bidders are advised to procure Digital Signing Certificate (DSC) Class III or appropriate from Govt. of India, authorized Certifying authority (CCA-Controller of Certifying Authority) for participating in E-Tender and to log into IREPS.

Payment of Bid Security & Tender Document Cost, in respect of E-tendering, should be done through net banking or payment gateway only.

All tenderers should necessarily furnish required Bid security through online payment only. Tenders received without valid Bid security shall be summarily rejected.

For details, interested persons may kindly log on to website at <http://www.ireps.gov.in>. For other details, terms and conditions, the tenderers are advised to refer to the documents uploaded.

**Sr. Divisional Electrical Engineer
(Traction Distribution), South
Western Railway, Hubballi –580020
(For and on behalf of the President of India)**

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1. INSTRUCTIONS TO TENDERERS

The President of the Union of India acting through the Divisional Railway Manager, Traction Distribution, Hubballi Division, South Western Railway invites online tenders through the official portal of Indian Railways E-Procurement System (IREPS) Website. It shall be noted that the president of the Union of India is not bound to accept the lowest or any tender or assign any reason for doing so and reserve the right to accept or discharge the tender at any stage in respect of the whole or any portion of the items specified.

The tenderers are advised to carefully read this Tender Document in conjunction with Indian Railways Standard General Conditions of Contract- April 2022 with amendments / advance correction slips issued up to the date of invitation of tender before participating in this tender.

1.1 Cost of Tender Form

E-Tender Forms shall be issued free of cost to all tenderers. Hence, no amount towards the cost of Tender Form is required to be deposited by the tenderer.

1.2 Bid Security

- (a) The tenderer shall be required to submit the Bid Security with the tender for the due performance with the stipulation to keep the offer open till such date as specified in the tender, under the conditions of tender. The Bid Security shall be as under:

Value of the Work	Bid Security
For all works	2% of the estimated cost of the work

Note:

- (i) The Bid Security shall be rounded off to the nearest ₹100. This Bid Security shall be applicable for all modes of tendering.
 - (ii) Any firm recognized by Department of Industrial Policy and Promotion (DIPP) as "Startups" shall be exempted from payment of Bid Security detailed above.
 - (iii) Labour Cooperative Societies shall submit only 50% of above Bid Security detailed above.
- (b) It shall be understood that the tender documents have been issued to the tenderer and the tenderer is permitted to tender in consideration of stipulation on his part, that after submitting his tender he will not resile from his offer or modify the terms and conditions thereof in a manner not acceptable to the Engineer. Should the tenderer fail to observe or comply with the said stipulation, the aforesaid amount shall be liable to be forfeited to the Railway.
- (c) If his tender is accepted, this Bid Security mentioned in sub para (a) above will be retained as part security for the due and faithful fulfillment of the contract in terms of Clause 16 of the Standard General Conditions of Contract. The Bid Security of other Tenderers shall, save as herein before provided, be returned to them, but the Railway shall not be responsible for any loss or depreciation that may happen thereto while in their possession, nor be liable to pay interest thereon.
- (d) The Bid Security shall be deposited either in cash through e-payment gateway or submitted as Bank Guarantee bond from a scheduled commercial bank of India or as mentioned in tender documents. The Bank Guarantee bond shall be as per Annexure- VIA of GCC and shall be valid

for a period of 90 days beyond the bid validity period.

- (e) In case, submission of Bid Security in the form of Bank Guarantee, following shall be ensured:
- (i) A scanned copy of the Bank Guarantee shall be uploaded on e-Procurement Portal (IREPS) while applying to the tender.
 - (ii) The original Bank Guarantee should be delivered in person to the official nominated as indicated in the tender document before closing date for submission of bids. (i.e excluding the last date of submission of bids) [ACS No.5 Dt.20-10-2023]
 - (iii) Non submission of scanned copy of Bank Guarantee with the bid on e-tendering portal (IREPS) and/or non submission of original Bank Guarantee within the specified period shall lead to summary rejection of bid.
 - (iv) The Tender Security shall remain valid for a period of 90 days beyond the validity period for the Tender.
 - (v) The details of the BG, physically submitted should match with the details available in the scanned copy and the data entered during bid submission time, failing which the bid will be rejected
 - (vi) The Bank Guarantee shall be placed in an envelope, which shall be sealed. The envelope shall clearly bear the identification “Bid for the ***** Project” and shall clearly indicate the name and address of the Bidder. In addition, the Bid Due Date should be indicated on the right-hand top corner of the envelope.
 - (vii) The envelope shall be addressed to the officer and address as mentioned in the tender document.
 - (viii) If the envelope is not sealed and marked as instructed above, the Railway assumes no responsibility for the misplacement or premature opening of the contents of the Bid submitted and consequent losses, if any, suffered by the Bidder.

1.3 Validity of offer

The tenderer shall keep the offer open for a minimum period of 90 days from the date of opening of the tender within which period that tenderer cannot withdraw his offer subject to the period being extended further if required by mutual agreement from time to time. Any contravention of the above condition will make the tenderer liable for forfeiture of his full amount of Bid security.

1.4 Eligibility Criteria for work above 50 Lakhs

1.4.1 Technical Eligibility Criteria:

- (a) The tenderer must have successfully completed or substantially completed any one of the following categories of work(s) during last 07 (seven) years, ending last day of month previous to the one in which tender is invited:
 - (i) Three similar works each costing not less than the amount equal to 30% of advertised value of the tender, or
 - (ii) Two similar works each costing not less than the amount equal to 40% of advertised value of the tender, or
 - (iii) One similar work costing not less than the amount equal to 60% of advertised value of the tender.
- (b)(1) In case of tenders for composite works (e.g. works involving more than one distinct component, such as Civil Engineering works, S&T works, Electrical works, OHE works etc. and in the case of major bridges – substructure, superstructure etc.), tenderer must have successfully completed or substantially

completed **any one** of the following categories of work(s) during last 07 (seven) years, ending last day of month previous to the one in which tender is invited:

- (i) Three similar works each costing not less than the amount equal to 30% of advertised value of each component of tender, or
- (ii) Two similar works each costing not less than the amount equal to 40% of advertised value of each component of tender, or
- (iii) One similar work each costing not less than the amount equal to 60% of advertised value of each component of tender.

Note for:

b (1): Separate completed works of minimum required values shall also be considered for fulfillment of technical eligibility criteria for different components.

(b)(2) In such cases, what constitutes a component in a composite work shall be clearly pre-defined with estimated tender cost of it, as part of the tender documents without any ambiguity.

(b) (3) To evaluate the technical eligibility of tenderer, only components of work as stipulated in tender documents for evaluation of technical eligibility, shall be considered. The scope of work covered in other remaining components shall be either executed by tenderer himself if he has work experience as mentioned in clause 7 of the Standard General Conditions of Contractor through subcontractor fulfilling the requirements as per clause 7 of the Standard General Conditions of Contract or jointly i.e., partly himself and remaining through subcontractor, with prior approval of Chief Engineer in writing.

However, if required in tender documents by way of Special Conditions, a formal agreement duly notarized, legally enforceable in the court of law, shall be executed by the main contractor with the subcontractor for the component(s) of work proposed to be executed by the subcontractor(s), and shall be submitted along with the offer for considering subletting of that scope of work towards fulfilment of technical eligibility. Such subcontractor must fulfill technical eligibility criteria as follows:

The subcontractor shall have successfully completed at least one work similar to work proposed for subcontract, costing not less than 35% value of work to be subletted, in last 5 years, ending last day of month previous to the one in which tender is invited through a works contract. *[As per GCC 10.1 (b) (3)]*

Note: for subletting of work costing up to Rs 50 lakh, no previous work experience of subcontractor shall be asked for by the Railway.

In case after award of contract or during execution of work it becomes necessary for contractor to change subcontractor, the same shall be done with subcontractor(s) fulfilling the requirements as per clause 7 of the Standard General Conditions of Contract, with prior approval of Chief Engineer in writing.

(c) (1) As per Para 7 (a)(i) of part-ii of GCC '22, The Contractor shall not sub-contract the Works comprising more than 40% (forty per cent) of the Contract Price and shall carry out Works for at least 60% (sixty per cent) of the total Contract Price directly under its own supervision and through its own personnel. The Parties expressly agree that for the purposes of computing the value of sub-contracts under this Clause 3.2.1, the Contract Price shall exclude any sub-contract for the procurement of goods and equipment like [rails, sleepers and track fittings, signaling and telecommunication & Power supply equipment]. The Parties agree that all obligations and liabilities under this Agreement for the entire Railway Project shall at all time remain with the Contractor. {The Parties agree that works equal to at least 30% (thirty per cent) of the Contract Price shall be discharged solely by the Lead Member.}\$

Procurement of material, hire of equipment or engagement of labour by prime contractor or procuring entity will not mean sub-contracting.

\$ May be deleted if the Contractor is not a Consortium/Joint Venture.

Note for Technical Eligibility Criteria:

Work experience certificate from private individual shall not be considered. However, in addition to work experience certificates issued by any Govt. Organisation, work experience certificate issued by Public listed company having average annual turnover of Rs 500 crore and above in last 3 financial years excluding the current financial year, listed on National Stock Exchange or Bombay Stock Exchange, incorporated/registered at least 5 years prior to the date of closing of tender, shall also be considered provided the work experience certificate has been issued by a person authorized by the Public listed company to issue such certificates.

In case tenderer submits work experience certificate issued by public listed company, the tenderer shall also submit along with work experience certificate, the relevant copy of work order, bill of quantities, bill wise details of payment received duly certified by Chartered Accountant, TDS certificates for all payments received and copy of final/last bill paid by company in support of above work experience certificate.

Similar Nature of Work is defined as:

Provision (design, supply, erection, testing and commissioning) to substation involving 25kV AT feeding system (2x25kV) or 25kV/33kV/ 66kV/ 132kV/ 220kV and higher voltage switch gear equipment's, control and protection equipment's, reactors, power factor correction equipment's etc, transformers of 12.5MVA/21.6MVA/ 30MVA and higher capacities executed for Railways or any other SEB's/PGCIL/NTPC/DISCOMs etc with or without supply of transformers & associated switch gear equipment's."

- 1.4.2 **Financial Eligibility Criteria:** The tenderer must have minimum average annual contractual turnover of V/N crores; where

V= Advertised value of the tender in crores of Rupees

N= Number of years prescribed for completion of work for which bids have been invited.

The average annual contractual turnover shall be calculated as an average of "total contractual payments" in the previous three financial years, as per the audited balance sheet. However, in case balance sheet of the previous year is yet to be prepared/ audited, the audited balance sheet of the fourth previous year shall be considered for calculating average annual contractual turnover.

The tenderers shall submit requisite information as per **Annexure-VIB**, of GCC April, 2022 along with copies of Audited Balance Sheets duly certified by the Chartered Accountant/ Certificate from Chartered Accountant duly supported by Audited Balance Sheet.

1.4.3 Eligibility Criteria for work below 50 Lakhs

1. **No prescribed Technical and Financial eligibility criteria is applicable for works costing up to 50 lakhs. However, documents testifying the tenderer's previous experience and financial status may be produced along with the tender.**

Note:

1. Tenderers shall submit all documents in support of credentials along with the tender. Post Tender correspondence shall not be entertained normally. Any Certificate / Documents offered after the

tender opening shall not be given any credit unless the same is requested by the Tender Committee.

2. The Onus of establishing the credentials of the tenderer(s) from the office records or otherwise does not lie with the, Railway. Railway shall evaluate the offer only from the certificates / documents (as referred above) submitted along with the tender offer. However, the Tender committee / Tender Accepting authority may, at their discretion, call for the originals of the credentials for verification from the tenderers or any clarifications/confirmations on the contents of the documents submitted.
3. In case the Certificates/documents produced are proved to be false/ fabricated, their business with the organization shall be banned for a specific period of not less than six months at the discretion of the Administration.

1.4.3.1 Explanation for Eligibility Criteria:

1. Substantially Completed Work means an ongoing work in which payment equal to or more than 90% of the present contract value (excluding the payment made for adjustment of Price variation (PVC), if any has been made to the contractor in that ongoing contract and no proceedings of termination of contract on Contractor's default has been initiated. The credential certificate in this regard should have been issued not prior to 60 days of date of invitation of present tender.
2. In case a work is started prior to 07 (seven) years, ending last day of month previous to the one in which tender is invited, but completed in last 07 (seven) years, ending last day of month previous to the one in which tender is invited, the completed work shall be considered for fulfillment of credentials.
3. If a work is physically completed and completion certificate to this extent is issued by the concerned organization, but final bill is pending, such work shall be considered for fulfillment of credentials.
4. In case of completed work, the value of final bill (gross amount) including the PVC amount (if paid) shall be considered as the completion cost of work. In case final bill is pending, only the total gross amount already paid including the PVC amount (if paid) shall be considered as the completion cost of work. In case of substantially completed work, the total gross amount already paid including the PVC amount (if paid), as mentioned in the certificate, shall be considered as the cost of substantially completed work
5. If a bidder has successfully completed a work as subcontractor and the work experience certificate has been issued for such work to the subcontractor by a Govt. Organization or public listed company as defined in Note for Item 10.1 Para 10 of the Tender Form (Second Sheet) of GCC, April 2022, the same shall be considered for the purpose of fulfillment of credentials.
6. In case a work is considered similar in nature for fulfillment of technical credentials, the overall cost including the PVC amount (if paid) of that completed work or substantially completed work, shall be considered and no separate evaluation for each component of that work shall be made to decide eligibility
7. In case of newly formed partnership firm, the credentials of individual partners from previous proprietary firm(s) or dissolved previous partnership firm(s) or split previous partnership firm(s), shall be considered only to the extent of their share in previous entity on the date of dissolution / split and their share in newly formed partnership firm. For example, a partner A had 30% share in previous entity and his share in present partnership firm is 20%. In the present tender under consideration, the credentials of partner A will be considered to the extent of $0.3 \times 0.2 \times$ value of the work done in the previous entity. For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deed(s), dissolution deed(s) and proof of surrender of PAN No.(s) in case of dissolution of partnership firm(s) etc.
8. In case of existing partnership firm, if any one or more partners quit the partnership firm, the credentials of remaining partnership firm shall be re-worked out i.e., the quitting partner(s) shall take away his credentials to the extent of his share on the date of quitting the partnership firm(e.g. in a partnership firm of

partners A, B & C having share 30%, 30% & 40% respectively and credentials of Rs 10 crore; in case partner C quits the firm, the credentials of this partnership firm shall remain as Rs 6 crore). For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deed(s), dissolution deed(s) and proof of surrender of PAN No.(s) in case of dissolution of partnership firm(s) etc.

9. In case of existing partnership firm if any new partner(s) joins the firm without any modification in the name and PAN/TAN no. of the firm, the credentials of partnership firm shall get enhanced to the extent of credentials of newly added partner(s) on the same principles as mentioned in item 6 above. For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deeds, dissolution/splitting deeds and proof of surrender of PAN No.(s) in case of dissolution of partnership firm etc.

10. Any partner in a partnership firm cannot use or claim his credentials in any other firm without leaving the partnership firm i.e., In a partnership firm of A&B partners, A or B partner cannot use credentials of partnership firm of A&B partners in any other partnership firm or propriety firm without leaving partnership firm of A&B partners.

11. In case a partner in a partnership firm is replaced due to succession as per succession law, the proportion of credentials of the previous partner will be passed on to the successor.

12. If the percentage share among partners of a partnership firm is changed, but the partners remain the same, the credentials of the firm before such modification in the share will continue to be considered for the firm as it is without any change in their value. Further, in case a partner of partnership firm retires without taking away any credentials from the firm, the credentials of partnership firm shall remain the same as it is without any change in their value.

13. In a partnership firm “AB” of A&B partners, in case A also works as propriety firm “P” or partner in some other partnership firm “AX”, credentials of A in propriety firm “P” or in other partnership firm “AX” earned after the date of becoming a partner of the firm AB shall not be added in partnership firm AB.

14. In case a tenderer is LLP, the credentials of tenderer shall be worked out on above lines similar to a partnership firm.

15. In case company A is merged with company B, then company B would get the credentials of company A also.

1.4.3.2 All other conditions regarding fulfillment of Eligibility Criteria shall be governed by para-No. 10 (10.1 & 10.2) of Annexure-I (Tender Form – Second sheet) of Part-I, GCC, April 2022.

Note for Financial Eligibility Criteria:

As per Annexure-VI of GCC '22 For tenders having advertised value more than Rs 10 crore wherein eligibility criteria include Bid Capacity also, the tenderer will be qualified only if its available bid capacity is equal to or more than the total bid value of the present tender.

1.5 Documents to be submitted along with the Tender.

1.5.1 Certificate on documents submitted

A copy of certificate stating that they are not liable to be disqualified and all their statements/documents submitted along with bid are true and factual. **Standard format of certificate to be submitted by the bidder is enclosed as ANNEXURE-V. Non submission of a copy of certificate by the bidder shall result in summarily rejection of his/their bid.** It shall be mandatorily incumbent upon the tenderer to identify, state and submit the supporting documents duly self-attested/digitally signed by which they/he is qualifying the Qualifying Criteria mentioned in the Tender Document.

Note:

1. The Railway reserves the right to verify all statements, information and documents submitted by the bidder in his tender offer, and the bidder shall, when so required by the Railway, make available all such information, evidence and documents as may be necessary for such verification. Any such verification or lack of such verification, by the Railway shall not relieve the bidder of its obligations or liabilities hereunder nor will it affect any rights of the Railway there under
2. In case of any information submitted by tenderer is found to be false, forged or incorrect at any time during process for evaluation of tenders, it shall lead to forfeiture of the tender Bid Security besides banning of business for a period of upto five years.
3. In case of any information submitted by tenderer is found to be false, forged or incorrect after the award of contract, the contract shall be terminated. Bid Security, Performance Guarantee and Security Deposit available with the railway shall be forfeited. In addition, other dues of the contractor, if any, under this contract shall be forfeited and agency shall be banned for doing business for a period of upto five years.

1.5.2 NEFT Mandate Form (Mandatory)

The tenderer shall provide NEFT details as per the format at **Appendix - B** of the tender document.

1.5.3 Electrical License (Mandatory)

Electrical license: - The works shall be carried out only by licensed contractors having valid Class I electrical contractors license / employed a person having a valid Class I electrical contractors license on regular basis, issued by any state Government. The tenderer should furnish with his tender offer the particulars of the license held by him or of person employed which should be valid. (Minimum applicable voltage rating of 33KV)

1.5.4 Statement on Employment/Partnership etc. of Retired Railway Employees (Mandatory)

The Contractor shall abide by the instructions contained in the Clause No.16 of Annexure I of Part I and Clause No. 59(9) of Part II of Indian Railways Standard General Conditions of Contract, April 2022.

If the information required as per the above clause has not been furnished, contract is liable to be dealt in accordance with provision of clause 62 of Standard General Conditions of Contract, **In case, no retired railway employees are associated with the firm, a statement as per the sample format at Appendix-C to be furnished by the tenderer.**

1.6 Other documents to be submitted along with the Tender.

- (i) The tenderer shall clearly specify whether the tender is submitted on his own (proprietary firm) or on behalf of a partnership Firm/Company/Joint Venture/Registered Society/Registered Trust etc. The tenderer(s) shall enclose the attested copies of constitution of their concern, and copy of PAN card along with their tender. Tender Documents in such cases are to be signed by such persons as may be legally competent to sign them on behalf of the Firm, Company, Association, Trust or Society, as the case may be.
- (ii) Following additional documents shall be submitted by the tenderer in respect of the following:
 - (a) HUF:**
 - (i) A copy of notarized affidavit on Stamp Paper declaring that he who is submitting the tender

on behalf of HUF is in the position of “Karta” of Hindu Undivided Family (HUF) and he has the authority, power and consent given by other members to act on behalf of HUF.

