

DEENDAYAL PORT TRUST  
(Formerly known as KANDLA PORT TRUST)  
(An ISO 9001 : 2008 & ISO 14001 : 2004 Certified Port)



MECHANICAL ENGINEERING DEPARTMENT

ELECTRICAL DIVISION

**TENDER NO. EL/AC/2686**

**TENDER FOR**

**Strengthening of 11KV overhead line from thermal to Port  
Power House and Oil Jetty at DPT, Kandla**

Executive Engineer (Electrical)

Electrical Division

DEENDAYAL PORT TRUST

7, Ground Floor,

Port & Custom Building,

New Kandla – 370 210.

Phone No. (02836) 270209/270342

Fax No. (02836) 270184/271010

**DEENDAYAL PORT TRUST**  
**TENDER NOTICE NO.EL/AC/2686**

|   |  |
|---|--|
| Name of work  | Strengthening of 11KV overhead line from thermal to Port Power House and Oil Jetty at DPT, Kandla  |
| Estimated cost put to tender                          | ₹ 2,39,33,732  |
| EMD   | ₹ 00.00/- However, Bid Securing Declaration to be submitted. Tender condition and NIT may be seen.   |
| Tender Fee  | Rs. 5,900/- inclusive of GST. (Rs. 5,000/- + 900 GST). Tender condition and NIT may be seen.   |
| Start date of downloading                             | 08/11/2021   |
| Last date and time of submission of E-tender          | 07/12/2021 upto 14:00 only on website<br><a href="https://kpt.nprocure.com">https://kpt.nprocure.com</a> :   |
| Pre-bid meeting                                       | 17/11/2021 @ 15:00 Hrs. in the Old Board Room, A. O. Building, Gandhidham  |
| Date and time for opening of E-tender                 | 07/12/2021 at 14:30 hrs  |
| Downloading websites                                  | <a href="https://kpt.nprocure.com">https://kpt.nprocure.com</a> , <a href="http://www.deendayalport.gov.in">http://www.deendayalport.gov.in</a> as well as <a href="http://www.eprocure.gov.in">http://www.eprocure.gov.in</a> . |
| Corrigendum, if any, will be placed on websites only. |  |

**Executive Engineer (E)**  
**Deendayal Port Trust**

**NOTICE INVITING ON LINE TENDER**

Details about tender:

|   |   |
|---|---|
| <b>Department Name</b>                  | Mechanical Engineering Department   |
| <b>Circle/ Division</b>                 | Electrical Division, Port & Customs Building,<br>Ground Floor, New Kandla-(Kutch)-370210  |
| <b>Tender Notice No.</b>                | EL/AC/2686  |
| <b>Name of Project</b>                  | "Strengthening of 11KV overhead line from thermal to Port Power House and Oil Jetty at DPT, Kandla"   |
| <b>Name of Work</b>                     | "Strengthening of 11KV overhead line from thermal to Port Power House and Oil Jetty at DPT, Kandla"   |
| <b>Estimated Contract Value (INR)</b>   | <b>₹ 2,39,33,732/-</b>  |
| <b>Period of Completion (in Months)</b> | Five months from the date of issue of work order  |
| <b>Bidding Type</b>                     | Open  |
| <b>Bid Call (Nos.)</b>                  | One   |
| <b>Tender Currency Type</b>             | Single  |
| <b>Tender Currency Settings</b>         | Indian Rupee (INR)  |
| <b>Qualifying Criteria:</b>             | <p>PRE-QUALIFICATION CRITERIA FOR ELIGIBLE BIDDERS:</p> <p>The Bidders shall fulfill the following pre-qualification criteria:</p> <p>a) Average Annual financial turnover during the last 3 years, ending 31<sup>st</sup> March of the previous financial year, should be atleast ₹ 71.80 Lakh Certified by Chartered Accountant.</p> <p>b) Solvency Certificate issued by any Nationalized/ Scheduled Bank (except co-operative bank) for ₹ 95.73 Lakh not older than 6 months as on the date of opening of bid.</p> <p>c) Experience of having successfully completed similar works during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following:</p> <p>i) Three similar completed works each costing not less than the amount equal to ₹ 95.73 Lakh.<br/>Or</p> <p>ii) Two similar completed works each costing not less than the amount equal to ₹ 119.67 Lakh.<br/>Or</p> <p>iii) One similar completed work costing not less than the amount equal to ₹ 191.47 Lakh.</p> <p>Note: In case the similar work has been issued for any private body, the bidder will be required to produce the tax deducted at source (TDS) certificate indicating the income tax deducted by the client for</p> |

|                      |  |
|----------------------|--|
|                      | <p>that work which will form the basis for assessing the value of completed work. Alongwith the TDS certificate, a statement should be submitted giving details showing the name of client, gross amount of work, TDS amount and net payment received. This statement should be signed by a Chartered Accountant.</p> <p>d) Bidders who meet the minimum qualification criteria will be qualified only if their available bid capacity is more than the total bid value.</p> <p>The available bid capacity will be calculated as under:</p> <p>Assessed Available Bid capacity = <math>A \times N \times 2 - B</math>,</p> <p>Where,</p> <p>"N" = Number of years prescribed for completion of the subject contract.</p> <p>"A" = Maximum value of works executed in any one year during last seven years (at current price level).</p> <p>"B" = Value at current price level of existing commitments and on-going works to be completed in the next 'N' years.</p> <p>The Bidder shall furnish statements showing the value of existing commitments and on-going works as well as the stipulated period of completion remaining for each of the works preferably countersigned by the Nodal Office or his nominee-in charge.</p> <p>(E) The contractor shall have valid electrical contractor's license for carrying out electrical work of nature involved in this tender obtained from the competent authority of their respective states without which the tender shall not be accepted. Contractor shall submit certificate and copy of the license in lieu of the same for consideration.</p> <p>(F) Upload duly signed document given at Section-IX towards evidence of site visit. (The bidder who has not physically visited the site and not uploaded document given at Section-IX, will be declared technically disqualified. The date of physical visit of site should be the date invariably prior to date of opening of preliminary bid. The mandatory site visit and uploading of document are exempted if there is declared travel restriction by central/state government)</p> <p><b>Similar works means</b> Supply, installation, testing and commissioning of 11 KV overhead and underground electrical network with relevant accessories in government/semi government/private sector/PSUs.</p> <p>Note: In case of a single project, where, different work orders for different activities has been issued by one agency, such work shall also be considered.</p> |
| <b>Joint Venture</b> | <b>Not Allowed</b>   |
| <b>Rebate</b>        | <b>Not applicable</b>  |