(b) Partnership Firm:

- (i) A notarized copy of the Partnership Deed or a copy of the Partnership deed registered with the Registrar.
- (ii) A notarized or registered copy of Power of Attorney in favour of the individual to tender for the work, sign the agreement etc. and create liability against the firm.
- (iii) An undertaking by all partners of the partnership firm that they are not blacklisted or debarred by Railways or any other Ministry / Department of the Govt. of India from participation in tenders / contracts as on the date of submission of bids, either in their individual capacity or in any firm/LLP in which they were / are partners/members. Any Concealment / wrong information in regard to above shall make the bid ineligible or the contract shall be determined under Clause 62 of the Standard General Conditions of Contract.

Note: Participation of Partnership Firms in Works Tenders shall be governed by the conditions specified in para 18 of Annexure-I (Tender Form – Second sheet) of Part I, GCC, April 2022.

(c) Company registered under Companies Act 2013:

- (i) The copies of **MOA (Memorandum of Association) / AOA (Articles of Association)** of the company
- (ii) A copy of Certificate of Incorporation
- (iii) A copy of Authorization/Power of Attorney issued by the Company (backed by the resolution of Board of Directors) in favour of the individual to sign the tender on behalf of the company and create liability against the company.

(d) LLP (Limited Liability Partnership):

- (i) A copy of LLP Agreement
- (ii) A copy of Certificate of Incorporation
- (iii) A copy of Power of Attorney/Authorization issued by the LLP in favour of the individual to sign the tender on behalf of the LLP and create liability against the LLP.
- (iv) An undertaking by all partners of the LLP that they are not blacklisted or debarred by Railways or any other Ministry / Department of the Govt. of India from participation in tenders / contracts as on the date of submission of bids, either in their individual capacity or in any firm/LLP or JV in which they were / are partners/members. Concealment / wrong information in regard to above shall make the contract liable for determination under Clause 62 of the Standard General Conditions of Contract.

(e) Registered Society & Registered Trust:

- (i) A copy of Certificate of Registration
- (ii) A copy of Memorandum of Association of Society/Trust Deed
- (iii) A copy of Power of Attorney in favour of the individual to sign the tender documents and create liability against the Society/Trust.
- (iv) A copy of Rules & Regulations of the Society

- (iii) If it is NOT mentioned in the submitted tender that tender is being submitted on behalf of a Sole Proprietorship firm / Partnership firm / Joint Venture / Registered Company etc., then the tender shall be treated as having been submitted by the individual who has signed the tender.
- (iv) After opening of the tender, any document pertaining to the constitution of Sole Proprietorship Firm / Partnership Firm / Registered Company/ Registered Trust / Registered Society / HUF/LLP etc. shall be neither asked nor considered, if submitted. Further, no suo moto cognizance of any document available in public domain (i.e., on internet etc.) or in Railway's record/office files etc. will be taken for consideration of the tender, if no such mention is available in tender offer submitted.
- (v) A tender from JV shall be considered only where permissible as per the tender conditions.
- (vi) The Railway will not be bound by any change of power of attorney or in the composition of the firm made subsequent to the submission of tender. Railway may, however, recognize such power of attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the Contractor.

1.7 The tenderer whether sole proprietor / a company or a partnership firm / joint venture (JV) / registered society / registered trust / HUF / LLP etc if they want to act through agent or individual partner(s), should submit along with the tender, a copy of power of attorney duly stamped and authenticated by a Notary Public or by Magistrate in favour of the specific person whether he/they be partner(s) of the firm or any other person, specifically authorizing him/them to sign the tender, submit the tender and further to deal with the Tender/ Contract up to the stage of signing the agreement except in case where such specific person is authorized for above purposes through a provision made in the partnership deed / Memorandum of Understanding / Article of Association/Board resolution, failing which tender shall be summarily rejected.

A separate power of attorney duly stamped and authenticated by a Notary Public or by Magistrate in favour of the specific person whether he/they be partner(s) of the firm or any other person, shall be submitted after award of work, specifically authorizing him/them to deal with all other contractual activities subsequent to signing of agreement, if required.

Note: A Power of Attorney executed and issued overseas, the document will also have to be legalized by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by Bidders from countries that have signed the Hague Legislation Convention 1961 are not required to be legalized by the Indian Embassy if it carries a conforming Apostille certificate.

1.8 Rights of the Railway to deal with Tender

The Railway reserves the right of not to invite tenders for any of Railway work or works or to invite open or limited tenders and when tenders are called to accept a tender in whole or in part or reject any tender or all tenders without assigning reasons for any such action. In case if tender is accepted in part by Railway administration, Letter of Acceptance shall be issued as counter offer to the Tenderer, which shall be subject to acceptance by the Tenderer.

The authority for the acceptance of the tender will rest with the Railway. It shall not be obligatory on the said authority to accept the lowest tender or any other tender, and tenderer(s) shall neither demand any explanation for the cause of rejection of his/ their tender nor the Railway to assign

reasons for declining to consider or reject any particular tender or tenders.

If the tenderer(s) deliberately gives / give wrong information in his/ their tender or creates / create circumstances for the acceptance of his/ their tender, the Railway reserves the right to reject such tender at any stage.

1.9 Participation of Joint Ventures.

Joint Venture Firms are not allowed to participate in this tender since the value of the work is below 10 Crore. (Authority: Railway Board letter No. 2002/CE-I/CT/37 JV Pt VIII, dated 14.12.2012)

2. GENERAL CONDITIONS OF CONTRACT

All the conditions of this contract shall be read along with Indian Railways Standard General Conditions of Contract for works - April 2022 with amendments or latest correction slips

2.1 Submission of documents by successful Tenderer

On receipt of "Letter of Acceptance" from Railways, the successful tenderer shall submit the following in Railway prescribed formats.

1. A copy of the "Letter of Acceptance" of tender, duly signed, as a token of acceptance.
2. Power of Attorney for signing in the Agreement, Measurement Book and for all purposes.
3. Performance Guarantee as per Para 16(4) of Part II - Indian Railways Standard General Conditions of Contract, April 2022.

2.2 Security Deposit:

1. The Security Deposit shall be 5% of the contract value. The Bid Security submitted by the Contractor with his tender will be retained/encashed by the Railways as part of security for the due and faithful fulfillment of the contract by the Contractor. Provided further that, if Contractor submits the Cash or Term Deposit Receipt issued from a Scheduled commercial bank of India or irrevocable Bank Guarantee Bond from a Scheduled commercial bank of India, either towards the Full Security Depositor the Part Security Deposit equal to or more than Bid Security, the Railway shall return the Bid Security, to the Contractor.
2. Balance of Security Deposit may be deposited by the Contractor in cash or Term Deposit Receipt issued from Scheduled commercial bank of India or irrevocable Bank Guarantee bond issued from Scheduled commercial bank of India, or may be recovered at the rate of 6% of the bill amount till the full Security Deposit is recovered. Provided also that in case of defaulting Contractor, the Railway may retain any amount due for payment to the Contractor on the pending "on account bills" so that the amounts so retained (including amount guaranteed through Performance Guarantee) may not exceed 10% of the total value of the contract.
3. The Irrevocable Bank Guarantee submitted towards Security deposit shall be initially valid up to the stipulated date of Maintenance period plus 60 days and shall be extended from time to time, depending upon extension of contract granted in terms of Clause 17A and 17B of the Standard General Conditions of Contract.

Note: Security Deposit deposited in cash by the Contractor or recovered from the running bills of a Contractor or submitted by contractor as Term Deposit Receipt(s) can be refunded/returned to the contractor, in lieu of irrevocable Bank Guarantee bond issued from scheduled commercial bank of India, to be submitted by him, for an amount equal to or more than the already available Security Deposit, provided however that, in a contract of value less than Rs. 50 Crore, such refund/ return of the already available Security Deposit is permitted up to two times and in a contract of value equal to or more than Rs. 50 Crore, such refund / return of the already available Security Deposit is permitted up to three times.

2.3 Refund of Security Deposit: Security Deposit mentioned above shall be returned to the Contractor along with or after the following:

- (a) Final Payment of the Contract as per clause 51. (1) of GCC **and**
- (b) Execution of Final Supplementary Agreement or Certification by Engineer that Railway has No Claim on Contractor **and**
- (c) Maintenance Certificate issued, on expiry of the maintenance period as per clause 50. (1), in case applicable.

2.4 Forfeiture of Security Deposit: Whenever the contract is rescinded as a whole under clause 62 (1) of GCC, the Security Deposit already with railways under the contract shall be forfeited. However, in case the contract is rescinded in part or parts under clause 62 (1) of GCC, the Security Deposit shall not be forfeited.

2.5 No interest shall be payable upon the Bid Security and Security Deposit or amounts payable to the Contractor under the Contract, but Government Securities deposited in terms of Sub-Clause 16. (4)(b) of this clause will be payable with interest accrued thereon.

2.6 Performance Guarantee

The procedure for obtaining Performance Guarantee is outlined below:

- (a) The successful bidder shall have to submit a Performance Guarantee (PG) within 21 Twenty-one) days from the date of issue of Letter of Acceptance (LOA). Extension of time for submission of PG beyond 21 (Twenty-one) days and up to 60 days from the date of issue of LOA may be given by the Authority who is competent to sign the contract agreement. However, a penal interest of 12% per annum shall be charged for the delay beyond 21(Twenty-one) days, i.e. from 22nd day after the date of issue of LOA. Further, if the 60th day happens to be a declared holiday in the concerned office of the Railway, submission of PG can be accepted on the next working day.

In all other cases, if the Contractor fails to submit the requisite PG even after 60 days from the date of issue of LOA, the contract is liable to be terminated. In case contract is terminated railway shall be entitled to forfeit Bid Security and other dues payable against that particular contract, subject to maximum of PG amount. In case a tenderer has not submitted Bid Security on the strength of their registration as a Startup recognized by Department of Industrial Policy and Promotion (DIPP) under Ministry of Commerce and Industry, DIPP shall be informed to this effect.

The failed Contractor shall be debarred from participating in re-tender for that work.

- (b) The Performance Guarantee is drawn in the favour of Sr. DFM/UBL
- (c) The successful bidder shall submit the Performance Guarantee (PG) in any of the following forms, amounting to 5% of the original contract value and additional performance guarantee as per clause ***16(4) (h)** in any of the following forms.
 - (i) A deposit of Cash;
 - (ii) Irrevocable Bank Guarantee;
 - (iii) Insurance Surety Bond as per Annexure XVII.

Note:

In case of extension of Date of Completion, selected bidder needs to submit extended Insurance Surety Bond/Fresh Insurance Surety Bond/fresh Performance Security, in any form as given above, before expiry of existing Insurance Surety Bond.

- (iv) Government Securities including State Loan Bonds at 5% below the market value;
- (v) Pay Orders and Demand Drafts tendered by any scheduled commercial Bank of India.
- (vi) Guarantee Bonds executed or Deposits Receipts tendered by any Scheduled commercial Bank of India.
- (vii) Deposit in the Post Office Saving Bank;
- (viii) Deposit in the National Savings Certificates;
- (ix) Twelve years National Defence Certificates;
- (x) Ten years Defence Deposits;
- (xi) National Defence Bonds and
- (xii) Unit Trust Certificates at 5% below market value or at the face value whichever is less. Also, FDR in favour of Sr. DFM/UBL (free from any encumbrance) may be accepted.

Note: *16(4) (h) New Para of part-II of GCC '22

If a tender is accepted on the quoted rates of bidder which is below the advertised tender value, an additional performance security shall be submitted by the bidder as below:

Bid quoted in % of advertised cost	Additional Performance Guarantee (%)
Below 0 – 5 % (inclusive)	Nil
Below 5%	5%

- (d) The Performance Guarantee shall be submitted by the successful bidder after the Letter of Acceptance (LOA) has been issued, but before signing of the contract agreement. This P.G. shall be initially valid up to the stipulated date of completion plus 60 days beyond that. In case, the time for completion of work gets extended, the Contractor shall get the validity of P.G. extended to cover such extended time for completion of work plus 60 days.
- (e) The value of PG to be submitted by the Contractor is based on original contract value and shall not change due to subsequent variation(s) in the original contract value.
- (f) The Performance Guarantee (PG) shall be released after physical completion of the work based on 'Completion Certificate' issued by the competent authority stating that the Contractor has completed the work in all respects satisfactorily.
- (g) Whenever the contract is rescinded, the Performance Guarantee already submitted for the contract shall be encashed.
- (h) The Engineer shall not make a claim under the Performance Guarantee except for amounts to which the President of India is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:
 - (i) Failure by the Contractor to extend the validity of the Performance Guarantee as described herein above, in which event the Engineer may claim the full amount of the Performance Guarantee.
 - (ii) Failure by the Contractor to pay President of India any amount due, either as agreed by the Contractor or determined under any of the Clauses/Conditions of the Agreement, within 30 days of the service of notice to this effect by Engineer.

- (iii) The Contract being determined or rescinded under clause 62 of the GCC.

2.7 Variation in Quantities.

2.7.1 Clause No. 42 of “General Conditions of Contract” shall govern the variations in quantities in this contract.

- i. Unless otherwise specified in the special conditions of the contract, the accepted variation in quantity of each individual item of the contract would be upto 25% of the quantity originally contracted, except in case of foundation work (in which no variation limit shall apply). However, the rates for the increased quantities shall be as under:-
- ii. The Contractor shall be bound to carry out the work at the agreed rates and shall not be entitled to any claim or any compensation whatsoever upto the limit of 25% variation in quantity of individual item of works.
- iii. In case an increase in quantity of an individual item by more than 25% of the agreement quantity is considered unavoidable, then same shall be executed at following rates
 - a. Quantities operated in excess of 125% but upto 140% of the agreement quantity of the concerned item, shall be paid at 98% of the rate awarded for that item in that particular tender;
 - b. Quantities operated in excess of 140% but upto 150% of the agreement quantity of the concerned item shall be paid at 96% of the rate awarded for that item in that particular tender;
 - c. Variation in quantities of individual items beyond 150% will be avoided and would be permitted only in exceptional unavoidable circumstances and shall be paid at 96% of the rate awarded for that item in that particular tender.
 - d. Variation to quantities of Minor Value Item: The limit for varying quantities for minor value items shall be 100% (as against 25% prescribed for other items). A minor value item for this purpose is defined as an item whose original agreement value is less than 1 % of the total original contract value.
 - d.(i) Quantities operated upto and including 100% of the agreement quantity of the concerned minor value item, shall be paid at the rate awarded for that item in that particular tender;
 - d.(ii) Quantities operated in excess of 100% but upto 200% of the agreement quantity of the concerned minor value item, shall be paid at 98% of the rate awarded for that item in that particular tender;
 - d.(iii) Variation in quantities of individual minor value item beyond 200% will be avoided and would be permitted only in exceptional unavoidable circumstances and shall be paid at 96% of the rate awarded for that item in that particular tender.
- iv. In case of earthwork items, the variation limit of 25% shall apply to the gross quantity of earthwork items and variation in the quantities of individual classifications of soil shall not be subject to this limit.
- v. As far as Standard Schedule of Rates (SOR) items are concerned, the variation limit of 25% would apply to the value of SOR schedule as a whole and not on individual SOR items. However, in case of Non Standard Schedule of Rates items, the limit of 25% would apply on the individual items irrespective of the manner of quoting the rate (single percentage rate or individual item rate).

2.7.2 Valuation of Variations:

The enlargements, extensions, diminution, reduction, alterations or additions referred to in Sub- Clause of this Clause shall in no degree affect the validity of the contract; but shall be performed by the Contractor as provided therein and be subject to the same conditions, stipulations and obligations as if they had been originally and expressly included and provided for in the Specifications and Drawings and the amounts to be paid therefore shall be calculated in accordance with the accepted Bill(s) of Quantities. Any extra item(s)/quantities of work falling outside the purview of the provisions of Sub-Clause above shall be paid for at the rates determined under Clause-39 of these Conditions.

2.7.3 Handling Vitiating during Variation in contract quantities

In partial modification of existing instructions, it has been decided that as a result of variations, a contract shall be considered “vitiating” only when, the following percentage variation in contract value between tenderers are noticed to have been executed vide Railway Board letter No.2017/Trans/01/Policy dated 08/02/2018.

SN	Value of contract	Percentage difference between present contractor and new L-1 as a result of variation.(Percentage shall be calculated with base as the revised contract quantities multiplied by the rates of the present contractor.)
1	Small value contracts (Tender value less than Rs.50 lakh)	10
2	Other than small value contracts (Tender value equal to or more than Rs.50 lakh)	5

When the percentage difference between present contractor and new L-1 is noticed as becoming the values specified above, the following action shall be taken.

- i. The Railway administration should immediately examine whether it is practicable to bring in a new agency to carry out the extra quantity of work keeping in view the progress of the work in accordance with the original contract and the nature and lay-out of the work. If it is found that there will be no serious practical difficulty in meeting the additional quantity of work done by another agency, then fresh tenders for the extra quantity may be invited otherwise negotiating the rate with the existing contractor for arriving at a reasonable rate for the additional quantities of work, may be adopted.
- ii. The above shall be regulated as under:
 - a) The case shall be decided by the tender accepting authority (competent for the revised quantity) and shall not be treated as a case of single tender. The provisions of Railway board letter No. 2007/CE. I/CT/18/Pt. XII dated 31.12.2010 hereby gets superseded.
 - b) These instructions will be similarly applicable to earning contracts with H-1, H-2 substituted for L-1, L-2 and so on.
 - c) Executives while executing the work shall make all efforts to ensure that no vitiating takes place in normal circumstances. Vitiating should be an exception rather than a routine affair. Efforts should be made to invite bids on the basis of percentage above/below/at par.
 - d) Vitiating should always be computed with respect to the items, rates, quantities and conditions as available at the time of tender opening and subsequent changes/additions by way of new items will not be counted for computing vitiating.

2.8 Price Variation.

Price Variation Clause (PVC) shall be applicable only in tender having advertised value above Rs. 2 Crores. In case of applicability of PVC, the same shall be dealt with in accordance with provisions of clause No. 46A of GCC-April 2022. following shall be outside the purview of price adjustments (i.e. shall be excluded from the gross value of the work for the purpose of price variation) :

- a) Materials supplied by Railway to the Contractors, either free or at fixed rate;
- b) Any extra item(s) included in subsequent variation falling outside the purview of the Bill(s) of

Quantities of tender, under clause 39. (1)(b) of these Standard General Conditions, unless applicability of PVC and 'Base Month' has been specially agreed, while fixing the rates of such extra item(s).

2.9 Labour

The successful tenderer shall comply with the provisions related to Minimum Wages Act, Employees Provident Fund Scheme, Employees Deposit Linked Insurance Scheme etc., as mentioned in Clause 54 to 60 of Indian Railways Standard General Conditions of Contract, April 2022 or latest.

2.10 Updation of Labour data on Railway's Shramik kalyan portal.

1. Contractor is to abide by the provisions of Payment of Wages Act & Minimum Wages Act in terms of clause 54 and 55 of Indian Railways General Conditions of Contract. In order to ensure the same, an application has been developed and hosted on website "www.shramikkalyan.indianrailways.gov.in". Contractor shall register his firm/company etc. and upload requisite details of labour and their payment in this portal. These details shall be available in Public domain. The Registration/ updation in Portal shall be done as under
 - (a) Contractor shall apply for Onetime registration of his company/firm etc. in the Shramikkalyan portal with requisite details subsequent to issue of Letter of Acceptance. Engineer shall approve the contractor's registration on the portal within 7 days of receipt of such request.
 - (b) Contractor once approved by any Engineer, can create password with Login ID (PAN No.) for subsequent use of portal for all LOAs issued in his favour.
 - (c) The contractor once registered on the portal, shall provide details of his Letter of Acceptance (LOA)/Contract Agreements on shramik kalyan portal within 15 days of issue of LOA for approval of concerned Engineer. Engineer shall update (if required) and approve the details of LOA filled by contractor within 7 days of receipt of such request.
 - (d) After approval of LOA by Engineer, contract shall fill the salient details of contract laborers engaged in the contract and ensure uploading of each wage payment to them on shramik kalyan portal on monthly basis.
 - (e) It shall be mandatory upon the contractor to ensure correct and prompt uploading of all salient details of engaged contractual labour & payments made thereof after each wage period.
2. While processing of any "On Account bill of "Final bill or release of "Advances" or "Performance Guarantee/Security Deposit", contractor shall submit a certificate to the Engineer or Engineer's representatives that "I have uploaded the correct details of contract labours engaged in connection with this contract and payments made to them during the wage period in Railway's Shramikkalyan portal at www.shramikkalyan.indianrailways.gov.in tillMonth, Year".

2.11 Display board

As per clause No. 34(5) of "General Conditions of Contract", the contractor shall be responsible for displaying the details of works, i.e. name of work, Approximate cost, expected date of completion, name and address of the contractor and address of Engineer on a proper board of size not less than 1m x 1m.

2.12 Certificate of Completion of Works:

As soon as in the opinion of the Engineer, the work has been completed and has satisfactorily passed any final test or tests that may be prescribed, the Engineer shall issue a certificate of completion duly indicating the date of completion in respect of the work and the period of maintenance of the work shall commence from the date of completion mentioned in such certificate. The certificate, inter alia, should mention that the work has been completed in all respects and that all the contractual obligations have

been fulfilled by the Contractor and that there is no due from the Contractor to Railways against the contract concerned.

The Engineer may also issue such a certificate indicating date of completion with respect to any part of the work (before the completion of the whole of work), which has been both completed to the satisfaction of the Engineer and occupied or used by the Railway. When any such certificate is given in respect of part of a work, such part shall be considered as completed and the period of maintenance of such part shall commence from the date of completion mentioned in the completion certificate issued for that part of the work.

2.13 Right of Railway to Determine the Contract:

The right of Railway to determine the contract shall be governed by Clause No. 61 of “General Conditions of Contract”, April, 2022.

2.14 Determination of Contract owing to Default of Contractor:

The determination of Contract owing to default of Contractor shall be as per the provisions contained in clause No. 62 of General Conditions of Contract, April 2022.

2.15 Settlement of disputes

Settlement of disputes and the demand of Arbitration shall be as per the provisions contained in clause No. 63 & 64 of General Conditions of Contract, April 2022.

3. SPECIAL CONDITIONS OF CONTRACT - GENERAL

These special conditions should be read in conjunction with the General Instructions of this tender and Indian Railways Standard General Conditions of Contract for works - April 2022 with amendments or latest. In the event of any conflict or inconsistency between the Indian Railways Standard General Conditions of Contract and Special Conditions of Contract, the provisions of Special Conditions of Contract contained herein shall prevail.

3.1 Name of Contract:

Design, supply, erection, testing and commissioning of 220kv/25kv additional Traction Transformer at GKK Traction Sub Station.

3.2 Scope of work:

Design, supply, erection, testing and commissioning of 220kv/25kv bay equipments and associated works at GKK Traction Sub Station (All components excluding traction transformer as it will be supplied By railway) .

The contractor have to design, supply , erect, testing and commission of 220kv/25kv bay equipments and associated works at GKK Traction Sub Station (All components excluding traction transformer as it will be supplied By railway) and also make arrangements for the erection of traction transformer and its associated fittings and NIFPS system.

The quantity furnished for various items in the Work Schedule is only approximate. After issue of LOA, the contractor will be supplied with the tentative schematic electrical sectioning diagram of the tracks to be equipped with 25 kV ac OHE/PSI. Based on this, the Contractor has to conduct detailed survey at site and submit the material assessment statement for the items included in the Work Schedule for the approval of Sr. DEE/TRD/UBL before initiating procurement action. Based on approved material assessment statement, variation statement will be processed for sanction of competent authority for executing the work.

Further, Designs & drawings for OHE/PSI arrangements shall also be submitted for the approval of Railways. On getting approval from Railways for the Designs & drawings, the work has to be planned for execution. If during the course of execution of work, deviations to approved material assessment are noted, revised Material Assessment Statement shall be submitted for approval of Railways.

All the released materials including masts, if any, shall be transported to nearest OHE depot and handed over to the Engineer-in-charge of work with proper record.

3.3 Execution of Contract Document

Indian Railway has launched a web-enabled application IR-Works Contract Management System (IR-WCMS), designed and developed by CRIS (Centre for Railway Information Systems) and it has been hosted on IRCEP (<https://ircep.gov.in>). The application covers all the activities associated with contract handling which inter-alia include the submission of Performance Guarantee, Preparation of signing of the contract agreement, Billing and its integration with IPAS for payment, NS site preparation and sanction, Variation Statement preparation and sanction, Extension of DOC, Release of PG/SD & Correspondence between Railway with the contractor etc. The Tenderer whose tender is accepted shall be required to sign the agreement shared through the IRWCMS duly using their digital signature certificate used for bidding in IREPS.

The Contract Agreement shall be entered into by Railway only after submission of valid Performance Guarantee by the Contractor. Failure to do so shall constitute a breach of the agreement affected by the acceptance of the tender.

If the tenderer on being called upon to sign the contract agreement fail to sign the same within stipulated

period mentioned in tender documents, the bidder shall be banned from submission of bids in any Works / Service Tender issued by Indian Railways for a period of 12 months from the date of such banning done on e-platform IREPS.

3.4 Engineer-in-Charge of work:

Sr. Section Engineer/TRD will be the Engineer-in-Charge of this work, who will supervise and record the measurements for this work. All correspondence with Railways with regard to this works contract shall be routed through the Engineer-in-charge.

3.5 Completion period.

All the works under this contract shall be completed within a period of **12 months** from the date of issue of "Letter of acceptance" of tender. The Railway Administration is entitled to recover the penalty as stipulated in clause 17B of the "General Conditions of Contract" or otherwise specified separately, if the contractor is in default.

3.6 Submission of staff particulars

The following details shall be furnished by the Contractor in respect of the labour employed by him for execution of this contract.

- (i) Name.
- (ii) Valid Medical Fitness Certificate.
- (iii) Police verification certificate for each staff.

3.6.1 Accident Claim Insurance

Accident Claim Insurance for sufficient amount to be taken and documentary proof to be submitted by the contractor for each staff employed by him. This Insurance shall be valid for the entire contract period plus 6 months beyond that.

3.7 Entry Permits and Photo Identity Cards.

The contractor and/or his staff shall neither enter nor be permitted to enter any Railway premises unless he/they are in possession of "Photo Identity Cards" of their own and "Entry Permits" issued by the TRD branch, South Western Railway, Hubballi.

3.8 Quality Assurance Programme.

The following Registers are to be maintained at site in connection with this Works Contract:

- | | | |
|--------------------------------------|---|-------------------------------------|
| 1. Site Order book | - | By Contractor. |
| 2. Hindrance Register | - | By Contractor |
| 3. Material Transaction Register | - | Both by Railways and the Contractor |
| 4. Daily Progress & Labour Register. | - | By Contractor. |
| 5. Cube Testing Register | - | By Contractor |

These registers are to be maintained at site and should be produced during inspection by officials. The formats for maintaining the above-mentioned registers are furnished at Appendix - F to J.

3.9 Workmanship:

1. Good workmanship is an essential requirement. The contractor shall employ a site supervisor for execution/supervision of the work in all respects. The work shall be carried out under the supervision/directions of the Railway's Engineer-in-charge of work or his authorized representative.
2. The Contractor shall employ a qualified technical staff at work site for supervision. Normally, a qualified graduate engineer shall be employed for all works costing 200 lakhs and above and a diploma holder when the work is costing more than 25 lakhs but less than 200 lakhs.
3. The Contractor's Site Engineer shall be permitted to work only after taking the approval of the Engineer-in-charge. In this regard, the Contractor shall submit the details of the Site Engineer along with his request seeking approval of Engineer-in-charge of Railways.
4. In case, the contractor fails to employ the technical staff as aforesaid, he shall be liable to pay an amount of 40000/- in case of graduate engineer and 25000/- in case of diploma holder for each month or part thereof for the default period.
5. Handing over/taking over of Equipment's/works: The contractor shall be bound to hand over the equipment's/works executed under the contract to the Railway, complete in all respects, to the satisfaction of the Engineer. The Engineer-in-charge shall determine the date on which the work is considered to have been completed. For all purposes, the contractor shall be bound to observe any such determination by the Engineer.

3.10 Terms of Payment.

1. No advance payment shall be made to the contractor. Progress payments for completed portions of work as per the Work Schedule will be made, as per provision contained in "General Conditions of Contract works - 2022".
2. Railways shall not be liable for any other charges except the rate accepted as per Price schedule. Under no circumstances, the rates quoted by the contractor and accepted by the Railways shall be enhanced during the entire period of contract.
3. Payment through Letter of Credit (LC)
 - a) The contractor shall have the option to take payment from Railways through a Letter of Credit (LC) arrangement.
 - b) This option of taking payment through LC arrangements has to be exercised in IREPS (Indian Railway Electronic Procurement System - the e-application on which tenders are called by Railways) by the tenderer at the time of bidding itself, and the tenderer shall affirm having read over and agreed to the terms and conditions of the LC option.
 - c) The option so exercised, shall be an integral part of the bidder's offer.
 - d) The above option of taking payment through LC arrangement, once exercised by tenderer at the time of bidding, shall be final and no change shall be permitted, thereafter, during execution of contract.

3.11 Taxes and other Deductions

3.11.1 Income Tax Deductions

Income tax will be deducted at source at the rates notified by the Income Tax Department from time to time and TDS certificate will be issued in form No.16 for such deductions with each bill.

3.11.2 Goods and Services Tax

The work done under this contract would be subjected to the various provisions of The Central Goods and Services Tax Act, 2017(CGST)/ Integrated Goods and Services Tax Act, 2017(IGST)/ Union Territory Goods and Services Tax Act, 2017(UTGST)/ respective state's State Goods and Services Tax Act (SGST) also, as notified by Central/State Govt. & as amended from time to time and applicable taxes.

The Contractor is liable to be registered under CGST/IGST/UTGST/SGST Act and shall submit GSTIN along with other details required under CGST/IGST/UTGST/SGST Act to railway immediately after the award of contract, without which no payment shall be released to the Contractor. The Contractor shall be responsible for deposition of applicable GST to the concerned authority.

3.11.3 Conservancy Cess Charges

Conservancy Cess Charges will be deducted from your bills based on the average No. of Laborer's/Workmen employed per day by you for the above work as under and the same shall be certified by the SSE in-charge. (Ref: Railway Board letter No. F(X)1-95/1/1, dated 07-09-2021).

Sl.	Avg. No. of Laborer's/workman employed per day	Conservancy Cess charges to be recovered (per month)
1	01 to 05	Rs 159/-
2	06 to 10	Rs 312/-
3	11 to 25	Rs 785/-
4	26 to 50	Rs 1143/-
5	51 to 100	Rs 1534/-
6	101 to 200	Rs 1926/-
7	201 to 300	Rs 2318/-
8	301 to 750	Rs 2676/-
9	751 to 1500	Rs 5382/-
10	1501 to 3000	Rs.10768/-

3.11.4 Taxes on Schedule Items of Work

All rates quoted in the tenders shall be deemed to be inclusive of Goods and Services tax, duties, royalties, octroi, cess etc. payable by the contractor to the Govt. or any other public body and no additional amount/rate or claim will be entertained on this account by the Railways. Also no claim whatsoever will be accepted by Railways on account of revision of tax rates, introduction of new taxes of statutory nature by State/Central Govt.

3.12 Swachh Bharat Mission

The contractor must maintain a clean work area. Not only after the completion of the contract, but he should also continue to clean the work area during the performance of the contract. For achieving this, the following shall be done.

1. A spot for dumping of the debris should be identified.
2. Each bill will be accompanied by a certificate by the concerned railway supervisor that the debris for the work done till the stage of payment (for which the bill is being put up) has been cleared and dumped at the nominated site. This will also be subjected to check by officers as per the provisions of test check.
3. The supervisors in the field should be asked to nominate the dumping spot for the debris and advise the contractors in writing.

3.13 Noteworthy Instructions

1. The contractor shall obtain special permit from the Railway to enable his workers to work at, to bring to or to take materials from work spot.
2. The list of released materials shall be jointly prepared on the basis of field survey to be conducted by the “Sr. Section Engineer/TRD” and contractor’s representative after the work has been awarded but before dismantling work is allowed to commence. The contractor shall be bound to handover the materials according to the said agreed list and should be responsible for any shortages.
3. In the case of any differences of opinion regarding the quality of work or quality of the materials, the decision of the Engineer-in-charge shall be final and binding on the Contractor.
4. If there are varying or conflicting provisions in the documents forming part of the contract, the Engineer-in-charge shall be the deciding authority with regard to the intentions of the provisions and his decision shall be final and binding on the contractor.
5. The work shall be carried out generally in conformity with the Railway specifications, except as amended or modified by these “Special Conditions of Contract” and directions, if any, in writing by the Engineer-in-charge of the work.
6. The program and method of work shall be furnished by the contractor well in time in consultation with Engineer –in-charge of the work.
7. No free passes or transport will be arranged by the Railways for the movement of contractor and his staff.
8. Communication handed over to the contractor’s personnel at site/over phone/FAX/mail shall be deemed to have reached his office.
9. The several documents forming the Contract are to be taken as mutually complementary to one another.

3.14 Care in Submission of Tenders:

- 3.14.1 Before submitting a tender, the tenderer will be deemed to have satisfied himself by actual inspection of the site and locality of the works, that all conditions liable to be encountered during the execution of the works are taken into account and that the rates he enters in the tender forms are adequate and all-inclusive to accord with the provisions in Clause-37 of the Standard General Conditions of Contract for the completion of works to the entire satisfaction of the Engineer
- 3.14.2 Tenderers will examine the various provisions of The Central Goods and Services Tax Act, 2017(CGST)/ Integrated Goods and Services Tax Act, 2017(IGST)/ Union Territory Goods and Services Tax Act, 2017(UTGST)/ respective state’s State Goods and Services Tax Act (SGST) also, as notified by Central/State Govt.& as amended from time to time and applicable taxes before bidding. Tenderers will ensure that full benefit of Input Tax Credit (ITC) likely to be availed by them is duly considered while quoting rates
- 3.14.3 The successful tenderer who is liable to be registered under CGST/IGST/UTGST/SGST Act shall submit GSTIN along with other details required under CGST/IGST/UTGST/SGST Act to railway immediately after the award of contract, without which no payment shall be released to the Contractor. The Contractor shall be responsible for deposition of applicable GST to the concerned authority
- 3.14.4 In case the successful tenderer is not liable to be registered under CGST/IGST/UTGST/ SGST Act, the railway shall deduct the applicable GST from his/their bills under reverse charge mechanism (RCM) and deposit the same to the concerned authority.

3.14.5 Advance Correction Slip No. 6 to Indian Railways Standard General Conditions of Contract

New Para 6(a)(v), Part I of GCC shall be read as under:

- 6(a)(v) Contractor shall be liable to pay/refund the amount collected as GST to the Indian Railways along with interest and penalties, if any imposed by the authorities, in case GST input tax credit of Indian Railways is denied/rejected by the tax authorities due to reasons mentioned below but not limited to:

Wrong/incorrect invoice issued by Contractor;
 No-filing of GST returns;
 Non-payment of GST collected from Indian Railways to the authorities;
 Any other non-compliance done by Contractor;

General Indemnity: Contractor hereby agrees to indemnify and hold harmless the Indian Railways from and against any and all losses, including loss on account of Input Tax Credit and all losses incurred by the Indian Railways relating to or arising out of or in connection with any actual or threatened claim, legal action, proceedings, prosecution or inquiry by or against the Indian Railways arising out, directly or indirectly, of failure by the contractor to comply with the provisions of GST and related laws, or based upon or arising from any failure by the Contractor.

Retention Money: Any payment liable to be paid by Indian Railways to contractor against the goods or services or both supplied by such contractor to Indian Railways shall be kept on hold in case supplier makes any non-compliance of any of the GST law provisions including non-reporting of invoices in GST returns. Such payment shall be released after proper verification of records and availability of ITC to Indian Railways as per provisions of GST Law.

- 3.15** Due to increase in cable cuts it is advised to Contractor While the digging work at site be care full about Railway signaling, telecom, electrical etc., If any cables cut while digging near or vicinity to railway signal telecom, electrical etc., the penalties will be imposed, to bind them legally for ensuring recoveries from them. As per the Railway Board Letter No: 2023/CE-I/EDCE(G)/Misc.Dated:18.04.2023 & No. H/G.157/DRM/Misc./OFC/Quad-Cable dated: 22.05.2024

4. SPECIAL CONDITIONS OF CONTRACT – TECHNICAL

4.1 Supply of materials (Equipment's, fittings& Components)

- 4.1.1 All the materials/equipment's/fittings/components required for successful completion of this work shall be procured only from RDSO/CORE approved sources. If for any item, no RDSO/CORE approved sources are available, the said item conforming to relevant RDSO specification/drawing shall be procured from other sources.
- 4.1.2 Insulators: As per extant instructions, 1050 mm CD porcelain insulators shall be used for Stay Arm, Bracket and 9 Tonne insulators. Composite type of insulators shall be used only on Railway's demand. Prior approval from Railways shall be obtained for using composite type of insulators

4.2 Inspection

1. The inspecting Officer(s) for this contract shall be RITES or the Engineer in-charge of this work or his authorized representative, as the case may be. Two weeks' notice must be given by the contractor to the Inspecting Officer to take up inspection. For the materials of purchase value 5.00 lakhs and above, inspection shall be done by RITES. For materials of purchase value below 5.00 lakhs, inspection shall be done by the consignee.
2. In special cases (to be indicated by the tenderer) where the inspection involves technical expertise or facility, that is ordinarily not available with the consignee, RITES inspection may be insisted upon, even if the value of purchase order does not exceed Rs. 5 lakhs.
3. As per the extant standing instruction / policy all OHE items should be inspected only by RITES/RDSO.
4. Consequence of Rejection: On the materials/equipment's/fittings/components being rejected by the inspecting Officer or his authorized representative, the contractor shall replace/redo the rejected portion of the work forthwith but in any event not more than 2 weeks. The contractor shall bear all the cost of such rejection including freight, unloading etc. The Contractors are not entitled to any extra time in the completion period on this account.
5. Inspection charges of M/s. RITES shall be borne by the Contractor, whether the inspected material is finally utilized in the work or not.
6. In the case of Consignee inspection, all facilities for free and fair testing and inspection shall be arranged by the Contractor/Suppliers at their works.

4.3 Guarantee / Maintenance Period:

1. The contractor shall guarantee satisfactory working of the installations supplied and erected by him, for a period of 24 (**Twenty Four**) months after their delivery or 12 months from the date of placement in service whichever shall be sooner and this warranty shall survive notwithstanding the fact that the goods/stores/articles may have been inspected, accepted and payment therefore made by the Purchaser. The said period is treated as the Maintenance period in this contract.
2. During the period of guarantee (Maintenance period), the contractor shall attend to any defects and replace the equipment/components resulting from defective erection or defects in the equipment's supplied by the contractor.
3. In the case of materials, components, fittings and equipment's supplied by the Railway, no liability

will rest on the contractor for failures on account of defective materials and for any consequential damages.

4.4 SPECIFIED RAILWAY STORES

1. The list of Railway supply materials are furnished in **Appendix-E**. All other materials required for the successful completion of the work shall be arranged by the Contractor.
2. All Railway materials to be issued by Railways will be issued to the contractor as per relevant clauses of General Conditions of OHE Contract. The contractor shall make necessary arrangements so as to protect the Railway materials from pilferage/theft/loss and maintain them in good condition in such a way that while in storage they do not suffer any deterioration in quality in any manner whatsoever and shall have to compensate the Railways, in case the materials are considered to have been damaged, deteriorated, or have come to such a state that the same cannot be allowed to be installed/used. Railway will not be responsible for any damage/loss/deficiency/deterioration in quality suffered by the materials issued to them (Please refer other conditions of contract). The contractor shall maintain proper account for the materials issued to their workman for installation and the remaining quantity of the material. All Railway materials shall be exclusively used for installation/use for the purpose for which it is issued and the contractor shall not divert/remove the materials issued to Railways for any other work not connected with this tender enquiry.