|   |   |
|---|---|
| <b>Bid Document Fee:</b>                        | Rs. 5000 + 900 (GST) Present rate of GST is 18%<br><br>Through on line transfer in PNB bank account no. 2177000100022538 - Deendayal Port Trust - (IFSC code PUNB0217700). Scanned copy of RTGS no. and date of transfer may be uploaded on (n) procure website.<br><br>(In case of Micro and Small Enterprise (MSEs) Valid Govt. Purchase Enlistment Certificate issued by Ministry of Micro, Small & Medium Enterprises, Govt. of India/National Small Scale Industries Corporation Ltd., showing list of items related to subject tender and monetary limit may be submitted in order to become eligible for exemption from payment of Tender fee. Such bidders shall upload the scanned copy of valid certificate. <b>It may be noted that exemption certificate issued by any other authority will not be entertained.</b> |
| <b>Bid Document Fee Payable To:</b>             | Through on line transfer in PNB bank account no. 2177000100022538 – Deendayal Port Trust (IFSC code PUNB0217700). Scanned copy of RTGS no. and date of transfer may be uploaded on (n) procure website.   |
| <b>Bid Security/ EMD (INR) :</b>                | <b>₹ 00.00/-</b><br><br>The bidder is required to upload duly filled in Bid Securing Declaration in prescribed format as provided at Section-VIII during preliminary bid stage. In the event of non-uploading of Bid Securing Declaration during preliminary bid stage their technical and price bid will not be opened.  |
| <b>Bid Security/ EMD (INR) In Favor Of :</b>    | <b>₹ 00.00/-</b><br><br>The bidder is required to upload duly filled in Bid Securing Declaration in prescribed format as provided at Section-VIII during preliminary bid stage. In the event of non-uploading of Bid Securing Declaration during preliminary bid stage their technical and price bid will not be opened.  |
| <b>Bid Document Downloading Start Date</b>      | <b>08/11/2021</b>   |
| <b>Bid Document Downloading End Date</b>        | <b>07/12/2021 up to 14:00 Hrs.</b>  |
| <b>Date &amp; Place of Pre Bid Meeting</b>      | <b>17/11/2021 @ 15:00 Hrs. Old Board Room at A.O. Building, Gandhidham</b>  |
| <b>Last Date &amp; Time for Receipt of Bids</b> | <b>07/12/2021 @ 14:00 Hrs.</b>  |
| <b>Bid Validity Period</b>                      | <b>120 Days</b>   |

|   |  |
|---|--|
| Condition   | <p>(1) Tender Fee shall be submitted Through on line transfer in PNB bank account no. 2177000100022538 - Deendayal Port Trust (IFSC code PUNB0217700). Scanned copy of RTGS no. and date of transfer may be uploaded on (n) procure website. (In case of Micro and Small Enterprise (MSEs) Valid Govt. Purchase Enlistment Certificate issued by Ministry of Micro, Small &amp; Medium Enterprises, Govt. of India/National Small Scale Industries Corporation Ltd., showing list of items related to subject tender and monetary limit may be submitted in order to become eligible for exemption from payment of Tender fee. Such bidders shall upload the scanned copy of valid certificate. <b>It may be noted that exemption certificate issued by any other authority will not be entertained.</b></p> <p>(2) EMD: The bidder is required to upload duly filled in Bid Securing Declaration in prescribed format as provided at Section-VIII during preliminary bid stage. In the event of non-uploading of Bid Securing Declaration during preliminary bid stage their technical and price bi will not be opened.</p> <p>Accordingly, offer of those bidders shall only be opened whose EMD in form of Bid security declaration form as per Section-VIII) AND Tender Fee is received electronically. However, for the purpose of realization, bidder shall send the same in original to Executive Engineer (E) at the time of tender opening or send the same by hand/courier/RPAD/Speed post so as to reach the Executive Engineer (E), Deendayal Port Trust, P&amp;C Building, New Kandla within 07 days from the last date of opening.</p> |
| Remarks   | Submission of EMD in form of Bid security declaration form for as per Section-VIII), tender fees and other documents during office hours: on 07/12/2021 to 13/12/2021 by hand/courier/RPAD/Speed post in the chamber of Executive Engineer (E), Electrical Division, P&C Building, New Kandla (Kutch) – 370 210. Phone: 02836- 270209/270342.  |
| Bid Opening Date  | Technical Bid (preliminary) will be opened on 07/12/2021 @ 14:30 Hrs. Date of opening of price bid shall be notified after scrutiny and evaluation of Technical Bid.   |
| Documents required to be submitted by scanning through online | <p>a. Documents in support of fulfilling Qualifying Criteria as indicated above.</p> <p>b. <b>Tender fees plus GST:</b> Through on line transfer in PNB bank account no. 2177000100022538 – Deendayal Port Trust - (IFSC code PUNB0217700). Scanned copy of RTGS no. and date of transfer may be uploaded on (n) procure website. (In case of Micro and Small Enterprise (MSEs) Valid Govt. Purchase Enlistment Certificate issued by Ministry of Micro, Small &amp; Medium Enterprises, Govt. of</p>  |