4.5 RAILWAY STORES

- 4.5.1 If any material/complete set of materials for a particular item in the agreement is supplied by the Railway either at the contractor's request or suo moto in order to prevent any possible delay in the execution of the works likely to occur due to the contractor's inability to make adequate arrangement for supply thereof or otherwise, recovery will be made from contractor's bill at the accepted rate in the agreement for that particular item plus 5% on account of initial freight and 2 % on account of incidental charges together with supervision charges at 12.5% of the total cost inclusive of material, freight and incidental charges. Freight between the Railway's source of supply and the contractor's depot or rail head shall be to the contractor's account.

For example:

1.	The cost of material	-	Say	100.00
2.	Initial freight @ 5%	-		5.00
3.	Incidental charges @ 2%	-		2.00
4.	Total	-		107.00
5.	Supervision charges @ 12.5%	-		13.38
6.	TOTAL	-		120.38

- 4.5.2 In the case of a part / component forming part of a complete set of materials for a particular item, the recovery will be made at the last purchase rate or at the budgetary rate obtained from an RDSO/CORE approved source within a period of 6 (six) months from the date of completion of the work.
- 4.5.3 If, however, the material required by the contractor is not available in Railway's stock or the Railway decides not to supply the same, be that for whatever reason, the Railway shall not be bound to arrange for the supply at cost quoted above, or at any other cost nor will this fact be accepted as an excuse for delay in execution of works.

- 4.5.4 If the contractor runs short of materials and such materials are available in the Railways stock, the materials may be supplied by the Railway on loan basis to the contractor, who will return these on receipt of the supplies or within 3 months whichever is earlier. This is subject to a written request and production of a standing indemnity bond by the contractor. If the contractor fails to return the materials within the above-mentioned period, recovery will be made from the contractor's bill as detailed in clause No. 3.1 & 3.2 above.

4.6 LADDER TROLLEYS

The contractor may use light ladder trolleys on tracks for carrying out installation of droppers and adjustments of traction overhead equipment. The ladder trolleys shall not be more than 200 Kg and should be capable of being removed from the track easily and quickly.

4.7 TOWER WAGON

For final checking of OHE only, Tower Wagon will be spared by Railways free of charge. The Tower Wagon shall not be utilized for transportation of Contractor's materials or released materials including masts.

4.8 TRAFFIC BLOCKS / POWER BLOCKS

- 4.8.1 The Railway will make arrangement to obtain traffic blocks (herein after referred to as "blocks") necessary for the running and / operation of work trains and light ladder trolleys and track lorries for works to be carried out along or adjacent to the track. The contractor shall, however carry out maximum amount of work possible without blocks. Works such as grouting of traction masts, muffing, and erection of brackets shall invariably be done without traffic blocks. Installation of droppers and adjustment of traction overhead equipment may also be permitted to be carried out with light ladder trolleys protected by banner flags in accordance with general and subsidiary Rules of Indian Railways, under power block, if necessary.
- 4.8.2 Blocks will normally be granted during day light hours; if however, it becomes absolutely necessary, block may be granted during night also. The contractor shall confirm that he will equip himself to carry out all construction work during night blocks, efficiently, by suitable special lighting equipment's without any extra cost, if required to do so. The blocks granted will ordinary be on one track at a time over a distance covered by one or two consecutive block sections. In case of blocks to be granted after sunset, the contractor will be informed at least 7 days in advance. The duration of blocks, normal and maximum, which would ordinarily be granted on different tracks and in different section, during day and / or night time. Blocks shall not be availed of by the contractor when it is not possible for him to complete the specified work within the block period granted by the Railway.
- 4.8.3 The contractor shall be levied with penalty as per Railway's prescribed rules in case of power block/ Line block burst as decided by Engineer in-charge.
- 4.8.4 All efforts will be made to sanction maximum power block. However, it depends entirely on nature of traffic. Hence, it shall not be made an excuse for delay in execution of work.

4.9 SAFETY MEASURE

4.9.1 Safety Rules to be followed during working

The contractor shall be solely responsible for the safety of all the staff deployed by him. In case of any injury or accident to the staff while on duty, the contractor is liable for their compensation. Railway will

not take any responsibility in such cases.

The contractor shall provide badge, uniform safety belts, shock proof safety shoes, raincoats and helmets etc. to all his staff who are authorized to work on OHE.

The contractor shall have to take all necessary precautions to prevent possible electrical accidents due to proximity of adjacent live OHE, unless otherwise a power block is granted on the adjacent line. The contractor shall also take all precautions to protect his staff working on the line against traffic (running of trains involving both longitudinal and cross movements) on the working/adjacent lines.

4.9.2 Accident, Safety of Men and Material.

1. The contractor shall be fully responsible for ensuring safety at all times and shall bear the cost of all damages in cases of accidents/ unusual occurrences resulting in damages to Railway property.
2. The contractor shall not permit their staff to work on the posts carrying overhead conductors or any other current carrying parts unless he had received in writing the permit to work from the authorized Railway representatives. He shall have to ensure that the supply lines are dead and earthed before commencing the work on the overhead conductors or any other current carrying parts.
3. The Tenderer/Contractor must ensure the safety of the labourers engaged by him while executing the work and the Railway will not be responsible for any injury sustained by the labourers due to any accident or any other fatalities. The labourers should be fully aware of all the safe working practices on 25 kV AC Traction.
4. The Contractor shall take all precautionary measures not only for protection of his own personnel moving about or working on the Railway premises, but also confirms to the rules and regulations of the Railways in this respect.

4.9.3 The contractor shall take all precautionary measures in order to ensure the protection of his own personnel moving about or working on the Railway premises, but shall then conform to the rules and regulations of the Railway, if and when, in the course of the works there is likely to be any danger to persons in the employment of the contractor due to running traffic while working in the Railway siding and premises. The contractor shall apply, in writing, to the Railway to provide flagmen or lock-out men for protection of such persons. The Railway will, however, decide as to whether it is necessary to post such flagmen for various types of work and also the number of such men required to protect the gang or gangs of contractor's staff working at site. The Railway shall remain indemnified by the contractor in the event of any accident occurring in the normal course of work arising out of the failure of contractor or his men to exercise reasonable precaution at all places of work whether or not the Railway decides to post flagmen at any particular site of work. The flagmen will be appointed by the Railway and no expense on this account will be charged from the contractor.

4.9.4 Blasting of rock for foundation work shall be done only after due notice is given to the Railway and time/s and date/s for blasting operation agreed to by the Railway. Blasting, if required to be done in the vicinity of the track, shall not be undertaken until the Railway's flagmen on duty take necessary steps to protect trains and the track is adequately protected by the contractor against damages by blasted rock. The contractor shall follow detailed instructions, which will be issued to him regarding blasting operations in the vicinity of tracks.

4.9.5 During stringing operations, every care shall be taken to prevent conductors hanging low over tracks on which traffic block has not been given. All conductors shall be pulled out before traffic block is cleared so that such conductors do not infringe with moving traffic.

- 4.9.6** Ladder trolleys, if required, shall be used with caution. They shall not be put on track/s until the Railway's flagmen are on duty to protect the trolleys and the Railway's representative authorizes in writing for the trolleys to be put on the track/s. Ladder Trolleys shall be promptly removed on instructions from the Railway's representative and well in advance of trains. No claim shall rest on the Railway in the event of a ladder trolley being run over by a train.
- 4.9.7** The contractor shall abide by all Railway regulations and Indian Electricity Rules, 1956 in force for the time being and ensure that the same are followed by his Representative, Agent or sub-Contractor or workmen. He shall give due notice to his employees and workers about provision of this para.
- 4.9.8** While working within station limits, especially on a platform/passenger platform, the contractor shall ensure that at all times sufficient space is left for free movement of passengers. He must cover and/or barricade the excavations carried out in such areas and continue to maintain these, till the work is completed, with a view to avoid any accident to public or to Railway staff.
- 4.9.9** The works must be carried out most carefully without any infringement of the Indian Railway Act or the General and Subsidiary Rules in force on the Railway, in such a way that they do not hinder Railway operation nor affect the proper functioning of or damage any Railway equipment, structure or rolling stock except as agreed to by the Railway provided that all damage and disfiguration caused by the contractor of any railway property must be made good by the contractor at his own cost failing which, cost of such repairs shall be recovered from the contractor.
- 4.9.10** If safety of track or tracks, drainage etc. is affected, as a consequence of works under taken by the contractor, the contractor shall take immediate steps to restore normal conditions. In case of delay, the Railway shall, after giving due notice to the contractor, in writing, take necessary steps and recover the costs from the contractor.
- 4.9.11** If at any time, the works to be carried out directly concern the safety of trains, the contractor staff must comply fully with the Railway regulation given to him by the authorized Railway staff. The contractor's employees and workers may for no reason operate any installations concerning train safety or train movement. They shall notify the authorized representative, of the Railway who will take all necessary steps in this regard.
- 4.9.12** The contractor shall be responsible for the safe custody of all equipment till provisional acceptance. Should the situation warrant posting of armed guards for protection from thefts, the same will be provided by the Railway, at his own cost and at his discretion. The contractor shall apply to the Railway explaining the circumstances under which posting of armed guards is considered necessary by him. At the same time, the details of the requirement and the number of personnel of armed guards, where and when required, shall also be furnished.
- 4.9.13** The contractor shall ensure the unauthorized, careless or inadvertent operation of switchgear, which may result in accident to staff and/ or damage to equipment, does not occur.

4.10 PROVISIONAL ACCEPTANCE

After completion of the work the contractor can seek the provisional acceptance certificate which shall be issued after the successful completion and its inspection by the authorized Railway Engineer.

4.11 FINAL ACCEPTANCE

- 4.11.1** The final acceptance of the entire equipment installed under this contract shall take effect from the date of expiry of the period of guarantee (Maintenance period), provided that the Contractor has complied fully with his obligations against the contract as per the terms & conditions of the agreement.

- 4.11.2 If on the other hand, the Contractor has not so complied with his obligations against the contract as per the terms & conditions of the agreement, the Railway may either extend the period of guarantee until the necessary works are carried out by the contractor or carry out those works or have them carried out suomoto on behalf of the contractor at the contractor's expense. After expiry of the period of guarantee, a certificate of final acceptance shall be issued by the Railway.
- 4.11.3 All instructions and clauses shall be applicable as per GCC-2022 along with all Advance Correction Slips/correction slips issued up to the date of invitation of tender**

5. EXPLANATORY NOTES OF SCHEDULE OF WORK

SECTION–I–GENERAL

1. Explanatory notes for various items of work included in the “Schedule of Work” are given below
2. The basic quantities of components and materials required to make up a unit of work for selected items are indicated for guidance only. There may be minor variations to suit erection but no adjustment in prices shall be made on that account. In estimating the prices for various items of work provision for loss and wastage in transit and erection should be provided for, over and above the basic quantities of components and materials required to make up a unit of work, indicated herein except where otherwise specified for materials supplied by the Railways.
3. In the explanatory notes given in Section-II of this chapter, the term “small parts steel work” is meant to cover fabricated steel work made from rolled steel sections, complete with bolts and nuts and washers wherever required for fastening the small parts steel work to any structural member. The terms „attachment” wherever used is intended to cover castings, forging, machined welded components or fittings which are attached directly to a structural member, or mounted on small parts steel work and shall include bolts and nuts fastening the attachment to the structural member of small parts steel work.
4. In the explanatory notes given in section-II of this chapter, the term „bimetallic connection” is meant to cover any connection between a copper conductor and an aluminum conductor. The clamps used for such connections shall be made of a suitable aluminium alloy or copper alloy and the copper/ aluminum conductor shall be wrapped with a bimetallic aluminium/ copper strip to prevent direct contact between aluminum and copper.
5. Special notes for measurements are included in section-II of this chapter under various items wherever necessary.
6. In the case of wires, conductors, etc. the prices for erection shall include any assembly work to be done in the contractor’s depot prior to erection at site, such as fabrication of dropper etc. to shapes and sizes required.
7. In case of disputes over the scope of work covered under the explanatory notes of various items, the decision of the Engineer-in-charge will be final and binding on the contractor. The Various guidelines/instructions issued by RDSO/Rly. Board from time to time in the design aspects of OHE including the Weight Schedule shall be taken into consideration while executing the work without any extra cost.
8. The 70% Payment of the Supply Items will be made after the supply of Supply Items and the remaining 30% of the payment of supply items will be made after the Erection.

SECTION – II

Explanatory Notes

SCHEDULE - A

Item No 1: Design and drawings for 220/27 or 132/27 KV or 110/27 KV or 66/27KV traction sub-station including feeding post and capacitor bank (Erection)

The prices shall cover on a flat rate basis preparation, of all designs and drawings required in connection with supply, erection, testing and commissioning of 220/27kv 110/27 KV 27KV traction sub-station, DPI, Tr. Transformer, SF-6 Circuit Breaker, feeding posts Shunt Capacitor equipment at the traction sub-stations. The price shall also cover on a flat rate basis cost of survey, investigation of soil bearing pressure and soil resistivity, preparation of cross section drawing, general arrangement drawings, detailed layout of equipment's, bus bar connections and insulators, layout of cable trenches out door and inside the control room, layout of the earthing system and earth connection layout, design of supporting structures, detailed drawings for steel work and structural support, suitable concrete pedestals and foundations for equipment's components, fittings and materials. The price shall include supply of requisite number of copies of all drawings including completion drawings to the Purchaser. The price shall also include supply of required number of copies of designs, drawings, technical booklets and completion drawings as mentioned in tender specification.

Item No 2 & 3: Supply, erection, testing & commissioning of 220 or 132 or 110 KV double pole SF-6 gas circuit breakers with interlock (Supply & Erection)

The price shall cover supply, erection, testing & commissioning of 220kv or 132 KV or 110 KV double pole SF-6 Gas Circuit Breakers, complete with operating mechanism, all fittings and accessories including terminal connectors. The price shall cover grouting the supporting frame and Mechanism box on foundations block and mounting of other accessories in their respective places. It shall also cover first gas filling (gas required for first filling shall be supplied by the Purchaser), testing and commissioning of the circuit breaker. The price shall also cover the supply and erection of an enameled number plate. The Contractor shall make his own arrangement for filling of the SF-6 gas and power supply required for testing purpose. All necessary tools, equipment, instruments required for carrying out necessary checks, tests and commissioning shall be arranged by the Contractor

Item No 4 & 5: Supply, erection, testing & commissioning of 220 or 132 KV double isolators (manually operated) (Supply & Erection)

The price shall cover supply, erection, testing & commissioning and connecting up of a 132KV single phase double pole Isolator with manually operated mechanism complete with mounting base and all accessories/required for its operation including terminal connectors. The price shall include supply and erection of an enameled number plate and padlock. The price shall include mounting of the Isolator and the operating rod in position and their alignment for smooth and trouble free operation. The prices shall also include the cost of 220 or 132KV solid core post insulator and operating rod. 132 KV Double Pole Isolators (Manually operated) shall conform to RDSO specification No. ETI/ PSI/ 122(3/89) with A&C slip No.1 or latest amendments

Item No 6 & 7: Supply, erection, testing and commissioning of 220 or 110 KV current transformer assembly (400-200/5A) (Supply & Erection)

The price shall cover supply, erection, testing & commissioning and connecting up of a 110 KV Current Transformer(400-200/5A) complete with all fittings and accessories including terminal connectors. It shall also include mounting of the transformer in position, and supply and erection of an enameled number plate. The 220 or 110 KV Current Transformers shall conform to RDSO specification No. ETI/PSI/117 (7/88) with A&C slip No.1 to 9 or latest amendments.

Item No 8 & 9: Supply, erection, testing and commissioning of 198 KV lightning arrestors. (Supply & Erection)

The price shall cover supply, erection, testing & commissioning and connecting up of a 198 KV Lightning arrester with surge counters complete with all fittings and accessories including terminal connector. It shall also include mounting of the Lightning arrester in position and supply and erection of and enameled number plate. 198 KV Lightning Arrestors shall conform to RDSO specification no. ETI/PSI/ 137(8/89) with A&C slip No.1 to 7 or latest amendments.

Item No 10 & 11: Supply & erection of 220KV or 110 or 132 KV support insulators with fittings and fasteners (Supply & Erection)

The price shall cover supply and erection of 220KV or 110 or 132KV support insulators complete with fixing bolts, nuts and studs. Bus-bar/ jumper clamps for clamping the bus-bar shall be paid under item bus bar junctions & connectors

Item No 12 & 13: Supply & erection of 220 or 110 or 132 KV termination with/without adjuster complete with disc insulators (Supply and Erection)

Termination with adjuster complete with disc insulators

The price shall cover supply and erection of all materials for the termination of a single ACSR conductor (61/3.18 mm ZEBRA) strung between gantries/portals, including anchor fittings, single clevis assembly, adjuster, anchor double straps, string ring of 16nos. of 280mm (11") Disc Insulators strain clamps and arcing and other fittings to complete the assembly. The assembly shall be of breaking strength of not less than 11500 kgf.

Termination without adjuster complete with disc insulators

The price shall cover supply and erection of all materials for the termination of a single ACSR conductor (61/3.18 mm ZEBRA) strung between gantries/portals, including anchor fittings, single clevis assembly, anchor double straps, string of 16nos. of 280mm (11") Disc Insulators, strain clamps and arcing ring and other fittings to complete the assembly. The assembly shall be of breaking strength of not less than 11500 kg..

Item No 14: supply, erection, testing & commissioning of 220/27 KV, 21.6/30.24 MVA, ONAN/ONAF, single phase traction power transformers (Erection)

The price shall cover erection, testing & commissioning of 220 KV/27KV single phase traction power transformer complete with all accessories including oil as per RDSO Spec. No. ETI/PSI/118 (10/93) with A&C slip no.01 to 10 or latest amendments for 21.6/30.24 MVA, ONAN/ONAF traction power transformer. The price shall cover transportation & unloading charges of power transformer to the sub-station premises.

Item No 15 & 16: Supply, erection, testing & commissioning of 25 KV single pole Vacuum circuit breaker with interlocking of rating 1600 amps (Supply & erection)

The price shall cover supply, erection, testing & commissioning of 25kV Vacuum Circuit breaker with interlocking of rating 1600 amps, complete with operating mechanism, all fittings, and accessories including terminal connectors. The price shall cover grouting the supporting frame and mechanism box on foundation block and mounting of other accessories in their respective places. It shall also cover testing and commissioning of the circuit breaker with interlocking of rating 1600 amps. The price shall also cover the supply and erection of an enamelled number plate. All necessary tools, equipment's instruments required for carrying out necessary checks and tests and commissioning shall be arranged by the Contractor.

Item No 17 & 18: Supply, erection, testing and commissioning of 25 KV current transformers (1500-750/5A) (Supply & Erection)

The price shall cover supply, erection, testing & commissioning and connecting up of a 25KV Current Transformer complete with all fittings and accessories including terminal connectors. It shall include mounting of the transformer in position and supply and erection of an enamelled number plate. 25KV Current Transformers (1500-750/5) shall conform to RDSO specification No. ETI/ PSI/90(6/95) with A&C slip No.1 to 8 or latest amendments

Item No 19 & 20: Supply & erection of tubular aluminium bus bars 50 mm x 39 mm dia including

all connectors, bus splice etc. (Supply & Erection)

The price shall cover supply and erection per meter length of 50x39mm dia. Aluminium tube to serve as bus bar or equipment to equipment bus-bar connection in the traction sub-station, wherever required. The price shall include bending, shaping and connecting/ clamping of the Aluminium tube to the equipment terminals/bus-bar supports as required.

Item No 21 & 22: Supply & erection of 'Zebra' ACSR conductor including all connectors etc. (Supply & Erection)

The price shall cover supply and erection per meter length of 61/3.18 mm (ZEBRA ACSR) conductor to serve as bus-bar or equipment to equipment/bus-bar connection in the traction sub-station, wherever required. The price shall include straightening, shaping and connecting/clamping of the conductor to the equipment terminals/bus bar supports as required.

Item No 23 & 24: Supply & erection of copper jumper with fittings and fasteners required for TSS (Supply & Erection)

The price shall cover supply & erection of all type of Copper jumpers with fittings and fasteners required for TSS

Supply and erection of 50 Sq.mm (19/1.8 mm) small copper jumpers.

The price shall cover supply of Small jumper wire size 50 Sq.mm (19/1.80 mm) made of annealed stranded 100% pure copper conductor, and on a flat rate basis, the supply of all components and fittings required for providing a flexible small copper jumper connection, including supply of parallel clamps, bi-metallic and Aluminium Copper Al-Cu strips, wherever required, and bolted type terminal connector where ever required. The price shall also cover the erection of the complete jumper assembly including jumper wire. The price shall not, however, be applicable for jumper connections already including under item 6(a) and 10, but shall be applicable for any small jumper connection in any combination required for lightening arresters and isolators etc. Anti-theft jumper as per drawing No. ETI/OHE/G/ 05107, with latest mod. for connecting out-of-run OHE with the in running OHE at insulated/un-insulated over-lap locations and also ant creep locations at polluted zone wherever considered necessary will be payable under this item.

Supply of materials and erection of a large copper jumper 160 Sq. mm between Aluminium bus and cross feeder

This jumper shall be provided between 36 mm Aluminium bus and the copper cross feeder at SP/SSP/FP/BT locations. The price shall cover the supply of 160sqmm flexible copper jumper wire, made of annealed stranded 100% pure copper conductor as per RDSO's specification ETI/OHE/3(2/94) with A&C Slip No 1 (latest spec.), all components and fittings required for providing a flexible copper jumper (160 Sq. mm) and connection between 36 mm Aluminium bus and cross feeder including Terminal connector 19mm multiple hole bolted type (1009), parallel clamps (1050-3), Al-Cu bimetallic strips, fasteners. The price shall also cover the erection of the complete jumper assembly including jumper wire.

Supply of materials and erection of a large copper jumper 160 Sq. mm between cross feeder and OHE.

This jumper shall be provided between copper cross feeders and OHE. The price shall cover supply of 160 sq. mm flexible copper jumper wire, made of annealed standard 100% pure copper conductor as per RDSO's specification ETI/OHE/3(2/94) with A&C Slip No 1(latest spec.), and all components and fittings required for providing a flexible copper jumper (160 Sq. mm) between copper cross feeder and existing OHE, including Parallel clamps (1030-3 & 1050-3) complete with fasteners etc. as required. The price shall also cover the erection of the complete jumper assembly including jumper wire.

Item No 25: Supply, erection testing & commissioning of 240 Volt AC and 110 V DC Distribution boards in the control room (Supply)

The price shall cover supply, testing & commissioning of a 240 VOLT and 110V DC distribution board in the control room. The price shall include the grouting of the frame work of the distribution board in position or mounting it on the wall and necessary connections. 240 volt and 110V D.C. Distribution Board shall conform to RDSO specification as indicated in Annexure 1(c), or latest amendments.

Item No 26 & 27: Supply and erection of earth electrode. (Supply & Erection)

The price shall cover supply and erection of an earthing station with a single pipe embedded into the ground

by driving or otherwise complete with protective concrete box and lugs suitable for directly connecting two mild steel flats of minimum size 50 mm x 6 mm, a typical drawing of which is included in Annexure-I. The price shall cover the provision of a protective concrete box with removable cover as shown in the drawing. The price shall include the testing of earth value and painting the particulars on the box.

NOTE: 1) The price shall be inclusive of concrete box with cover for this item

The earth electrodes shall normally be of mild steel galvanised perforated pipe of not less than 40mm nominal bore of about 3m length provided with a spike at one end and welded lug suitable for taking directly MS flat of required size at other end. The pipe shall be embedded vertically into the ground as far as possible except in case of hard rock, it may be buried inclined, the inclination being limited to 30 degrees from the vertical. The connection of MS flats to each electrode shall be made through MS links by bolted joints. A typical drawing of one earth electrode installation is indicated in Annexure-1. If the value of earth resistance specified may not be achieved with a reasonable number of electrodes connected in parallel such as in rocky soil or soil of high resistivity,

The earth surrounding the electrodes shall be chemically treated by alternative layers of finely divided coke, crushed coal or charcoal and salt at least 150mm all around. However, coke treatment shall be used only where absolutely necessary and such electrodes shall not be situated within 6 m of other metal work. In high embankments, use of electrodes longer than 3 m shall be considered so as to reach the parent soil to achieve earth resistance as specified.

Item No 28: Extra payment on TSS-20 for excavation in hard soil/soft rock requiring machine drilling/breaking (Erection)

The Price shall cover extra payment in for excavation hard-soil / soft rock requiring machine drilling/breaking for erection.

Item No 29 & 30: Supply and erection of earth leads 75 x 8 mm mild steel flat laid in the ground or exposed as per site requirement (Supply & Erection)

The price shall cover supply and installation per meter length of 75x8mm mild steel flat, buried at a depth of 60cm below ground level. The price shall also cover connections of the steel flats to the earth electrodes to constitute the main earth ring and to the earthed terminals of the 110/25kV transformers etc. as required

Item No 31 & 32: Supply and erection of earth leads 50 x6 mm mild steel flat laid in the ground or exposed as per site requirement (Supply & Erection)

The price shall cover supply and installation per meter length of 50x6mm mild steel flat buried at a depth of 60cm below ground level. The price shall also cover connections of the steel flats to the main earth ring and to the steel structures and metallic frame work/terminals of various equipments, as required.

Note (For Item No. 29 & 30 and Item No, 31 & 32)

- 1) The price for item No. 29 & 30 and Item No, 31 & 32 shall cover supply and installation of a buried rail of approx..13m length.

ITEM NO: 29 & 30 (a) Earth leads 75x8 mm mild steel flat laid exposed.

The price shall cover supply and installation per meter length of 75x8 mm mild steel flat, painted all around with two coats of painting to colour grass green shade-218 of IS:5 passing through cable trench or exposed above ground level. The price shall also cover the connections of the steel flats to the earth electrodes, to constitute the main earth ring and to the earthed terminals of the various equipments as required.

ITEM NO: 31 & 32 (b) Earth leads 50x6 mm mild steel flat laid exposed.

The price shall cover supply and installations per meter length of 50x6 mm mild steel flat painted all around with two coats of painting to colour grass green shade-218 of IS:5 passing through cable trench or exposed above ground level. The price shall also cover the connections of the steel flats to the main earth ring and to the steel structures and metallic frame work/terminals of various outdoor equipments as required.

Item No 33: Supply, erection, testing & commissioning of 25 KV shunt capacitor bank of 2400 KVAR rating at 25 KV including low loss series reactor, 25 KV neutral current transformer and all other

accessories etc except control and numeric relay Panel. (Supply)

The lump sum price shall cover supply, testing and commissioning of 5500 KVAR at 40 KV (2469 KVRA at 25kV) shunt capacitor bank at Traction sub-stations, complete with capacitor unit, internal fuses, discharge devices, rack insulator assembly, inter-connector between units, insulators, suitable earthing lugs including terminal connectors and other material and hardware required for satisfactory operation of the unit. It shall also include mounting of the capacitor bank on the supporting structures and its connecting up to other equipments. Payment for supporting structure shall be made under item 41 & 42.

The contractor shall carryout pre-commissioning tests as approved by the purchaser and commission the shunt capacitor bank strictly in accordance with the instructions of the shunt capacitor bank manufacturer or his commissioning engineer at site to the complete satisfaction of the purchaser. The contractor shall be held responsible to ensure that the work is carried out to the highest standards, in accordance with relevant codes of practice and any special conditions/ guidelines/requirements as laid down by the manufacturer of the shunt capacitor bank are properly complied with. The contractor shall notify the manufacturer regarding likely date of commissioning, one month in advance so that the manufacturer can depute his representative, if so desired by him, at his own cost, for warranty obligation purposes. Notwithstanding availability of manufacturer's representative or otherwise, it shall be contractor's responsibility to ensure that the equipment is commissioned as per laid down procedure. All necessary tools, equipments, instruments required for carrying out necessary checks and commissioning of the shunt capacitor bank shall be arranged by the contractor. 25kV Shunt Capacitor bank shall conform to RDSO specification No. TI/SPC/PSI/FC & SR/0100(01/10) or latest amendments.

The prices shall cover supply of series reactor suitable for 5500 KVAR at 40 KV (2469 KVRA at 25kV) shunt capacitor bank complete with all fittings and accessories including connectors. It shall include mounting of the series reactor in position. 25kV Shunt Capacitor bank equipment shall conform to RDSO specification No. TI/SPC/PSI/FC & SR/0100(01/10) or latest amendments.

The prices shall cover supply of a 25kV Current transformer with ratio 200-100/5A complete with all fittings and accessories including terminal connectors. Current transformer shall conform to RDSO specification as indicated in Annexure 1(c). The price shall include mounting of the current transformer in position and supply and erection of an enamelled number plate.

The prices shall cover supply of 25KV neutral current transformer for protection of the capacitor bank. The price shall also cover connecting of the neutral current transformer with capacitor bank and control and relay panel. It shall also cover mounting of the neutral current transformer on the supporting frame.

Item No 34& 35: Supply, erection, testing and commissioning of 42 KV Lightning Arrestor with surge monitor, counter and cable (Supply & Erection)

The price shall cover supply, erection, testing and commissioning of 42 kV lightening arrestors complete with all fittings and accessories as per relevant specifications including terminal connectors. The cost of supply and erection shall include proper alignment of the lightening arrestor in position. The price shall not cover supply and erection of cadmium copper jumper (65) which will be paid under ITEM No 25 & 26. The price shall not include the cost of any small parts steel work.

Item No 36 & 37: Supply and installation of cables for SWS/TSS (Supply & erection)

The Price shall cover supply and installation of all type of cables for SWS/TSS .

(a) CABLE FOR L.T. SUPPLY

240 V A.C. supply from L.T. supply transformer at switching stations shall be brought and terminated on the L.T. A.C. distribution board in the remote control cubicles at the switching stations by 1100 Volt 25 sq.mm aluminum two-core PVC insulated PVC sheathed and steel armoured heavy duty cable conforming to IS:1554(Part-I) (Latest version as indicated in Annexure-1).

(b) CONTROL AND INDICATIONS CIRCUITS

All other cables for control and indication at switching stations shall be 1100-V grade PVC insulated and sheathed un-armoured (heavy duty) complying with IS: 1554(Part-I) (Latest version as indicated in Annexure-1). The cables shall be provided as indicated in the Table below:

PURPOSE	RUN	CIRCUIT VOLTAGE	CORE SIZE & MATERIAL	NO OF CORES
FOR SWS:				
Control & indication of interrupters	From each Interrupter to terminal board	110 V/D.C.	2.5 sq.mm copper	7
Catenary indication	From each P.T. line indication type to terminal board	110 V/A.C.	2.5 sq.mm copper	2
Heater supply for interrupters control mechanism cabinet	i) From interrupter to interrupter	240 V A.C.	4.0 sq.mm Aluminum	2
	ii) From each interrupter to fuse box.	-do-	-do-	-do-
	iii) From fuse box. to distribution board.	-do-	-do-	-do-
Battery supply	i) 110V battery charger to 110V battery	110 V/D.C.	2.5 sq.mm copper	-do-
	ii) 110V battery to 15A, DC fuse box.	110 V/D.C.	2.5 sq.mm copper	-do-
	ii) 15A, DC fuse box to terminal board.	-do-	-do-	-do-
FOR TSS:				
Control and indication of circuit breakers	From each circuit breaker to control board.	110 V DC	7x2.5	Three cables to be used.
Transformer alarm/trip circuits & tap changer control	From each transformer to control board.	110 V DC	10x2.5	Five cables to be used.
Transformer protection (bushing transformer to current transformer connections)	From each transformer to control board.	110 V DC	4x4.0	One cable for each bushing CT to be used.
Current transformer & neutral connections	From each current transformer to control board.	110 V DC	2x4.0	One cable for each core of CT/Neutral CT
Potential transformer connections	From each potential transformer to control board.	110 V DC	2x2.5	One cable to be used
110V DC supply	(i) Connection between battery chargers & DC distribution board.	110 V DC	4x4.0	One cable to be used with two core connected in parallel
	(ii) Connection between batteries & DC distribution board.	110 V DC	4x4.0	One cable to be used with two core connected in parallel
	(iii) Connection from DC distribution board to control board.	110 V DC	4x4.0	Two cables to be used with each circuit breaker and one cable for DC supply to control boards.
Control & indication of bus coupler interrupter	From interrupter to control board.	110 V DC	7x2.5	Two cables to be used.
240V AC supply	Connection from AC distribution board to control board.	240 V AC	2x2.5	One cable to be used

c) Cables for heater circuits.

The 240 V AC supply to space heaters provided in control cabinets of various equipments shall be provided by means of 4 sq.mm. 2-core aluminum PVC insulated (heavy duty) cables complying with IS: 1554 (Part-I)-1988. Three circuits shall be provided on the LT A.C. distribution board for this purposes, one for the heaters in the control cabinets of 220/132/110 KV circuit breakers, the second for the heaters in the control cabinets of 25 KV circuit breakers and bridging Interrupters and the third for heaters in marshalling box of traction transformers. Each circuit shall be provided with a fuse of approved type and suitable rating in the LT A.C. distribution Board.

d) Cables for battery charger.

240 V A.C. supply to each of the battery chargers in the Control Room shall be provided by means of 4 sq.mm. 2 core PVC insulated, PVC sheathed (heavy duty) copper cables complying with IS: 1554 (Part-I)-1988. Two circuits each with a fuse of approved type and suitable rating in the LT A.C. distribution board shall be provided for the two battery chargers in the Control Room. The 240 V A.C. supply to Control Board from A.C.

distribution board shall be provided by means of 2.5 sq.mm. 2- core PVC insulated PVC sheathed (heavy duty) copper cable complying with IS:1554(Part-I)-1988.

e) Cables for blower fans.

240 V A.C. supply to blower fans fixed on the traction transformer shall be provided by means of 2 core 25 sq.mm. aluminum conductor cables. The cables shall be PVC insulated, PVC sheathed and armored cables of 1100 V grade complying with IS:1554(Part-I)-1988. Separate cables shall be laid from the L.T. A.C. distribution board in the control room to marshalling box of each traction transformer. Individual circuits from the LT A.C. distribution board shall be provided for this purpose with each circuit protected by a fuse of suitable rating.

f) The cable shall be resistant to decay, mechanical abrasion, acids, alkaline and other corrosive materials.

NOTE: (i) In case of feeding stations which are located within the traction sub-station premises, the cables shall be run from individual equipment and terminated inside the sub-station control room.

(ii) Notwithstanding the sizes of cables given above, the Tenderer shall assure himself that various cables would suit the ratings of equipments offered by him.

(g) SPECIFICATION

The cables shall be resistant to decay, abrasion, acids, alkalies and other corrosive materials. All indoor wiring on walls shall be clamped neatly on teak wood battens fixed to the wall by means of wall plugs/wooden pegs. The cable run layout at a typical switching stations is shown in the relevant drawing already included in Annexure-1.

LITERATURE FOR EQUIPMENT: 2.4.24

The Contractor shall, within six months of issue of Letter of Acceptance of Tender, supply 5 copies of booklets containing manufacturer's instructions for operation and maintenance of each of the items of equipments the supply of which is, Herded by the contract. In addition, 25 copies of detailed schedule of components, catalogues and drawing of all parts of the equipment shall also be supplied.

Item No 38 & 39: Providing and layingh of concrete for foundation and plinth in all types of soils using M-15 grade concrete for main foundation and M - 20 grade concrete for grouting and muffing including nominal reinforcement wherever required as per RDSO drawings. (Supply & Erection)

The price shall cover excavation, supply and handling of all materials and accessories, temporary arrangements for excavation in hard soil and concrete/masonry drains/walls requiring use of chisel and hammer hard soil or requiring blasting rocky soil, shoring where necessary, casting concrete including frame work where necessary, tamping of concrete, grouting of masts and finishing the top of concrete foundation or anchor blocks. The price also includes dismantling of all connected temporary arrangements, back filling with earth and compacting the same to the required height and width as per drawing to ensure safety of foundation, confining the exposed height of foundation block to within 10 cm., and removal of spoil.

The Purchaser's Engineer shall certify where use of chisel and hammer or blasting has been necessary. The contractor shall arrange for supply of explosives and all tools and plants for blasting operations at his own cost. If half or more of the depth or width of excavation is in hard soil/concrete/masonry drains/walls or in rock, the entire foundations shall be paid for under item hard soil or rocky soil as the case may be. If half of the depth or width of the excavation is in hard soil/concrete/masonry drains/walls and the other half is in rock, the entire foundation shall be paid under item rocky soil. The price shall include the cost of cement.

Notes for measurement for items hard soil and rocky soil: -

1. The payable volume of the foundations under item hard soil and rocky soil shall be the designed one as shown in the drawings for which the hole has been blasted, irrespective of the actual configuration assumed by the latter due to the blasting.
2. The depth of the excavation shall be measured from the formation level to the maximum excavated point.

Reinforced concrete for foundation and plinth

The price shall cover excavation and all reinforced concrete work for foundations excluding supply of steel for reinforcement {which will be paid separately under Item 3(g) (steel reinforcement for RCC work)} and including other materials shoring where necessary, casting concrete including frame work where necessary, grouting and finishing the tops of foundation blocks. The price shall also include dismantling of all connected temporary arrangements, back filling as required and removal of spoil.

The price shall also cover all concrete work for foundation (including that of Height Gauge) or anchor blocks on bridge piers, irrespective of whether they are actually reinforced or not, and counter weight foundations. Rails and fasteners required for counter weight foundations shall be supplied by the Purchaser free at the Contractor's depot or work spot according to convenience of the Purchaser. Dowel bars as may be required for bond with bridge structures shall be supplied and erected free of cost by the Purchaser. Dowel bars will not be considered as reinforcement for the purpose of this item. The price shall, include the cost of cement.

Note: Erection charges for CC/RCC in Hard Soil & rock shall be payable @ erection charges of Item 42.

Item No 40 & 41: Supply and erection of all types of galvanised Steel Structures, Small Parts Steel etc. (Supply & Erection)

The price shall cover supply and erection of traction main masts of OHE comprising rolled, broad flanged beams, fabricated K-series, B series, portal upright, uprights, boom pieces & associated fittings, D.A., extension chairs and AT Masts, feeder mast, bridge mast etc. with supply and erection of SPS for. different type of masts, portals, DA, isolator, boom.

Payment of SPS will be made as per black steel weight of material as per RDSO/CORE latest approved drawings and supplier.

(1) The price shall cover cost of fabrication, galvanization and supply setting before grouting of individual tractions masts.

(2) Galvanization thickness shall be as per Railway Specification No. ETI/OHE/13(4/84) with ACS no. 1 to 4 & as per RDSO's letter no. ELCORE/ALD/FIT/410 Part-I dtd. 13.11.2018 & as per RDSO's letter no. TI/CIV/GCP/2020 dtd. 22.10.2020, 27.01.2021 and 19.05.2021. Approval of Sr. DEE/Traction/ADI shall be taken for zinc coating galvanization before procurement.

(3) In case, required size of channels are not available as per approved drawing, higher size of channels can be used with approval of Senior Divisional Electrical Engineer (Traction) Western Railway, UBL and payment as per actual black weight will be paid.

(4) The price shall also include the straightening of masts/portal uprights etc. bent during transit and cutting of masts/portal uprights to suit the site condition.

(5) For standard fabrication of steel work or structures for which RDSO/CORE approved drawing are available, the black steel weight of steel work as specified in RDSO/CORE drawing, shall be considered for payment.

(6) However in case the unit sectional weight of any member indicated in RDSO's drawing is not in conformity with the unit sectional weight as per the latest IS specification the weight of the fabricated steel work shall be calculated on the basis of latest IS specification and the same will be considered for payment for the nonstandard fabricated steel work, the calculated weight to be considered for payment under this item shall be included in the relevant drawing based on latest IS sectional weight at the time of submitting the designs for approval of the purchaser.

(7) There will be no addition for increased weight due to galvanizing or painting or reduction for holes or screw cut.

(8) Galvanization damaged during transportation/ carting will be touch up with cold ZINC paints by tenderer.

(9) Materials will be supplied at site of work.