|                         |   |
|-------------------------|---|
|                         | <p>India/National Small Scale Industries Corporation Ltd., showing list of items related to subject tender and monetary limit may be submitted in order to become eligible for exemption from payment of tender fee. Such bidders shall upload the scanned copy of valid certificate. <b>It may be noted that exemption certificate issued by any other authority will not be entertained.</b></p> <p>c. <b>EMD:</b> The bidder is required to upload duly filled in Bid Securing Declaration in prescribed format as provided at Section-VIII during preliminary bid stage. In the event of non-uploading of Bid Securing Declaration during preliminary bid stage their technical and price bi will not be opened.</p> <p>d. Documents Mentioned in Eligibility Criteria.</p> |
| Officer- Inviting Bids: | Executive Engineer (E), Electrical Division, Port & Custom Building, Ground Floor, New Kandla-(Kutch)-370210  |
| Bid Opening Authority : | Executive Engineer (E)  |
| Address:                | Executive Engineer (E), Electrical Division, Port & Custom Building, Ground Floor, New Kandla-(Kutch)-370210  |
| Contact Details :       | <p>Executive Engineer (E), Electrical Division, Port &amp; Custom Building, Ground Floor, New Kandla (Kutch)-370210 Phone: 02836-270209, 270342.</p> <p>Fax No. 02836 270184.</p>   |

**In case, bidders need any clarifications or if training is required to participate in online Tenders, they can contact (n) Procure Support team at following address: -**

(n) Code Solutions-A division of GNFC Ltd.,  
(n)Procure Cell 403, GNFC Info tower, S.G. Road, Bodakdev, Ahmadabad – 380054 (Gujarat)

**Contact Details:**

**Airtel:** +91-79-40007501, 40007512, 40007516, 40007517, 40007525

**BSNL:** +91-79-26854511, 26854512, 26854513 (EXT: 501, 512, 516, 517, 525)

**Reliance:** +91-79-30181689 Fax: +91-79-26857321, 40007533

**E-mail:** [nprocure@gnvfc.net](mailto:nprocure@gnvfc.net)

**TOLL FREE NUMBER:** 1-800-233-1010 (EXT: 501, 512, 516, 517, 525)

**SECTION – I****INSTRUCTION TO BIDDERS****A. GENERAL****1. Scope of Bid**

- 1.1 The Executive Engineer (Electrical), Deendayal Port Trust invites bids by E-Tendering from the interested eligible bidder for the work as mentioned in the notice inviting online tender. All bids shall be completed and submitted on-line in accordance with instruction to the bidders.
- 1.2 The successful bidder will be expected to complete the works by the intended completion period.

**2. Source of funds**

- 2.1 The employer has arranged the funds from the internal resources and will have sufficient funds in India Currency for execution of the work.

**3. Eligible Bidders**

Only eligible bidders fulfilling all the requirements as mentioned in the Notice Inviting Online Tender may participate in the subject Tender. Successful completion of "Similar Works" only shall be considered for evaluation of eligibility criteria.

- 3.1 The invitation for Bids is open to all eligible bidders meeting the eligibility criteria as defined in clause regarding Eligibility Criteria.
- 3.2 All bidders shall fill the forms provided in Section – IV - Part – I "To be submitted by Bidders with their Bids".
- 3.3 Government-owned enterprises may participate if they are legally and financially autonomous, operate under commercial law and are not a dependent agency of the employer subject to fulfillment of Minimum Qualifying criteria.
- 3.4 Bidders shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by the employer.

**4. Eligibility Criteria:**

- 4.1** The Bidders shall fulfill the following pre-qualification criteria:

| Sr. No | Particulars  | Supporting Documents  |
|--------|--|---|
| (a)    | Average Annual financial turnover during the last 3 years, ending 31 <sup>st</sup> March of the previous financial year, should be atleast ₹ 71.80 Lakh Certified by Chartered Accountant. | Certificate should be issued by the Chartered Accountant. In case, the Accounts of 2020-21 has not been finalized, provisional turnover certificate duly signed by CA may be submitted. |



|     |  |   |
|-----|--|---|
| (b) | Solvency Certificate for ₹ 95.73 Lakh, not older than 6 months as on the date of opening of bid.   | The solvency certificate should be issued by any Nationalized Bank / Scheduled Bank (except co-operative bank)  |
| (c) | <p>Experience of having successfully completed similar works during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following:</p> <ol style="list-style-type: none"> <li>1. Three similar completed works each costing not less than the amount equal to ₹ 95.73 Lakh.</li> </ol> <p style="text-align: center;"><b>Or</b></p> <ol style="list-style-type: none"> <li>2. Two similar completed works each costing not less than the amount equal to ₹ 119.67 Lakh.</li> </ol> <p style="text-align: center;"><b>Or</b></p> <ol style="list-style-type: none"> <li>3. One similar completed work costing not less than the amount equal to ₹ 191.47 Lakh.</li> </ol> | <p>(a) A copy of the completion certificate in respect of the successfully completed similar work.</p> <p>(b) A copy of detail work order should also be submitted for which the bidder is submitting the completion certificate.</p> <p>Such completion certificate should be issued on the letter head of the client and invariably reflect the following details:-</p> <p>c) In Case the similar work has been issued for any private body, the bidder will be required to produce the tax deducted at source (TDS) certificate indicating the income tax deducted by the client for that work, which will form the basis for assessing the value of completed work. Along with the TDS certificate, a statement should be submitted giving details showing the name of the client, gross amount of the work, TDS amount and net payment received. The statement should be signed by the Chartered Accountant.</p> <p>d) Bidders who meet the minimum qualification criteria will be qualified only if their available bid capacity is more than the total bid value.</p> <p>The available bid capacity will be calculated as under:<br/> Assessed Available Bid capacity = <math>A \times N \times 2 - B</math>,<br/> Where,<br/> "N" = Number of years prescribed for completion of the subject contract.<br/> "A" = Maximum value of works executed in any one year during last seven years (at current price level).<br/> "B" = Value at current price level of existing commitments and on-going works to be completed in the next 'N' years.</p> <p>The Bidder shall furnish statements showing the value of existing commitments and on-going works as well as the stipulated period of completion remaining for each of the works preferably countersigned by the Nodal Office or his nominee-in charge.</p> <p>(e) The contractor shall have valid electrical contractor's license for carrying out electrical work of nature involved in this tender obtained from the competent authority of their respective states without which the tender shall not be accepted. Contractor shall submit certificate and copy of the license in lieu of the same for consideration.</p> <p>(f) Upload duly signed document given at Section-IX towards evidence of site visit. (The bidder who has not physically visited the site and not uploaded document given at Section-IX, will be declared technically disqualified. The date of physical visit of site should be</p> |