(10) Successful tenderer shall ensure compliance of Railway Board's letter no. 2020/RE/157/VIG dtd. 20.02.2020 or latest regarding correctness of weight/length and providing embossing.

(11) Marking, weighment and inspection process for galvanized steel structure should be as per CORE letter no. ELCORE/ MP/ Vendor/ Confidential/ 2018 dtd. 10.12.2020.

Note: Wiring train/Tower wagon/Crane may be supplied by Railway as per availability. Contractor shall make their own arrangement for erection of OHE structures & wiring. Road crane shall be hired for erection of OHE structures for locations easily accessible by Road. However, for inaccessible locations, crane with crew will be made available by Railways free of cost for erection of portal booms, but fuel is to be arranged by the

contractor. Final decision regarding such locations will be taken by Sr. DEE(Traction). However, Tower wagon shall be made available for final checking of OHE prior to commissioning

Item No 42: Extra on erection under Power Block (Erection)

The price under this item cover extra charges over and above erection rates of item 43 of Schedule of work, for erection of equipment in the vicinity of energized overhead equipment and feeders or erection of equipment which joins equipment already energized or on energized equipment which calls for a power block by switching off of traction power. The price payable under this item shall be 100% extra over the erection rates of the items referred to above provided such work is not called for on account of non-compliance with specifications, approved drawings and instructions given by the Railways from time to time.

The extra erection rate under this item will not be payable, if power block is given in an elementary section/sub-sector for a total duration of 4 hours or more in a day. The duration can be in one or more spells. In the case of works, which warrant power block in more than one line, the duration of power block will be reckoned as under.

The power block time will commence/ends from the time power block is availed on the first line and to the cancellation time of the line which ever cancelled later. Where the prices under this item are applicable the contractor shall finalize the quantities of various items of work to be done under a power block, jointly with the Railway's Engineer prior to taking the work in hand. This extra rate is inclusive of provision of earth rods during power block hours for any type of works (earth rods will be owned by the Contractor conforming to RDSO specification No. ETI/OHE/51 (9/87) Correction slip No.1) under the clear guidance of authorized Railway Representative/ Engineer at site.

The Power Block time will commence/ end from the time Power Block is availed/ cancelled from TPC/ASM. The contractor shall arrange for adequate lighting with generator set/ Petromax lamps at work site when the work is carried out during nights.

Note:

1. Wherever, the extra erection charges for work done under power blocks are applicable, the ETR2 Form 's reference No. shall be mentioned in the Daily Progress Reports, which in turn will be recorded in the Measurement Book to improve the traceability of power block work and to authenticate the power block charges.

2. The requirement of power block shall be ascertained by the contractor in consultation with Railway Site in-charge and the power block requirement thus finalized shall be submitted at least 5 days in advance. If sufficient power block is arranged as per the pre planned schedule, the contractor is not eligible for any extra payment on account of Power block. If contractor staff available for execution of work and the planned work could not be done due to the absence of sufficient power block, contractor is eligible for extra payment on account of power block. Further, the power block is made available as planned and if planned

power block work could not be done due to the failure of contractor; no extra charges will be given for execution of the same work on a later stage by availing Power block. Power block requirement is a safety aspect which is to be ensured by Railway site in-charge. Railway site in-charge is empowered to take a decision as to whether power block is required or not irrespective of the availability of clearance actually available at site and any such decision shall be binding on the contractor. Hence the item will be operated only at the discretion of site in charge.

Item No 43: Extra rate on Manual Erection (Supply)

The price under this item cover extra charges over and above erection rates of item 44 done by manual erection.

Item No 44: Providing and Laying of Reinforce concrete for Pier/Columns/Pile, Cable trench and Trench cover and special designed foundation requiring reinforcement (Erection)

2 a (i) Concrete for foundation & trench in hard soil:

2 a (ii) Concrete for foundations and trench in rock:

The price shall cover excavation, supply and handling of all materials and accessories, temporary arrangements for excavation in hard soil and concrete/masonry drains/walls, requiring use of chisel and hammer for item 2 (a) (i) or requiring blasting for item 2 (a) (ii), shoring and shuttering where necessary, casting concrete including frame work, grouting gantry/portal columns and steel supports and finishing the top of concrete foundation with required slope/muff. The price shall include dismantling of all connected temporary arrangements, back filling required and removal of soil. The Purchaser's Engineer shall certify where use of chisel and hammer or blasting has been necessary. The Contractor shall arrange for supply of explosives and all tools and plants for blasting operations at his own cost. If half or more of the depth and width of excavation is in hard soil, concrete /masonry/drains/ walls or rock, the entire foundation shall be paid for under item 2(a), if it is less than half, payment for the entire foundation shall be made at the rate for the type of soil in which the majority of the foundation is placed. The price shall include the cost of cement also. Cement shall not be supplied by the Rlys.

NOTE: For measurements for item 2 a(i) & (ii).

1) The payable volume of the foundations under item 2a (ii) shall be limited to the designed one as shown in the drawings for which the hole has been blasted, irrespective of the actual configuration assumed by the latter due to blasting.

2) The depth of excavation shall be measured from the formation level of the substation to the maximum excavated point.

2 (b) Concrete for foundation and trench other than hard soil and rock:

The price shall include all work mentioned in item 2(a) in all classes of soil, including black cotton and loose soils, except hard soil, concrete/masonry/drains/walls and rock. The price shall include the cost of cement also. Cement shall not be supplied by the Rlys.

2(c) (i) Reinforced concrete for foundation & trench:

The price shall cover excavation and all reinforced concrete work for foundations including supply of steel for reinforcement and other materials including bending/binding, laying of reinforcement, shoring and shuttering where necessary, casting concrete including frame work where necessary, grouting and finishing the tops of foundation blocks with the required slope/muff. The price shall include dismantling of all connected temporary arrangements, back filling as required and removal of soil. The price shall also cover all concrete work for cast-in- situ piles and pedestals/columns for mounting equipment. The volume of cast-in-situ piles and pedestals columns shall be added to the volume of foundation block for purposes of payment. Dowel bars will not be considered as reinforcement for the purpose of this item. The price shall include the cost of cement also. Cement will not be supplied by Rlys.

(ii) Cable trench covers:

The price shall cover casting of cable trench covers in reinforced concrete as per drawing in Annexure-1. The cable trench covers will be casted in an angle iron frame of angle size 40x40x5. The price shall include the supply of steel for reinforcement angle iron for the frame work fabrication of angle iron frame etc. The price shall include positioning and dressing up of the trench covers, if required. The price shall include the cost of cement also. Cement will not be supplied by Rlys.

Item No 45 & 46: Supply, erection, oil filtration, testing & commissioning of 25KV/240V 25 KVA Auxiliary (LT) Supply Transformers oil type with DO fuse switch, anti-climbing device, Arcing horns, pedestal insulators, copper jumper and earth electrode etc. With Porcelain Insulators 1050mm CD (Supply & Erection)

The price shall cover supply and erection, commissioning and connecting up a 25KVA L.T. Supply transformer complete with all fittings and accessories including terminal connectors. The price shall include supply and reaction of 5 SWG copper jumper wire required for connecting also include mounting of the transformer on its supporting structure and supply and erection of an enamelled number plate. The price shall also cover oil filtration, testing and commissioning of the transformer. The Contractor shall make his own arrangement for oil filtration plant as well as power supply for the same. 25KV/240V Auxiliary Supply Transformer (25 kVA capacity) Oil type shall conform to RDSO specification no. ETI/ PSI/15 (8/2003) or

latest amendments. And with DO fuse switch, anti-climbing device, Arcing horns, pedestal insulators, copper jumper and earth electrode etc. With Porcelain Insulators 1050mm CD

Item No 47 & 48: Supply and erection of 25 KV single pole isolator 1600 Amp with insulators (Supply & Erection)

The price shall cover the supply and erection, alignment and connecting up 25kV Single Pole Isolator complete with mounting base, operating rod, operating mechanism and all accessories required for its smooth and trouble-free operation. The price including solid core Post Insulator etc. shall also cover supply and erection of an enamelled number plate and a pad lock for each Isolator. Bus bar connector provided for making connection to Isolator terminal. 25kV Single Pole Isolators (1600A) shall conform to RDSO specification no. ETI/ OHE/16(1/94) with A&C slip No. 2 or latest amendments.

Item No 49 & 50: Supply and erection of earth lead using 75x8mm GI flat laid in ground/exposed as per the site requirement (Supply & Erection)

Earth leads 75x8 mm GI flat laid in the ground:

The price shall cover supply and installation per meter length of 75x8mm mild steel flat, buried at a depth of 60cm below ground level. The price shall also cover connections of the steel flats to the earth electrodes to constitute the main earth ring and to the earthed terminals of the 132/25kV transformers etc. as required.

Earth leads 75x8 mm GI flat laid in the exposed:

The price shall cover supply and installation per meter length of 75x8 mm mild steel flat, painted all around with two coats of painting to colour grass green shade-218 of IS:5 passing through cable trench or exposed above ground level. The price shall also cover the connections of the steel flats to the earth electrodes, to constitute the main earth ring and to the earthed terminals of the various equipments as required.

Item No 51 & 52: Supply & erection of 25 KV support / Post insulators with fittings and fasteners (Supply & Erection)

The price shall cover the supply and erection of a 25kV solid core post/support insulator to support Aluminium bus-bars. It shall include supply of fixing bolts, nuts, locknuts, washers and studs etc. It shall also cover erection of all components required for the assembly including post/support insulator with fittings and fasteners, Bus bar clamps/jumper clamps for clamping the bus-bars/jumpers shall be paid under item no: 20 & 21 (Supply & erection of tubular aluminum bus bars 50 mm x 39 mm dia including all connectors)

Item No 54: Erection and laying of 1.1 KV grade LT XLPE insulated armoured, aluminium conductor cable, making good the damages, end terminations with aluminium crimping socket/plugs, provisions of cable route markers, testing & commissioning etc. as required as per technical specifications. 2 Core 70 sq.mm (Erection)

The Price shall cover Erection and laying of 1.1 KV grade LT XLPE insulated armoured, aluminium conductor cable, making good the damages, end terminations with aluminium crimping socket/ plugs, provisions of cable route markers, testing & commissioning etc. as required as per technical specifications. 2 Core 70 sq.mm

Item No 56: Erection and laying of 1.1 KV grade LT XLPE insulated armoured, aluminium conductor cable, making good the damages, end terminations with aluminium crimping socket/plugs, provisions of cable route markers, testing & commissioning etc. as required as per technical specifications. 2 Core 185 sq.mm (Erection)

The price shall cover Erection and laying 1.1 KV grade LT XLPE insulated armoured, aluminium conductor cable, making good the damages, end terminations with aluminium crimping socket/ plugs, provisions of cable route markers, testing & commissioning etc. as required as per technical specifications. 2 Core 185 sq.mm.

Item No 57: Loading/Unloading transportation and handing over of all type of materials etc. other than contractor material

The price shall cover loading/unloading and transportation charges to (from) site/depot and handing over of material (if required) for all type of steel structures, portals, copper/ aluminium conductors, SPS, CBs, BMs, ATs, PTs, CTs, LAs and other electrical equipment's etc. into/from BFR/ trailer/ truck etc, other than contractor's material, or handing over of released material to specified location as instructed by the engineer

Item No 58: Hiring of Crane

The job shall cover Hiring of 15T capacity road crane with more than 10 mtr zip height. The requirement of crane is on need basis. Payment will be made on Hourly basis. All tools & materials required for crane operation to be arranged by crane contractor

Item No 59: Construction of baffle wall complete with reinforcement, brick work, plastering etc

The Job Shall cover supply of necessary accessories for the construction of baffle wall complete with reinforcement, and brick work etc., and should be completed with plastering.

Item No 60: Supply of 25 KV Potential Transformer TYPE-II as per technical specifications

The price shall cover supply of a 27.5 kV/110V potential transformer complete with all fittings and accessories including terminal connector as per RDSO spec. No. TI/SPC/PSI/PT/0210 (06/2021) or latest. It shall also include supply of an enamelled Number plate & connectors with jumper.

Item No 61: Erection of 25 KV Potential Transformer TYPE-II as per explanatory notes.

The price shall cover erection and connecting of a 27.5 kV/110V potential transformer complete with all fittings and accessories including terminal connector. It shall also include mounting of the transformer in position and erection of the enameled Number plate. Bus bar connectors provided with jumper connections as per instructions of Railway site engineer

Note:

1. The requirement of power block shall be ascertained by the contractor in consultation with Railway Site in-charge and the power block requirement thus finalized shall be submitted at least 5 days in advance. If sufficient power block is arranged as per the preplanned schedule, the contractor is not eligible for any extra payment on account of Power block. If contractor staff available for execution of work and the planned work could not be done due to the absence of sufficient power block, contractor is eligible for extra payment on account of power block. Further, the power block is made available as planned and if planned power block work could not be done due to the failure of contractor, no extra charges will be given for execution of the same work on a later stage by availing Power block. Power block requirement is a safety aspect which is to be ensured by Railway site in- charge. Railway site in-charge is empowered to take a decision as to whether power block is required or not irrespective of the availability of clearance actually available at site and any such decision shall be binding on the contractor.
2. All the rates are exclusive of Power Blocks charges

BID-SECURITY DECLARATION

I/ We, M/s am/are aware that I/We have been exempted from submission of Bid Security/ Earnest Money Deposit in lieu of this Bid Security Declaration. I/We understand and accept that if I/We withdraw my/our bid within bid validity period, or if awarded the tender and on being called upon to submit the Performance Guarantee/ Performance Security fail to submit the same within the stipulated time period mentioned in tender documents or on being called upon to sign the contract agreement fail to sign the same within stipulated period mentioned in tender documents, I/We i.e., the bidder shall be banned from submission of bids in any Works/ Service tender issued by Indian Railway for a period of 12 months from the date of such banning done on e-platform IREPS.



Signature of tenderer(s)

**SOUTH WESTERN RAILWAY
TENDER FORM (First Sheet)**

Tender No. _____

Name of Work _____

To
The President of India

Acting through the South Western Railway

1. I/We _____ have read the various conditions to tender attached hereto and agree to abide by the said conditions. I/We also agree to keep this offer open for acceptance for a period of _____ days from the date fixed for closing of the tender and in default thereof, I/We will be liable for forfeiture of my/our "Bid Security". I/We offer to do the work for South Western Railway, at the rates quoted in the attached bill(s) of quantities and hereby bind myself/ourselves to complete the work in all respects within _____ months from the date of issue of letter of acceptance of the tender.
2. I/We also hereby agree to abide by the Indian Railways Standard General Conditions of Contract, with all correction slips up-to-date and to carry out the work according to the Special Conditions of Contract and Specifications of materials and works as laid down by Railway in the annexed Special Conditions/Specifications, Standard Schedule of Rates (SSOR) with all correction slips up-to-date for the present contract.
3. A Bid Security of ₹ _____ has already been deposited online/ submitted as Bank Guarantee bond. Full value of the Bid Security shall stand forfeited without prejudice to any other right or remedies in case my/our Tender is accepted and if:
 - (a) I/We do not submit the Performance Guarantee within the time specified in the Tender document;
 - (b) I/We do not execute the contract documents within seven days after receipt of notice issued by the Railway that such documents are ready; and
 - (c) I/We do not commence the work within fifteen days after receipt of orders to that effect.
4. (a) I/We am/are a Startup firm registered by Department of Industrial Policy and Promotion (DIPP) and my registration number is valid upto

(Copy enclosed) and hence exempted from submission of Bid Security.

5. We are a Labour Cooperative Society and our Registration No. is
withand hence required to deposit only 50% of Bid Security
6. Until a formal agreement is prepared and executed, acceptance of this tender shall constitute a binding contract between us subject to modifications, as may be mutually agreed to between us and indicated in the letter of acceptance of my/our offer for this work.

Signature of Tenderer(s)

Date _____

Address of the Tenderer(s)

Each Bidder or each member of a JV must fill in this form separately:

NAME OF BIDDER/JV PARTNER:

Annual Contractual Turnover Data for the Previous 3/4 Years (Contractual Payment only)			
Year	Amount Currency	Exchange Rate	Indian National Rupees Equivalent
Average Annual Contractual Turnover for last 3/4 years			

1. The average annual contractual turnover shall be calculated as an average of “total contractual payments” in the previous three financial years. However, in case the balance sheet of the previous year is yet to be prepared/ audited, the audited balance sheet of the fourth previous year shall be considered for calculating average annual contractual turnover.
2. The information supplied shall be substantiated by data in the audited balance sheets and profit and loss accounts for the relevant years in respect of the bidder or all members constituting the bidder.
3. Contents of this form should be certified by a Chartered Accountant duly supported by Audited Balance Sheet duly certified by the Chartered Accountant.

SEAL AND SIGNATURE OF THE BIDDER

Certified that all figures and facts submitted in this form have been furnished after full consideration of all observations/notes in Auditor’s reports. _____

(Signature of Chartered Accountant)

Name of CA: _____

Registration No: _____

(Seal)

Appendix – V

FORMAT FOR CERTIFICATE TO BE SUBMITTED/UPLOADED BY TENDERER ALONG WITH THE TENDER DOCUMENTS

I, (Name and designation) ** appointed as the attorney/authorized signatory of the tenderer,

M/s.

..... (hereinafter called the tenderer) for the purpose of the Tender documents for the work of as per the tender No. of (Railway)**, do hereby solemnly affirm and state on the

behalf of the tenderer including its constituents as under:

1. I/We, the tenderer(s),am/are signing this document after carefully reading the contents.
2. I/We, the tenderer(s), also accept all the conditions of the tender and have signed all the pages in confirmation thereof.
3. I/We, hereby declare that I/We have downloaded the tender documents from Indian Railway website www.ireps.gov.in. I/We have verified the content of the document from the website and there is no addition, no deletion or no alteration to the content of the tender document. In case of any discrepancy noticed at any stage, i.e. evaluation of tenders, execution of work or final payment of the contract, the master copy available with the railway Administration shall be final and binding upon me/us.
4. I/We declare and certify that I/We have not made any misleading or false representation in the forms, statements and attachments in proof of the qualification requirements.
5. I/We also understand that my/our offer will be evaluated based on the documents/credentials submitted along with the offer and same shall be binding upon me/us.
6. I/We declare that the information and documents submitted along with the tender by me/us are correct and I/We are fully responsible for the correctness of the information and documents, submitted by us.
7. I/We certify that I/We the tenderer(s) is/are not blacklisted and debarred by Railways or any other ministry/department of Govt. of India from participation in tender on the date of submission of bids, either in individual capacity or as a HUF/Member of the Partnership firm/LLP/JV/Society/Trust.

8. I/We understand that if the contents of the Certificate submitted by us are found to be forged/false or incorrect at any time during process for evaluation of tenders, it shall lead to forfeiture of the Bid Security and may also lead to any other action provided in the contract, including banning of business for a period of up to five years. Further, I/We(*insert the name of the tenderer*)** and all my/our constituents understand that my/our offer shall be summarily rejected.
9. I/We also understand that if the contents of the certificate submitted by us are found to be forged/false at any time after the award of the contract, it will lead to termination of the contract, along with forfeiture of the Bid Security/Security Deposit and Performance guarantee and may also lead to any other action provided in the contract including banning of business for a period of up to two years.
10. I/We have read the clause regarding restriction on procurement from a bidder of a country which shares a land border with India and certify that I am /We are not from such a country
or
If from such a country, have been registered with the competent authority. I/We hereby certify that I/We fulfill all the requirements in this regard and am/are eligible to be considered (evidence of valid registration by the competent authority is enclosed).

SEAL AND SIGNATURE OF THE
TENDERER

Place:

Date:

** The contents in italics are only for guidance purpose. Details as appropriate are to be filled in suitably by tenderer.

This certificate is to be given by each member of JV or Partners of Partnership firm/LLP etc.

ANNEXURE-V(A)

Reference- Para 6.1 of ITT

(This certificate is to be given by attorney/authorized signatory/each member of Partnership firm/Joint Venture (JV) / Hindu Undivided Family (HUF) / Limited Liability Partnership (LLP) etc.)

I/We.....(Name), attorney/authorized signatory of the (constituent firm/constituent partner) and member/partner of the (tendering firm) hereby solemnly affirm and state as under:

1. I/we certify that (constituent firm/constituent partner) is/are not blacklisted or debarred by Railways or any other Ministry / Department of Govt. of India from participation in tender on the date of submission of bids, either in individual capacity or as a HUF/ member of the partnership firm/LLP/JV/Society/Trust.
2. I/We have read the clause regarding restriction on procurement from a bidder of a country which shares a land border with India and certify that I am/We are not from such a country or, if from such a country, have been registered with the competent Authority. I/We hereby certify that I/we fulfil all the requirements in this regard and am/are eligible to be considered (evidence of valid registration by the competent authority is enclosed).

SEAL AND SIGNATURE OF THE CONSTITUENT
FIRM/CONSTITUENT PARTNER

Place:

Dated:

Appendix – B**NEFT Mandate Form**

Details of Firm		
Name of Firm	:	
Name of the Contact Person	:	
Address	:	
E-mail ID	:	
Phone Number	:	
Bank Details		
Name of the Bank	:	
Branch Name	:	
Bank Address	:	
Type of Bank Account (SB/CA/CC)	:	
Bank Account No.	:	
11 digit IFSC Code of Bank	:	
9 digit MICR code of the Bank and Branch	:	
Other Details		
Contractor/Firm's PAN No.	:	
Contractor/Firm's TIN No.	:	
Contractor/Firm's GST No.	:	

Note: Cancelled cheque may enclosed for verification of Bank Details.

I/We, hereby declare that the particulars given above are correct and complete. I/We, authorize Railways to deposit the amount, if any, payable to me/us to the above mentioned Bank Account. If the transaction is delayed or not effected at all for reasons of incomplete or incorrect information, I would not hold Railways responsible for the same.

**Signature of the Authorised person of the
Firm with stamp and date**

Appendix - C

FORMAT FOR DECLARATION TO BE UPLOADED BY TENDERER ALONG WITH THE TENDER DOCUMENTS IF NO RETIRED RAILWAY EMPLOYEE IS/ARE ASSOCIATED WITH THE FIRM

(On Company's Letter Head)

1. DECLARATION REGARDING ASSOCIATION OF RLY.OFFICER(S) OR RETIRED RLY.OFFICER(S) WITH TENDERER(S)

Sl No.	Name	Position with the tenderer	Tenderer if working in Rly. On the date of tendering, designation & place of posting	Date of retirement	Position at retirement	Particulars of permission taken for associating with the tenderer

2. Declaration:

A Bidder or contractor being an individual on the list of approved Contractors, have a relative(s) or in the case of partnership firm or company of contractors one or more of his/her shareholder(s) or a relative(s) of the shareholders(s) employed in gazette capacity in any department of Indian Railway.

(Full details: _____)

**Signature of the Authorized person of the
Firm/bidder with stamp and date**

Undertaking

We hereby declare that any Ex-railway employee or director or retired manager of the Gazetted rank or any other Gazetted Railway officer has not associated with M/s_____. We Further declare that No relative of myself (Individual contractor)/ shareholders/Relative of shareholders (partnership firm) employed in gazette capacity in any department of Indian Railway.

Signature of the Authorized person of the
Firm/bidder with stamp and date

Appendix - D
 (On Stamp Paper of requisite value)
BANK GUARANTEE BOND
 (To be used by approved Scheduled Banks)

Name of the Bank: _____

President of India,

Acting through Sr. Divisional Finance Manager Hubballi ,

South Western Railway

Beneficiary: Railway

Date:

Bank Guarantee Bond No.:

Date: -----

1. In consideration of the President of India, acting through the Sr. Divisional Finance Manager Hubballi , South Western Railway, or his successor of the Ministry of Railways / Railway Board (herein after called 'The Government') having agreed to exempt M/s.

..... (hereinafter called „The said Contractor“) from the demand under the terms & conditions of Work Order/LOA No dt.

..... made between “The Government” and “The said Contractor” for the work of “

.....”

(herein after called “The said Agreement”), for the due fulfillment by the said Contractor(s) of the terms & conditions contained in the said Agreement on production of a Bank Guarantee for ,/-

(Rupees)

..... only). We (indicate the name of Bank) (hereinafter referred to as 'The Bank) at the request of “The said Contractor” do hereby undertake to pay to “The Government” an amount not exceeding /- (Rupees

..... only) against any loss or damage caused to or suffered or would be caused to or suffered by the Government by reason of any breach by the said Contractor (s) of any of the terms & conditions contained in the said Agreement.

2. We, (indicate the name of the bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the Government stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the Government by reason of any breach by the Contractor of any of the terms & conditions contained in the said Agreement or by reason of the Contractor’s failure to perform the terms & conditions of the said Agreement. Any such demand made on the bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding/-

(Rupees..... only)

3. We, (indicate the name of the bank) undertake to pay to the Government any money so demanded notwithstanding any dispute or disputes raised by the Contractor in any suit or proceedings pending before any court or tribunal relating thereto, our liability under this guarantee being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder and the Contractor shall have no claim against us for making such payment.

4. We, (indicate the name of the bank) further agree that the guarantee hereinafter contained shall remain in full force and effect during the period that would be taken for the performance under the terms & conditions of the said Agreement and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till „The Government“ certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor and accordingly discharges this guarantee. Unless a demand or claim under this guarantee is made on us in writing on or before (Date of validity), we shall be discharged from all our liability under this guarantee thereafter.

5. We, (indicate the name of the bank) further agree with the Government that the Government shall have fullest liberty without our consent or without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said Contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said Contractor and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variations, or extensions being granted to the said contractor or by any such matters or

things whatsoever, which, under the law relating to sureties would, but for this provisions, have effect of so relieving us.

6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor.

7. We, (indicate the name of the bank) lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Government in writing.

8. Notwithstanding anything contained herein above:

(a) Our liability under this guarantee is restricted to/- (Rupees only).

(b) This guarantee is valid up to (date) and

(c) We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if „The Government“ serve upon us a written claim on or before (date) i.e. date of expiry of Guarantee.

Dated, the _____ day of _____ for (indicate the name of Bank).

Yours faithfully,
(Signature of the authorized Officer
of the Bank)

Witness:

1. Signature:

Name:

Address:

2. Signature:

Name:

Address:

Appendix -E

LIST OF ITEMS TO BE SUPPLIED
BY THE RAILWAY TO THE CONTRACTOR

Sl. No.	Item No. in the "Schedule of Work"	Description of item to be supplied by the Railway	Quantity
1	6(a)	107 Sq.mm Hard Drawn Copper Contact wire & 65 Sq.mm Cadmium Copper Catenary wire	Entire Quantity
2	6(c)	107 Sq.mm Hard Drawn Copper Contact wire & 65 Sq.mm Cadmium Copper Catenary wire	Entire Quantity



APPENDIX-F
SOUTH WESTERN RAILWAY
SITE ORDER BOOK

Name of work:

AGT No./Date:

Name of the Contractor:

Starting date of construction:

Date	Site order by Inspecting Officials	Signature of the Official	Noting signature		Compliance details	Remarks	Compliance signature	
			Contractor	SSE			Contractor	SSE

NOTES (1) For every work, separate site order book should be maintained.

(2) Site orders should be recorded specifically and chronologically.

(3) Wherever required, site orders may be supported by sketches

SPECIAL NOTE:

Any objection of the contractor to the site orders should be brought to the notice of the Executive Engineer or higher officials immediately by the contractor separately.

APPENDIX-G
SOUTH WESTERN RAILWAY
HINDRANCE REGISTER

Name of work:

AGT. No./Date:

Starting date of construction:

Name of the Contractor:

Sl. No.	Nature of Hindrance	Date of Occurrence	Date Of removal	Period of hindrance	Overlapping period	Total period of hindrance	Extension recommended	Extension approved	Clause under GCC	Signature	
										Contract or	SSE

NOTE: Separate register to be maintained for each work.

APPENDIX-H
SOUTHE WESTERN RAILWAY
MATERIAL TRANSACTION REGISER

Name of Work:

AGT. No./Date:

Name of the Contractor

Starting date of construction:

Location of Stores

Date of Receipt	Name / Nature of work	Opening balance	Item description	Details of receipt				Total received (with unit)	Test Certificate	Signature		Details of issues			Closing balance	Remarks regarding performance	Signature	
				Voucher No.	Brand	Quantity	Expiry Date			Contractor	SSE	Date	Quantity	Total issued			Contact or	SSE

NOTES:

Separate register to be maintained for each work.

APPENDIX-I
SOUTH WESTERN RAILWAY
DAILY PROGRESS & LABOUR REGISTER

Name of work:

AGT. No./Date:

Name of the contractor:

Starting date of construction:

Date	Status of work (in the beginning)	Progress (on date)	Contractor labour (available at site)	Remarks	Signature	
					Contractor	SSE
						

Note: Separate register to be maintained for each work

Starting date of construction:

[illegible]

APPENDIX-K
LIST OF STANDARD DRAWINGS AND
SPECIFICATIONS

This annexure contains reference to RDSO drawing nos., charts, schedules, specifications and other data referred to in various paragraphs of this tender paper. All reference to drawings, charts, schedules or specifications given in this annexure shall be taken to be the latest versions of such drawings, charts, schedules or specifications as issued by the purchaser on the dates of tender invitation.

(A) LIST OF STANDARD DRAWINGS

Sl No.	Brief description	Drawing		Mod No.
		Series	Number	
1	2	3	4	5
1.	Extra allowance for setting of structures on curves. (1676 mm. Broad Gauge)	ETI/OHE/G	00111 Sh - 1	B
2.	Standard setting of structures in the vicinity of signals. (Broad gauge)	ETI/OHE/G	00112	C
3.	Typical design of side bearing foundation.	ETI/OHE/G	00131	-
4.	Typical design of new pure gravity foundation.	ETI/SK/C	131	-
5.	Typical design of side gravity foundation (Soil pressure 8000 Kgf/m.)	ETI/SK/C	142	-
6.	Typical design of cantilever mast.	RE/33/G	00141 Sh - 3	-
7.	Standard drilling Schedule of OHE mast 9.5m long RSJ & BFB respectively.	ETI/OHE/G	00144 Sh – 3	C
8.	Span & stagger chart for conventional OHE, (Cad. Cu. Catenary & Cu. Contact wire) wind pressure 75, 112.5 & 150 Kgf/Sq.m.	ETI/OHE/G	00202	-
9.	Employment schedule for cantilever mast, Regulated OHE Cat.65/Cu. And contact 107/Cu., WP 112.5 Kgf/Sq.m. without EW & without RC.	ETI/OHE/G	00153 Sh - 1	E
10	Employment schedule for cantilever mast, Regulated OHE Cat.65/Cu. And contact 107/Cu., WP 112.5 Kgf/Sq.m. with EW & without RC.	ETI/OHE/G	00153 Sh - 2	E
11.	Employment schedule for cantilever mast, Regulated OHE Cat.65/Cu. And contact 107/Cu., WP 112.5 Kgf/Sq.m. without EW & with RC.	ETI/OHE/G	00153 Sh - 3	E
12.	Employment schedule for cantilever mast, Regulated OHE Cat.65/Cu. And contact 107/Cu., WP 112.5 Kgf/Sq.m. with EW & RC.	ETI/OHE/G	00153 Sh - 4	D
13.	Employment schedule for cantilever mast, Unregulated OHE Cat.65/Cu. And contact 107/Cu., WP 112.5 Kgf/Sq.m. at 35 °C & with 28 Kgf/Sq.m. at 40 °C without EW & RC.	ETI/OHE/G	00154	D

14.	Employment schedule for 8”X8”X35 lbs BFB (9.5 m long) (WP 112.5 Kgf/Sq.m. Cat.65/Cu. & Cont. 107/Cu.	ETI/C	0708	A
15.	Employment Schedule for OHE mast overlap center location with 3.0m implantation, Cat. 65/Cu. & cont. 107/Cu., WP 112.5 Kgf/Sq.m.	ETI/C	0710	A
16.	Employment Schedule for OHE mast over lap inter location with 3.0m implantation, Cat. 65/Cu. & cont. 107/Cu., WP 112.5 Kgf/Sq.m.	ETI/C	0712	A
17.	Employment schedule for 9.5 m long 200x200x 49.9 Kg mast Cat.65/Cu. And cont.107/Cu. WP 112.5 Kgf/sq.mm.	ETI/C	0714	A
18.	Employment schedule for pre stressed spun concrete mast (PC 42) 9.5 m long for conventional OHE, Normal location (WP 150, 112.5 and 75 Kgf/sq.mm.)	ETI/C	0725	A
19.	Termination arrangement of Tramway type OHE with 3 pulley type regulating equipment (3:1 ratio)	ETI/OHE/G	04212	B
20..	General distribution of droppers.	ETI/OHE/G	00161	-
21.	Out line of Pantograph (Broad gauge and metre gauge)	RE/33/G	00181	A
22.	Earthing and bonding of PSI mast.	ETI/OHE/S K	537 Sh – 1	D
23.	Typical earthing arrangement in SPUN PSC mast with 18 mm. Dia rod.	ETI/OHE/S K	537 Sh – 2	B
24.	General formation of single track embankments and cutting (Broad gauge)	RE/33/G	01101 Sh – 1	A
25.	General formation of double track embankments and cutting (Broad gauge)	RE/33/G	01102 Sh- 1	A
26.	General formation of multiple tracks (1675 mm. gauge)	RE/33/G	01103 Sh. 1	A
27.	Standard anchor arrangement.	RE/33/G	01401	E
28.	Anchor arrangement with dwarf mast.	ETI/OHE/G	01402	B
29.	Schedule of anchor block for B.G. track.	ETI/OHE/G	01403 Sh. 1	D
30.	Double guy rod arrangement with anchor block for B.G. track.	ETI/OHE/G	01403 Sh.2	C
31.	Schedule of anchor block for B.G.(black cotton soil)	ETI/OHE/G	01403 Sh. 3	B
32.	Rock anchor for B.G. track.	ETI/SK/C	208	-
33.	Standard guide tube arrangement on a mast and structures.	ETI/OHE/G	01505	-
34.	Standard guide tube assembly.	ETI/OHE/P	5060-2	C
35.	Trapezoidal counter weight arrangement on OHE structures.	ETI/OHE/G	01502	-
36.	Arrangement of 3 Kv& 25 kv Pedestal insulator supports on OHE masts and portals.	ETI/OHE/G	01601	-

37.	Standard arrangements for mounting of number plate on OHE structures.	ETI/OHE/G	01701	A
38.	Schematic arrangement of regulated overhead equipment.	ETI/OHE/G	02101	A
39.	Typical arrangements of OHE on cantilever masts for double track section.	ETI/OHE/G	2102	-
40.	Typical arrangement for fixing of bracket assembly on 9.5m mast and structure to suit raising of tracks (in future)	ETI/OHE/G	02102 Sh.3	-
41.	MS Bracket fitting for PSC masts – General arrangement and SPS details	ETI/SK/C	214 Sh.1	E
42.	Mast on platforms (1676 mm gauge)	ETI/OHE/G	02104 Sh. 2	A
43.	Details of bracket arrangement on tangent and curved tracks.	ETI/OHE/G	02106 Sh. 1	A
44.	Details of bracket arrangement for OHE (high speed)	ETI/OHE/G	02106 Sh. 3	C
45.	Single bracket assembly on structures and dropped arms.	RE/33/G	02107	D
46.	Box type cantilever arrangement.	ETI/OHE/G	02108	A
47.	Arrangement at anti creep.	ETI/OHE/G	02111	A
48.	Standard cantilever arrangement for boom anchor anti creep location.	ETI/OHE/G	02113	-
49.	Schematic arrangement of un-insulated over lap (type –I) 3 & 4 span overlaps.	RE/33/G	02121 Sh. 1	F
50.	Schematic arrangement of insulated overlap.	ETI/OHE/G	02131 Sh.1	-
51.	General arrangement of regulated OHE at turn-outs (overlap & crossed type)	ETI/OHE/G	02141	C
52.	General arrangement of regulated OHE at cross over (overlap & crossed type)	ETI/OHE/G	02151	-
53.	Arrangement of neutral section.	ETI/OHE/G	02161 Sh.1	C
54.	Arrangement of neutral section assembly (PTFE type) at SWS.	ETI/OHE/G	02162	-
55.	Arrangement of short neutral section.	ETI/OHE/G	02161 Sh.2	-
56.	Schematic arrangement of un-regulated overhead equipment.	ETI/OHE/G	03101	-
57.	Standard termination of OHE (Regulated & un-regulated)	ETI/OHE/G	03121	E
58.	General arrangement of unregulated OHE at turnouts (Crossed & overlap type)	ETI/OHE/G	03151	-
59.	General arrangement of unregulated OHE at cross overs and diamond crossings (overlap and crossed type)	ETI/OHE/G	03152 Sh.1	-
60.	General arrangement of unregulated OHE at diamond crossing.	ETI/OHE/G	03152 Sh.2	-
61.	General arrangement of head span.	ETI/OHE/G	03201	-
62.	General arrangement of pull off.	ETI/OHE/G	03301	A
63.	In span jumper connection between catenary & contact wire.	ETI/OHE/G	05101	-

64.	Continuity jumper connection at un-insulated overlap.	ETI/OHE/G	05102	C
65.	Arrangement of anti-theft jumper.	ETI/OHE/G	05107	A
66.	Connection at turnouts.	ETI/OHE/G	05103	B
67.	Potential equaliser connection at insulated overlap and neutral section.	ETI/OHE/G	05104	-
68.	Connections at diamond crossing.	ETI/OHE/G	05106	A
69.	General arrangement of connections to OHE by copper cross feeder (150)	ETI/OHE/G	05121 Sh.1	C
70.	General arrangement of connections at switching station on double track section by copper cross feeder (150)	ETI/OHE/G	05122 Sh.1	C
71.	General arrangement of connections at switching station on multiple track section by copper cross feeder(150)	ETI/OHE/G	05123 Sh.1	C
72.	Termination of feeder, return conductor & return feeder (copper &aluminium)	RE/33/G	05145-1	-
73.	Arrangement of suspension of double spider 25Kv feeder and return feeder between sub-station and feeding station.	RE/33/G	05152	C
74.	Assembly of section insulators.	RE/33/G	05181	C
75.	General arrangement of earth wire on OHE mast.	ETI/OHE/G	05201	A
76.	SPS details for Earth wire clamp on PSC mast.	ETI/SK/C	214 Sh.2	A
77.	Arrangement of transverse bond.	ETI/OHE/G	05251	A
78.	Connection of return conductor to track.	ETI/OHE/G	05306	F
79.	Suspension arrangement of aluminium return conductor (spider) on traction structures.	ETI/OHE/G	05307	B
80.	Suspension of return conductor (spider) from boom of structures (with clevis type disc insulators)	ETI/OHE/G	05312	A
81.	Connections between OHE and aluminium return conductor at booster stations.	ETI/OHE/G	05413	B
82.	Mounting of 25 Kv Isolators on OHE structures (general arrangement)	ETI/OHE/G	05513 Sh.1	A
83.	Details of small part steel work for supporting 25 Kv Isolator on new TCC boom.	ETI/OHE/G	05513 Sh.2	A
84.	Characteristics of conductors/ Bus bar for 25 Kv AC traction.	ETI/OHE/G	05600	A
85.	Catenary dropper assembly.	ETI/OHE/P	1190	B
86.	Standard anti wind clamp.	ETI/OHE/P	2550-1/2	L
87.	Multiple cantilever cross arm assembly.	RE/33/P	3120	H
88.	Anchor fitting assembly on rolled sections.	ETI/OHE/P	3230	C
89.	Anchor fitting assembly on 'K' series, TTC masts and 'P' type portal upright.	ETI/OHE/P	3240	D