|                    |  |   |                |         |         |         |         |         |         |         |       |       |       |       |       |       |       |       |                    |   |      |      |      |      |      |      |
|--------------------|--|---|----------------|---------|---------|---------|---------|---------|---------|---------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|---|------|------|------|------|------|------|
|                    |  | the date invariably prior to date of opening of preliminary bid. The mandatory site visit and uploading of document are exempted if there is declared travel restriction by central/state government)   |                |         |         |         |         |         |         |         |       |       |       |       |       |       |       |       |                    |   |      |      |      |      |      |      |
| (d)                | <b>Similar works means</b>   | <p>Supply, installation, testing and commissioning of 11 KV overhead and underground electrical network with relevant accessories in government/semi government/private sector/PSUs.</p> <p>Note: In case of a single project, where, different work orders for different activities has been issued by one agency, such work shall also be considered.</p> |                |         |         |         |         |         |         |         |       |       |       |       |       |       |       |       |                    |   |      |      |      |      |      |      |
| (e)                | <p>Assessed Available Bid capacity = <math>A \times N \times 2 - B</math>,<br/>Where,<br/>"N" = Number of years prescribed for completion of the subject contract.<br/>"A" = Maximum value of works executed in any one year during last seven years (at current price level).<br/>"B" = Value at current price level of existing commitments and ongoing works to be completed in the next 'N' years.<br/>Note: For bringing value of works to current level, multiplying factor to be indicated in tender with reference to escalation based on WPI.</p> <table><tr><td>Financial Year</td><td>2020-21</td><td>2019-20</td><td>2018-19</td><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td></tr><tr><td>Index</td><td>123.4</td><td>121.8</td><td>119.8</td><td>114.9</td><td>111.6</td><td>109.7</td><td>113.9</td></tr><tr><td>Multiplying Factor</td><td>1</td><td>1.01</td><td>1.03</td><td>1.07</td><td>1.11</td><td>1.12</td><td>1.08</td></tr></table> <p>The Bidder shall furnish statements showing the value of existing commitments and ongoing works as well as the stipulated period of completion remaining for each of the works preferably countersigned by the Nodal Office or his nominee-in charge.</p> |   | Financial Year | 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 | Index | 123.4 | 121.8 | 119.8 | 114.9 | 111.6 | 109.7 | 113.9 | Multiplying Factor | 1 | 1.01 | 1.03 | 1.07 | 1.11 | 1.12 | 1.08 |
| Financial Year     | 2020-21  | 2019-20   | 2018-19        | 2017-18 | 2016-17 | 2015-16 | 2014-15 |         |         |         |       |       |       |       |       |       |       |       |                    |   |      |      |      |      |      |      |
| Index              | 123.4  | 121.8   | 119.8          | 114.9   | 111.6   | 109.7   | 113.9   |         |         |         |       |       |       |       |       |       |       |       |                    |   |      |      |      |      |      |      |
| Multiplying Factor | 1  | 1.01  | 1.03           | 1.07    | 1.11    | 1.12    | 1.08    |         |         |         |       |       |       |       |       |       |       |       |                    |   |      |      |      |      |      |      |

- 4.2 All bidders shall scan and forward the following information and documents with their bids.
- Copies of original documents defining the constitution or legal status, place of registration, and principal place of business, written power of attorney of the signatory of the Bid to commit the Bidder.
  - Total monetary value of similar works performed for each of the last seven years ending last day of month previous the one in which applications are invited.
  - Experience in works of a similar nature and size for each of the last seven years, and details of works underway or contractually committed, and Employers who may be contacted for further information on those contracts.
  - Reports on the financial standing of the Bidder, such as profit and loss statements and auditor's reports for the past three years ending 31<sup>st</sup> March of the previous financial year.
  - Duly filled Forms mentioned in Section – IV- Part – I.
  - PAN, Registration with GST, Provident Fund Authorities.
  - Valid Electrical Contractor License issued respective States.
  - EMD = The bidder is required to upload duly filled in Bid Securing Declaration in prescribed format as provided at Section-VIII during preliminary bid stage. In the event of non-uploading of Bid Securing Declaration during preliminary bid stage their technical and price bid will not be opened.
  - Tender fee = Through on line transfer in PNB bank account no. 2177000100022538

- Deendayal Port Trust (IFSC code PUNB0217700). Scanned copy of RTGS no. and date of transfer may be uploaded on (n) procure website.
- j. Information regarding any litigation, current or during the last five years, in which the Bidder is involved, the parties concerned, and disputed amount.
- k. A certificate by the bidder that they have not been banned / black listed by any govt. Agency.
- l. Power of attorney (dully accompanied by resolution of Board in case of company).
- m. Qualifications and experience of key site management and technical personnel proposed for the contract.
- n. The proposed methodology and program of work, backed with equipment planning and deployment, duly supported with broad calculations and quality control procedures proposed to be adopted justifying their capability of execution and completion of the work as per technical specifications within the stipulated period of completion as per milestones. (Modified as per Clause No. 1 under Special conditions, section-III)
- o. The completion certification should invariably mention the reference no. of work order, the date of completion and contract value.
- p. The copy of the work order should also be submitted for which the bidder is submitting completion certificate.
- q. In case the similar work has been executed for any private body, the bidder will be required to produce the tax deducted at source (TDS) certificate indicating the income tax deducted by the client for that work, which will form the basis for assessing the value of completed work.
- r. Bidders should give an undertaking letter duly stating that the documents submitted by them in support of their credentials are genuine and DPT is at liberty to take any action against the bidder if the said documents are found to be non-genuine.
- s. Bidders should give an undertaking that they will comply to the specifications of the work including terms and conditions in total without any deviation.
- 4.3 Even though the bidder meets the above qualifying criteria, they are subject to be disqualified if they have:
  - Made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements: and/or
  - Record of poor performance such as abandoning the works, non – completion of the contract.

## **5. One Bid per Bidder**

- 5.1** Each bidder shall submit only one bid. A bidder who submits more than one Bid will cause all the proposals with the Bidder's participation to be disqualified and the bidder can be disqualified for bidding of any contract with DPT for a period of 03 years.

## **6. Joint Venture: (Modified as per Clause No. 2 under Special Conditions, Section-III).**

In case of association in the form of consortium or joint venture agreement, the members of the association shall nominate one of the members as "lead partner" for participating in the tender and signing all the documents related therewith up to signing of agreement and execution of all the contractual obligations there after (in case of award of contract). All the partners of the association must also, jointly and severally, be

responsible for satisfactory execution and performance of the contract. The firms with at least 26% equity holding each are allowed to jointly meet the legibility criteria.

## **7. Cost of Bidding**

- 7.1** The Bidder shall bear all costs associated with the preparation and submission of its Bid and employer will in no case be responsible and liable for those costs regardless of the conduct or outcome of the bidding process.

## **8. Site Visit**

- 8.1** The Bidder, at his own responsibility and risk is encouraged to visit and examine the site of work and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for the works. The costs of visiting the site shall be at the Bidders' own expense.

## **B. Bidding Documents**

### **9. Content of Bidding Documents**

- 9.1** The set of bidding documents comprises the documents listed in the below and addenda issued in accordance with clause 9:

Invitation for Bids (NIT)

- **Bid Reference No. EL/AC/2686**

|                       |   |   |
|-----------------------|---|---|
| • <b>NIT</b>          | : | <b>Invitation for Bids</b>                          |
| • <b>Section I</b>    | : | <b>Instruction to Bidders</b>                       |
| • <b>Section II</b>   | : | <b>General Conditions of Contract</b>               |
| • <b>Section III</b>  | : | <b>Special Conditions of Contract</b>               |
| • <b>Section IV</b>   | : | <b>Forms of Bid</b>                                 |
| • <b>Section V</b>    | : | <b>Scope of Work &amp; Technical Specifications</b> |
| • <b>Section VI</b>   | : | <b>Bill of Quantities</b>                           |
| • <b>Section VII</b>  | : | <b>Drawings</b>                                     |
| • <b>SECTION VIII</b> | : | <b>Bid Securing Declaration Form</b>                |
| • <b>SECTION IX</b>   | : | <b>Evidence Towards site visit.</b>                 |
| • <b>SECTION X</b>    | : | <b>Guarantee Bond</b>                               |
| • <b>SECTION XI</b>   | : | <b>Bar Chart</b>                                    |

- 9.2** The bidding documents shall be downloaded. The documents should be completely filled and submitted through on line E – Tendering process.

- 9.3** The bidder is expected to examine carefully all instructions, conditions of contract, forms, terms, technical specifications, bill of quantities, in the bid document. Failure to comply with the requirements of the bid document shall be at the bidder's own risk. Bids which are not substantially responsive to the requirements of the tender documents shall be rejected.

## **10. Clarifications of the Bidding Documents**

- 10.1** A prospective bidder requiring any clarification of the bidding documents may notify the employer in writing. The employer may respond to any request for clarification which are received within seven days prior to date of pre-bid meeting. The clarifications shall be uploaded on Website <https://kpt.nprocure.com>, [www.deendayalport.gov.in](http://www.deendayalport.gov.in) and [www.eprocure.gov.in](http://www.eprocure.gov.in).

## 10.2 Pre–Bid meeting

- 10.2.1 The bidder or his official representative may attend pre-bid meeting to be held on 17/11/2021 @ 15:00 hrs in the Old Board Room, A.O Building, Gandhidham. The bidders/representative of bidders who wish to attend the Pre-Bid meeting shall furnish the authority letter on the letter head of Bidder, for attending the Pre-Bid Meeting on behalf of bidder at the time of Pre-Bid Meeting.
- 10.2.2 The purpose of the meeting will be to clarify issues related to work and tender conditions.
- 10.2.3 Pre – Bid clarifications will be uploaded in <https://kpt.nprocure.com>, [www.deendayalport.gov.in](http://www.deendayalport.gov.in) and [www.eprocure.gov.in](http://www.eprocure.gov.in) website without disclosing source of enquiry.
- 10.2.4 Non-attendance at the pre-bid meeting will not be a cause for disqualification of a bidder.
- 10.2.5 At any time prior to the deadline for submission of Bids, employer may, for any reason, whether at its own initiative or in response to a clarification sought by any prospective bidder, modify the bidding documents by amendment / addendum.
- 10.2.6 Those bidders who download the tender document from the website shall be solely responsible to check the web site for the amendment issued in shape of Corrigendum and/or Addendum.

## 11. Language of Bid

All documents relating to the bid shall be in the English language.

## 12. Documents comprising the Bid

The bid submitted by the bidder shall comprise the following:

### **A) Technical Bid:**

- i) Bid Security i.e. EMD in the form of Bid Securing Declaration Form and Tender Fees
- ii) Qualification information in accordance to clause of **Eligibility Criteria** shall be submitted.

### **B) Financial Bid:**

- (i) Bill of Quantities duly filled and digitally signed by bidder.

## 13. Bid Prices

- 13.1 The rates and prices quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
- 13.2 The prices shall be quoted inclusive of all Taxes, (except GST), Duties, and other incidentals charges like Transportation, Loading, Unloading, Boarding & Lodging, insurance etc. and should remain firm till completion of work.