90.	Anchor assembly on 'N' and 'O' type portal upright.	ETI/OHE/P	3250	D
91.	Structure bonds.	ETI/OHE/P	7000	E
92.	Earthing station.	ETI/OHE/P	7020	B
93.	Longitudinal rail bond.	ETI/OHE/P	7030	F
94.	Short super mast assembly.	ETI/C/P	8010	G
95.	Long super mast assembly.	ETI/C/P	8020	C
96.	Bracket attachment assembly on portal upright (N, O, R, P, G & BFB type)	ETI/C/P	8030	B
97.	Super mast assembly on portals.	ETI/C/P	8050	C
98.	Medium super mast assembly	ETI/OHE/P	8060	C
99.	Standard portal (N, O, P, R, G, & Double BFB type)	ETI/C	0064	-
100.	Volume chart and equivalent chart of foundation.	ETI/C	0058 Sh.1	E
101.	Volume chart and equivalent chart of foundation new pure gravity.	ETI/C	0058 Sh.2A	D
102.	Volume chart and equivalent chart of Dry black cotton soil foundation (NBC type) for 16500 & 11000 Kgf/m ² , 3.0 m depth.	ETI/C	0058 Sh.3A	B
103.	Volume chart and equivalent chart of New pure gravity foundation (500 m exposed)	ETI/C	0058 Sh.4	B
104.	Volume chart and equivalent chart of Dry black cotton soil foundation (NBC type) 2.5 depth only for 8000 Kgf/m ²	ETI/C	0058 Sh.5	-
105.	Dwarf mast foundation on wet & dry black cotton soil.	RE/ALD/OH E/ S K/C	02	-
106.	Special BFB portal for 5 tracks (General arrangement)	ETI/C	0026 Sh.1	C
107.	Protective screen at foot over bridge and road over bridge.	ETI/C	0068	F
108.	Chart for portal foundation.	ETI/C	0005/68	-
109.	Muff for OHE structures.	ETI/C	0007/68	D
110.	Structures muff for sand core foundations.	ETI/C	0012/69	D
111.	9.5 m Standard traction mast (fabricated 'K' series)	ETI/C	0018-2	D
112.	Details of Remote Control Cubicles (foundation, RCC slab, building plan & steel door)	ETI/C	0067	B
113.	9.5 m standard traction mast (fabricated with bottom plates 'B' series)	ETI/C	0071	E
114.	Details of OHE foundation in soft rock (bearing capacity 45,000 Kgf/m ²)	ETI/C	0059	B
115.	Details of foundation for fencing upright.	ETI/C	0032	B
116.	Typical location & schematic connection diagram for a three interrupter switching station.	ETI/PSI	003	C
117.	Typical general arrangement of a three interrupter switching station.	ETI/PSI	004	E

118.	Typical location plan & general arrangement for sectioning & paralleling station.	ETI/PSI	005	E
119.	Typical location plan and general arrangement for a feeding station.	ETI/PSI	006	E
120.	Typical general arrangement at a Booster transformer Station (with 4 cross feeder) Type III.	ETI/PSI	013	B
121.	Typical general arrangement of 280 KVA Booster transformer station (with 4 cross feeder) type-III.	ETI/PSI	018	A
122.	Typical general arrangement at a booster transformer station (without cross feeder) type – I.	ETI/PSI	011	C
123.	Arrangement of mounting 25Kv/240, 10 KVA LT supply transformer.	ETI/OHE/G	05522	-
124.	Typical number plate for auxiliary transformer.	ETI/PSI/P	7525	-
125.	Employment schedule for switching and booster station main masts.	ETI/C	0185	B
126.	Drilling schedule for S-1 mast.	ETI/C	0030	F
127.	Drilling schedule for S-2 mast	ETI/C	0031	D
128.	Drilling schedule for S-3 mast(length 11.4 m)	ETI/C	0180	C
129.	Drilling schedule for 8"x6"x35 lbs. RSJ mast 8.0 m long for booster transformer station Type S-4.	ETI/C	0036	E
130.	Drilling schedule for S-5 mast (11.4 m long)	ETI/C	0042	E
131.	Drilling schedule for S-6 mast (length 12.4 m)	ETI/C	0181	C
132.	Drilling schedule for S-7 mast (length 12.4 m)	ETI/C	0182	C
133.	Drilling schedule for S-8 mast (length 12.4 m)	ETI/C	0183	C
134.	Drilling schedule for S-9 mast (length 9.4 m)	ETI/C	0184	C
135.	General arrangement & details of fencing panels & gate for switching station.	ETI/C	0186 Sh.1	E
136.	Details of fencing upright and anti-climbing device for switching station.	ETI/C	0186 Sh.2	E
137.	S-100 fabricated mast for mounting LT supply transformer and drop out fuse switch at switching station.	ETI/C	0043	B
138.	S-101 details of mast for supporting isolator inside switching station.	ETI/C	0044	A
139.	Details of anchor beam for SP, SSP & FP	ETI/C	0033	D
140.	Details of small part steel for switching station.	ETI/C	0034 Sh.1	K
141.	Typical fencing and anticlimbing arrangement at switching station.	ETI/PSI	104	E
142.	Typical earthing layout of sub-sectioning and paralleling station.	ETI/PSI	201	+B

143.	Typical earthing layout of a sectioning and paralleling station.	ETI/PSI	202	B
144.	Typical earthing layout of a feeding station.	ETI/PSI	203	B
145.	Earthing details for interruptor LT supply transformer 25 Kv lightning arrestors P.T. Type-I (S-100 masts, S-101 mast, fencing upright and main mast)	ETI/PSI	204	C
146.	Typical earthing layout at a booster transformer stations.	ETI/PSI	211-1	A
147.	Typical cable run layout of a sub-sectioning & paralleling station.	ETI/PSI	301	C
148.	Typical cable run layout of a sectioning and paralleling station.	ETI/PSI	302	C
149.	Typical cable run layout of a feeding station.	ETI/PSI	303	B
150.	Typical earthing layout at a booster transformer station (with 4 cross feeder for Type III, IV and V)	ETI/PSI	212	B
151.	Typical drawing for a terminal board.	ETI/PSI	501	C
152.	36 mm aluminium Bus terminal.	ETI/PSI/P	6480	C
153.	36 mm Aluminium splices	ETI/PSI/P	6490	B
154.	36 mm aluminium Tee connector.	ETI/PSI/P	6500	C
155.	36 mm aluminium tee terminal	ETI/PSI/P	6510	D
156.	36/15 Tap connector	ETI/PSI/P	6520	C
157.	36 mm aluminium flexible bus splice.	ETI/PSI/P	6550	B
158.	36 mm aluminium bus splice cum tee connector.	ETI/PSI/P	6560	B
159.	Typical number plate for interruptor and double pole isolator.	ETI/PSI/P	7520	B
160.	Typical number plate for potential transformer Type-I	ETI/PSI/P	7521	B
161.	Typical number plate for booster transformer .	ETI/PSI/P	7522	B
162.	Details of bracing for switching & B.T. masts.	ETI/C	0034 Sh.2	B
163.	Details of small parts steel of out rigger for switching stations and booster transformer stations.	ETI/C	0037	C
164.	Details of small parts steel for booster transformer stations.	ETI/C	0040	E
165.	Details of pre-cast cable trench for switching station.	ETI/C	0038	E
166.	Standard 'R' type portal rod laced general arrangement.	ETI/C	0011/69 Sh.1	C
167.	Standard 'G' type portal special upright and end piece.	ETI/C	0056	C
168.	Short bored pile foundation for traction mast (permissible BM & volume)	ETI/C	0062	B
169.	Chart for portal foundations in dry black cotton soil safe bearing capacity 16500 Kg/m ²	ETI/C	0063	B
170.	Special arrangement of OHE under overline structure.	ETI/OHE/S K	529	-

171.	Suspension of 25 Kv feeder (spider) on OHE masts.	ETI/OHE/G	05143	B
172.	Parallel clamp (20/20)	ETI/OHE/P	1550	E
173.	Compensating plate.	ETI/OHE/P	5191-1/2	D
174.	Suspension clamp.	RE/33/P	1160	J
175.	Double suspension clamp.	RE/33/P	1170	K
176.	Double suspension lock plate.	RE/33/P	1172	C
177.	Catenary splice (65)	ETI/OHE/P	1090	-
178.	Arrangement of anti-theft jumper at overlap.	ETI/OHE/G	05107	A

**B. LIST OF STANDARD DRAWINGS FOR TRAMWAY TYPE OHE
(REGULATED)**

1	2	3	4	5
179.	Span and stagger chart for Tramway type OHE (Regulated)	ETI/OHE/G	04201	-
180.	Drilling schedule of OHE mast 8.5m & 9m long RSJ and BFB respectively.	ETI/OHE/G	04202 Sh.1 & 2	C
181.	Schematic arrangement of (regulated) tramway type OHE.	ETI/OHE/G	04203	C
182.	Arrangement of bracket assembly for tramway type OHE (regulated)	ETI/OHE/G	04204	B
183.	Hook Bracket.	ETI/OHE/P	2380	C
184.	BFB steady arm assembly for Tramway OHE (Regulated)	ETI/OHE/P	2540-1	-
185.	Anti wind clamp for tramway OHE (Regulated)	ETI/OHE/P	2550-3	E
186.	Arrangement of anti-creep for Tramway type OHE (Regulated)	ETI/OHE/G	04205	B
187.	Arrangement of anti-creep for Tramway OHE (Regulated alternative arrangement)	ETI/OHE/G	04206	B
188.	Arrangement of section insulator for Tramway type OHE (Regulated)	ETI/OHE/G	04207 Sh.1	B
189.	Small parts steel for supporting section insulator assembly for regulated Tramway type OHE.	ETI/OHE/G	04207 Sh.2	B
190.	Large suspension clamp 20mm (with armour rod)	ETI/OHE/P	1580 Sh.2	-
191.	General arrangement of turnouts for Tramway type OHE (Regulated)	ETI/OHE/G	04208	-
192.	Adjustment chart for Tramway type OHE (Regulated)	ETI/OHE/G	04209	-
193.	Counter weight assembly (light)	ETI/OHE/P	5090-3	E
194.	Counter weight assembly with pulley type regulating equipment.(3:1 ratio)	ETI/OHE/P	5090-5	B
195.	Employment schedule for tramway type regulated OHE without R.C. and E.W.(W.P.112.5 Kgf/m ²)	ETI/C	0705	A
196.	Bridle wire clamp (6mm) with two bolts	ETI/OHE/P	1070-1	B

APPENDIX-L
LIST OF STANDARD SPECIFICATIONS

Sl. No.	Title of Specification	Specification No.
1.	Annealed stranded copper conductor for jumper wire.	ETI/OHE/3 (2/94) With A&C slip No.1 of 4/95.
2.	Copper bus bar.	RE/30/OHE/5 (11/60) IS:613-1984.
3.	Structural steel tubes.	ETI/OHE/11 (5/89)
4.	Hot dip zinc galvanization of steel mast (Rolled and Fabricated) tube and fittings used on 25 Kv AC OHE.	ETI/OHE/13 (4/84) With A&C slip No.1 of 5/86, 2 of 4/90 and 3 of 4/90. QAS-5/86.
5.	Stainless steel wire ropes.	ETI/OHE/14 (9/94) With A&C slip No.1 to 3 of 9/95.
6.	25 Kv single and double pole isolators.	ETI/OHE/16 (1/94)
7.	Steel and SS Bolts, nuts and washers.	ETI/OHE/18 (4/84) With A&C slip No.4 of 10/02 QAS-8/84.
8.	Aluminium alloy section and tubes.	ETI/OHE/21 (9/74)
9.	Section insulator assembly without Section Insulator.	ETI/OHE/27 (8/84) With A&C slip No.1 of 10/92.
10.	Enameled steel plates.	ETI/OHE/33 (8/85)
11.	Galvanized steel wire.	ETI/OHE/36 (12/73) A&C slip No. 1 of 5/98.
12.	Fitting for 25 Kv 50 Hz AC overhead traction equipment (MCI)	ETI/OHE/49 (9/95) A&C slip No.1 of 3/97. QAS-3/1983.
13.	Cadmium Copper conductor for overhead Rly.Traction/Bridle wire/large span wire.	ETI/OHE/50 (6/97) With A&C slip No.1 of 6/97.
14.	25 Kv dropout fuse switch & operating pole for use with 10 KVA, 25 KVA & 50 KVA, LT supply transformer.	ETI/PSI/14 (1/86) With A&C slip No.1 of 4/87.
15.	25 Kv/240 V, 10 KVA LT supply transformer.	ETI/PSI/15 (08/2003)
16.	Aluminium alloy stranded catenary wire 19/2.79 mm.	ETI/OHE/54 (2/85) With A&C slip No.2 of 10/92.
17.	Regulating equipment (a) Winch type (5:1) (b) 3 pulley type (3:1)	ETI/OHE/48 (7/84) With A&C slip No.2 of 3/2003. -do-/48 A(9/85) with A&C slip No.3 of 3/2003.
18.	Battery charger for 110 V battery 40 AH	ETI/PSI/1 (6/81)
19.	7.5 Kv Lightning arrestors.	ETI/PSI/3 (8/75) With A&C slip No.1 of 2/91.
20.	25 Kv potential transformers.	ETI/PSI/8 (10/92) With A&C slip No.1 to 6.
21.	150 KVA Booster Transformers - oil filled. - Dry type.	ETI/PSI/98 (8/92) With A&C slip Nos. 3 of 6/94. ETI/PSI/97 (6/87) With A&C slip No.1&2 of 9/88.
22.	110V, 40 AH Lead Acid batteries.	ETI/PSI/21 (6/81) With A&C slip No.1 of 7/81.

Joint Procedure order for undertaking digging work in the vicinity of underground Signaling, Electrical and Telecommunication Cables.

Regarding incorporating the “Joint Procedure Order” as an integral part of all the tender documents and contract agreements in all future works contract agreements which involves earth work for undertaking digging work in the vicinity of underground Signaling, Electrical and Telecommunication cables along the Railway Track / Railway area etc.

letter No. SG/SWR/OFC/QC/Cut/Damage/Vol. IV/E:3-4, dated 27.12.2023 regarding incorporating the SWR JPO No. S&T-JPO/No.01/2023/Tele Dated 22.12.23 vide this letter this office has circulated “Joint Procedure Order” jointly signed by PCSTE, PCE, PCEE, PCSC & PFA for necessary action regarding undertaking digging work in the vicinity of underground Signaling, Electrical and Telecommunication cables for early adoption and taking necessary action accordingly. It was also mentioned in the letter that JPO shall be made integral part of all the future works contracts which involves earth work/digging in the vicinity of Railway Track/Railway area and in the vicinity of underground Signaling, Electrical and Telecommunication cables etc.

A Joint Procedure Order (JPO) for undertaking digging work in the vicinity of underground Signaling, Electrical and Telecommunication cables was issued last vide Board’s letter No. 2003/Tele/RCIL/1 Pt.IX dated: 24.06.2013 (Telecom Circular No. 17/2013). Notwithstanding the provisions contained in the JPO for protection of cable, a significant number of cable-cut incidents and practical difficulties in implementation of certain provisions of the said JPO were reported.

Penalty to be imposed for damages to cable shall be as under:

Cable damaged	Penalty per location
Only Quad cable or signaling cable	Rs.1.0 Lakh
Only OFC	Rs.1.25 Lakh
Both OFC & Quad	Rs.1.5 Lakh
Electrical Cable	Rs.1.0 Lakh

Penalty should be levied on the contractor when they work without permission or resort to careless working without making arrangements for protecting cables and other utilities,

- 1) सं. SG/SWR/OFC/QC/Cut/Damage/Vol. IV/E:3-4 दिनांक: 12.02.2024,
 - 2) सं. SG/SWR/OFC/QC/Cut/Damage/Vol. IV/E:3-4 दिनांक: 27.12.2023
 - 3) सं.2021/Tele/5(2)/3-Part(1)(3425647) new Delhi dated 12.06.2023
 - 4) No.2023/CE-I-EDCE(G) Misc dated 18.04.2023
 - 5) No. H/G.157/DRM/Misc./OFC/Quad-Cable dated: 22.05.2024
- These all Concerned letters are uploaded in IREPS

7. Joint Note format as per the JPO on Cables cuts issued by SWR

S No	Description	Remarks
1	Division	
2	Station/Block section	
3	Date and time of cut	
4	Date and time of restoration	
5	Location of cable cut (Km)	
6	Cable type (OFC/Quad/Signaling/Electrical)	
7	Availability of Cables route plan for the block section on Rail net (Yes/No)	
8	Provision made in estimate for shifting/protecting the cable (Yes/No)	
9	Is cable shifted / protected by executing agency? (Yes/No)	
10	During execution of the work/cable cut:	
	(i) S & T/ RCIL staff available at the spot?	
	(ii) Supervisor of Executing Agency available at the spot?	
	(iii) Is contractor worked carelessly without making arrangement for protecting cables and other utilities (Yes/No)	
11	Whether cable was in exposed condition for facilitating the works? (Yes/No)	
12	Is the cable properly secured or are damaged by the contractor or miscreant activity during the course of the work and are not reburied after completion of the work.	
13	Cable cut by which department? Name of the Executive Agency and Supervisor at Site	
14	Whether applied for digging permission by the user department? Y/N and if Yes, date of application	
15	Permission for digging provided by Sr. DSTE within 7 days of application or not? If so, date:	
16	Prior information of the work at least 3 days in advance conveyed to S & T by Engg Control (Y/N)	
17	Permission for execution of work provided by concerned SSE/Tele/Sig (Y/N) within 3 days of application or not	
18	Name of the contractor, phone No, nature of work details given to S & T by Engineering Control? If yes, when?	
19	Permission given for execution of the work to State Govt/NHAI/Other than Rly agencies by Engineering department with or without taking clearance from S & T department? If yes, when?	
20	List of gears affected	
21	Whether FIR Lodged (for cut without permission /By miscreants/ outsiders) (Y/N) if yes, crime No. for the same	
22	Whether penalty recommended (Y/N)	
23	If no, Reason thereof	
24	Remarks & Signature, Name Designation of Rly/ RCIL representative	Remarks & Signature, Name Designation of Executing Agency Representative

8. DOCUMENTS TO BE UPLOADED

(I) PARTNERSHIP FIRM

- PAN Card
- GST Certificate
- Power of attorney for signing the tender documents, agreements, measurement books on behalf of the partnership firm.
- Annexure-V and V(A)
- Subcontract Agreement (if any)

(II) PROPRIETORSHIP FIRM

- Same as in Partnership above
- Change of address of the Firm shall be confirmed by the auditor of the Company

(III) PRIVATE LIMITED COMPANY

- PAN details
- GST details
- Power of attorney of the Company
- MOA & AOA, CERTIFICATE OF INCORPORATION
- Board Resolution
- Annexure-V
- SUBCONTRACT AGREEMENT

(IV) JV FIRM

- JV Agreement
- PAN Card of Lead member
- GST certificate of Lead member
- MOA & AOA, CERTIFICATE OF INCORPORATION of Lead member
- Power of attorney backed by the board resolution.
- Annexure- V & V (A)
- MOA & AOA, CERTIFICATE OF INCORPORATION of other members
- Power of attorney of other members
- Annexure-V & V (A) of other members.

9. Following Ratification Clause to be incorporated in the GPA (General Power Attorney)

“AND I hereby for myself, my heirs, executors, administrators of acts done and legal representatives ratify and confirm and agree to ratify and by attorney confirm all and whatsoever my said attorney or his substitute or substitutes shall lawfully do or cause to be done by virtue of these presents”

During GM inspections of work sites (Bridge location. Amrit Bharat station etc.) certain shortcomings were noticed in project Management As a corrective action, the following is suggested:-

- a) The site supervisor should maintain daily register with details of daily resource deployment and work done in absolute quantity (i.e. concreting done in cum earth evacuated, fabrication of steel etc.).
- b) Each CE/CPM should have the progress chart of critical activities of each work under them and key milestone The key milestone should have TDCs
- c) Each contract agreement should incorporate the resource deployment milestone in clear terms and sequence of works to be undertaken so as to achieve these milestone
- d) Penalty and bonus clauses should be incorporated in the contract documents
- e) Wherever the contractor is granted multiple works (multiple FOB Bridges. Buildings etc.) as part of single contract, the resource deployment and key milestone should be mentioned for each work separately
- f) Camera should be installed for key project with feed to concerned CEs/ CAO / DRMs & GM for monitoring purpose.

“End of Tender Document”