#### **14. Currencies of Bid and Payment**

The unit rates and the prices shall be quoted by the bidder in Indian Rupees only.

#### **15. Bid Validity**

- 15.1 Bids shall remain valid for a period of 120 days from the date of opening of the Technical Bid. A bid valid for a shorter period shall be rejected by the employer as Non-responsive.
- 15.2 In exceptional circumstances, prior to expiry of the original time limit, the employer may request the bidders to extend the period of validity for additional period. The request and the bidders' responses shall be made in writing. A bidder may refuse the request for which EMD, if any, will not be forfeited.
- 15.3 A bidder agreeing to the request will not be permitted to modify his bid.

#### **16. Bid Security (Earnest Money Deposit-EMD In form of bid security declaration form as per Section- VIII)**

The bid/tender shall be accompanied by bid securing declaration in prescribed format as provided at Section-VIII of the bid document. The bid/tender not accompanied with this declaration shall not be considered and their technical and price bid will not be opened.

##### **(a) EMD (not applicable)**

##### **(b) Necessary action shall be taken to disqualify the bidder from bidding process of any contract with DPT for a period of 03 years, if :**

- (i) The bidder withdraws the Bid after Bid opening during the bid validity;
- (ii) The bidder does not accept the correction of the Bid-Price, pursuant to any arithmetic errors;
- (iii) The successful Bidder fails within the specified time limit to
  - a) sign the Agreement or
  - b) furnish the required performance Guarantee
- (iv) The bidder submits more than one bid

#### **17. Alternative Proposals by Bidders**

- 17.1 Conditional offer or Alternative offers will not be considered in the process of tender evaluation.

#### **18. Format and Signing of Bid**

- 18.1 The Price Bid to be submitted on-line shall be signed digitally by a person or persons duly authorized to sign on behalf the Bidders.

#### **19. Amendment of Bidding Documents**

- 19.1 Before the deadline for submission of bids, the Employer may modify the bidding documents by using addenda.
- 19.2 Any addendum thus issued shall be part of the bidding documents and shall be communicated in writing or by cable to all the purchasers of the bidding documents. Prospective bidders shall acknowledge the receipt of each addendum by cable to the Employer.

- 19.3 To give prospective bidders reasonable time in which to take an addendum in to account in preparing their bids, the Employer shall extend as necessary the deadline for submission of bids.

**D. Submission of Bids**

**20. Submission of Bids**

Bidders who wish to participate in the tender will have to procure/should have legally valid Digital Certificate, as per Information Technology Act-2000, using which they can sign their electronic bids. The bidders can procure the Digital Certificate from (n) code solutions a division of GNFC Ltd, who are licensed certifying authority by Government of India. All bids should be digitally signed. For details regarding Digital signature certificate and related matters, the bidder may contact the following address:

(n) Code Solutions,  
A Division of GNFC,  
301 GNFC Info tower,  
Bodakdev, Ahmedabad.  
Tel. 91 79 26857316/17/18  
Fax: 91 79 26857321  
Mobile: 9327084190 / 9898589652.  
E-mail: [nprocure@gnvfc.net](mailto:nprocure@gnvfc.net).

The accompaniments to the tender documents as described under Clause **4.2** shall be Scanned and submitted On-Line along with Tender documents. **However, the originals/attested hard copies along with tender documents (except Price Bid), signed on bottom of each page in token of acceptance of Tender Conditions** and shall have to be forwarded subsequently so as to reach the office of Executive Engineer (E) within 7 days of opening of the tenders.

- 20.1 The envelopes shall be addressed to:

- (a) Executive Engineer (E)  
Deendayal Port Trust  
Electrical Division,  
Room No. 6,  
Port & Customs Building,  
New Kandla – 370210. Gujarat-State.
- (b) bear the following identification:

Accompaniments for "Strengthening of 11KV overhead line from thermal to Port Power House and Oil Jetty at DPT, Kandla".

Bid reference No. EL/AC/2686  
Name and address of the bidder.

**21. Deadline of Submission of the Bids**

- 21.1 Bids must be received by the employer in On-Line System at websites <https://kpt.nprocure.com> not later than 07/12/2021 up to 14:00 Hrs.
- 21.2 At the time of submission of the tender document, the Bidder shall give an undertaking that no changes have been made in document. The uploaded version of the Port Tender

Document at <https://kpt.nprocure.com> websites will be treated as authentic tender and if any discrepancy is noticed at any stage between the Port's tender document and the one submitted by the Bidder, the conditions mentioned in the Port's uploaded document on <https://kpt.nprocure.com> websites shall prevail.

- 21.3 The employer may extend the deadline for submission of bids by issuing an amendment on DPT website as well as on <https://kpt.nprocure.com> in which case all rights and obligations of the employer and the bidders previously subject to the original deadline will then be subject to the new deadline.
- 21.4 In case of tender documents being downloaded from the web site, at the time of submission of (the hard copy of) the tender document, the tenderer shall give an undertaking that no change have been made in document. Any discrepancy is noticed at any stage between the port's tender document uploaded on <https://kpt.nprocure.com> and the one submitted by the tenderer, the conditions mentioned in the port's tender document uploaded on <https://kpt.nprocure.com> shall prevail. Besides, the tenderer shall be liable for legal action for the lapses.

## **22. Late Bids**

- 22.1 After the deadline of submission of bid, the bids cannot be submitted in the On-Line System.

## **23. Modification and Withdrawal of Bids**

- 23.1 Bidders may modify or withdraw their bids before the deadline of submission of bid or extension if any.
- 23.2 No Bid can be modified after the last date for submission of Bids.
- 23.3 Withdrawal or modification of a Bid between the deadline for submission of bids and the expiration of the original period of bid validity including extension, if any, may result in disqualification of the bidder from bidding process of any contract with DPT for a period of 03 years.

## **E. Bid Opening and Evaluation**

### **24. Bid Opening**

- 24.1 On the due date and time, the employer will first open Technical bids of all bids received including modifications.
- 24.2 In the event of the specified date for Bid opening being declared a holiday by the employer, the Bids will be opened at the appointed time on the next working day at the same time.
- 24.3 If any Bid contains any deviation from the Bid documents and / or if the same does not contain Bid security i.e., EMD in the form of Bid security declaration form and tender fees in the manner prescribed in the Bid documents, then that Bid will be rejected and the Bidder will be informed accordingly.



24.4 The bids which are technically qualified, their financial bids will be opened. The date of opening of financial bid will be declared in the <https://kpt.nprocure.com> and [www.deendayalport.gov.in](http://www.deendayalport.gov.in) .

24.5 The price bid i.e., BOQ will be opened only those bids qualify technically.

## **25. Clarification of Bids**

25.1 To assist in the examination and comparison of Bids, the employer may, at his discretion, ask any Bidder for clarification of his Bid, including breakup of unit rates. The request for clarification and the response shall be in writing, but no change in the price of substance of the Bid shall be sought, offered, or permitted.

25.2 No Bidder shall contact the employer on any matter relating to his bid from the time of the bid opening to the time the contract is awarded.

25.3 Any effort by the Bidder to influence the employer's bid evaluation, bid comparison or contract award decisions, may result in the rejection of his bid.

## **26. Examination of Bids and Determination of Responsiveness**

26.1 Prior to detailed evaluation of Bids, the employer will determine whether each Bid

- (a) Has been properly digitally signed,
- (b) Meets the eligibility criteria defined
- (c) Is accompanied by the required Bid Securing Declaration Form and tender fees;
- (d) is responsive to the requirements of the Bidding documents.
- (e) GST number to be quoted invariable by bidder.

26.2 A substantially responsive Technical and Financial Bid is one which conforms to all the terms, conditions and specification of the Bidding documents.

26.3 If a Technical Bid is not substantially responsive, it will be rejected by the employer, and may not subsequently be made responsive by correction or withdrawal of the non-confirming deviation or reservation.

## **27. Evaluation and Comparison of Bids**

27.1 The employer will evaluate and compare only the Bids determined to be responsive.

27.2 In evaluating the Bids, the employer will determine for each Bid the evaluated Bid price by adjusting discounts, if any.

27.3 If in the opinion of Engineer in Charge, the rate quoted by successful bidder is abnormally high/low compared to the estimated cost of the work, the employer may ask the bidder to produce detailed price analysis for all items of the bill of quantities.

## **F. Award of Contract**

### **28. Award Criteria**

The employer will award the work to the bidder whose bid has been evaluated to be techno-commercially responsive and the lowest evaluated amount bid subject to submission of agreement and performance security.

The employer, if so required, reserves the right to:

- a) Split the work and award the work in favor of more than one firm,
- b) Award the work separately as supply, execution, Operation & Maintenance/Operation/Maintenance as applicable.

**29. Employer's Right to accept any Bid and to reject any or all.**

Notwithstanding Clause 28, the Employer reserve the right to accept or reject any bid without assigning any reason and to cancel the bidding process and reject all bids, at any time prior to the award of contract, without thereby incurring and liability to the affected bidder or bidders of the grounds for Employer's action.

**30. Letter of Intent:**

The Chief Mechanical Engineer will issue the Letter of Intent (Form No. 7) intimating the successful bidder about the proposed pre-acceptance of tender.

**31. Notification of Award and Signing of Agreement**

- i) The Bidder who's Bid has been accepted will be notified for the award by the employer prior to expiration of the Bid validity period by confirmation in writing. In this letter (hereinafter and in the Conditions of Contract called the "Letter of Intent") the contract amount, completion period of the work, etc. will be mentioned in line with the tender conditions.
- ii) The notification of award will constitute the formation of the Contract subject to the furnishing of a performance security in accordance with the provisions of tender condition.
- iii) The Agreement will be submitted by successful Bidder within 14 days (National Bid) 28 days (Global Bid) of issue of the notification of award (Letter of Intent). The agreement will incorporate all correspondence between the employer and the successful bidder.

**32. Contract Agreement:**

32.1 The agreement on stamp paper shall be furnished by the Contractor as per the following guidelines within 14 days (National Bid) 28 days (Global Bid) from the date of issue of Letter of Intent.

- i) The successful Bidder will be required to execute an agreement at his expense on Three Hundred Rupees (₹300/-) Non-Judicial Stamp Paper in the proper departmental format (Form 8) for the due and proper fulfillment of the contract within 14 days (national Bid) 28 days (Global bid) from the date of Letter of Intent.

32.2 Pending preparation and execution of the contract agreement as above, the tender submitted by the Contractor together with Chief Mechanical Engineer's letter/fax accepting the tender shall constitute a binding contract between the Board and the Contractor.

32.3 The contract period shall be reckoned from the date of issue of work order to commence the work.

- i) The original agreement as per the format attached with the tender should be executed on a stamp paper of appropriate value (at present ₹ 300/-)
- ii) The Agreement should be submitted in duplicate and the date of execution is to be kept blank.
- iii) Each page of the document is to be signed by the Contractor/ his authorized representative by indicating his full name.
- iv) If the Contractor is a partnership firm, then a copy of the Partnership Deed and in case it is a Company, a copy of Memorandum and Articles of Association along with Registration Certificate is to be submitted.
- v) If the agreement is signed by a Partner/ a Director/ an authorized person of the firm, in such case, a certified true copy of the power of attorney/ letter of authority given by the firm/ company to the signatory of the Contractor firm is to be submitted.
- vi) The entire agreement should be in type written form/ computer printed form.
- vii) Leaving blanks and insertion of some contents of the agreement with hand writing should be avoided.
- viii) All corrections/ additions made in the agreement are to be initialled.

### **33. Performance Security (Read with clause no. 21 of Section-III)**

- 1) Security Deposit shall consist of performance guarantee to be submitted at award of work. Performance guarantee should be 3% of the contract price which should be submitted in form of bank guarantee, or Demand Draft within (21 days in case of domestic bids and within 28 days in case of global bids) of receipt of Letter of Acceptance/Intent which will be refunded immediately not later than 14 days from completion of defect liability period.
- 2) Failure of the successful bidder to comply with the requirements as mentioned above shall constitute sufficient grounds for cancellation of the award of work and the bidder can be disqualified from bidding for any contract with DPT for a period of three years from the date of notification.
- 3) The Port Trust will also be at liberty to deduct from performance guarantee or from any sums of money due or that may become due under any contract with the contractor that may become due to the employer. This is without prejudice to the rights of the employer under the terms of the contract. The Bank Guarantee is required to be dispatched by the issuing bank directly to The Employer by Registered AD Post.
- 4) The performance guarantee will be accepted in the form of bank guarantee if issued by any nationalized/scheduled bank (except co-operative bank) having its branch at Gandhidham.
- 5) The Port Trust may at their option forfeit the Performance Guarantee cum Security Deposit if the contractor fails to carry out the work or perform or observe the conditions of contract.

6) The Performance Guarantee cum Security Deposit will be released after successful completion of guarantee period.

### **34. Issue of Work Order**

Work order will be issued indicating the Contract value, completion period etc. after submission of Performance Security Deposit and Contract Agreement on Non-Judicial Stamp Paper by the successful bidder as per Tender Conditions.

### **35. Time Schedule**

The Contract shall be effective from the date of issue of Work Order and the work shall be completed within five (05) month from the date of Work Order.

### **36. Corrupt or Fraudulent Practices**

36.1 The employer requires that Bidders/Suppliers/Contractors under this contract, observe the highest standard of ethics during the procurement and execution of this contract. In pursuance of this policy, the employer:

- (a) Defines the following for the purpose of these provisions:
  - (i) "Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and
  - (ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the employer, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the employer of the benefits of free and open competition.
- (b) Will reject a proposal for award of work if he determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.
- (c) will declare a Bidder ineligible, either indefinitely for a stated period of time, to be awarded a contract/contracts if he at any time determines that the Bidder has engaged in corrupt or fraudulent practices in competing for or in executing, the contract.

**Signature & Seal  
Of Contractor**

**Executive Engineer (E)  
Deendayal Port Trust**

## **SECTION – II**

### **GENERAL CONDITIONS OF CONTRACT**

#### **GENERAL CONDITIONS**

##### **1. Definitions**

In the Contract (as hereinafter defined) the definition of the following words and expressions shall have the meanings hereby assigned to them except where the context otherwise requires:

- a. **"Employer"** means Board of Trustees of Deendayal Port, a body corporate under the Major Port Trust Act 1963, by notification issued by the Government of India, acting through its Chairman, Dy. Chairman or Chief Mechanical Engineer or any other officers so nominated by the Board.
- b. **"Contractor"** means the person or persons, firm, corporation or company whose tender has been accepted by the employer and includes the Contractor's servants, agents and workers, personal representatives, successors and permitted assigns.
- c. **"Contract"** means and includes Tender Documents, Instructions to Bidders, General Conditions of Contract, Drawings, Specifications, and Schedules etc., any amendments thereto, Bid, Letter of Intent, Contract Agreement and the work order.
- d. **"Contract Price"** means the total sum of money to be paid by the employer to the contractor on timely completion of the contract work as per Contract including payment for extra work, i.e. as per defined and applicable items of the terms of payment, including any taxes, except GST, and duties to be paid to state or central Government.
- e. **"Specifications"** means the specification referred to in the tender documents and any modifications thereof or additions thereto or amendments thereto as may be from time to time be furnished or approved in writing by the employer.
- f. **"Chief Mechanical Engineer"** shall mean the Chief Mechanical Engineer of DEENDAYAL PORT TRUST.
- g. **"Work" or "Works"** shall mean the whole of the plant and materials to be provided and work to be done executed or carried out by the contractor under the contract.
- h. The **"Site"** shall mean the whole of the premises, buildings and grounds in or upon which the system or works is or are to be provided, executed, erected, done or carried out.
- i. The **"Schedule"** shall mean the schedule or Schedules attached to the specifications.
- j. The **"Drawings"** shall mean the drawings, issued with the specification which will ordinarily be identified by being signed by the Chief Mechanical Engineer and any further drawing submitted by the contractor with his tender and duly signed by him and accepted or approved by the Chief Mechanical Engineer and all other drawings supplied or furnished by the contractors or by the Chief Mechanical Engineer in accordance with these contract conditions.

- k. **"Trials" and "Tests"** shall mean such trials and tests as are provided for in these conditions of contract and described in the specification and shall include all other tests to be carried out as per the requirement of the 'employer'.
- l. **"Approved" or "Approval"** shall mean approval in writing.
- m. **"Engineer-in-charge/Nodal officer"** shall mean any officer/Engineer authorized by Chief Mechanical Engineer for purpose of this contract.
- n. **"Day"** are calendar days, **"months"** are calendar months
- o. **"Equipment"** is the contractor's machinery and vehicles brought temporarily to the site to construct the works.
- p. **"Material"** are all supplies, including consumables, used by the contractor for incorporation in the works.
- q. **"Plant"** is any integral part of the works which is to have mechanical, electrical, electronic or chemical or biological function.

## 2. **Use of Contract Document:**

The Contractor shall not, without prior consent, make use of any document except for the purpose of performing this contract.

## 3. **Change Orders:**

At any time during the execution of the contract, by a written notice to the Contractor, changes may be made in the general scope of contract. The Engineer In-charge (EIC), with due approval of competent authority, may make any changes in the quality and/or quantity of the work or any part thereof that may, in his opinion, be necessary and for that purpose the Engineer In-charge shall have the power to order the Contractor to do and the Contractor shall do any of the following:

- b. Increase or decrease or split the quantity of work included in the contract,
- c. Omit any such work,
- d. Change the character, quality or kind of any such work,
- e. Change the dimensions of any such work,
- f. Change in Location
- g. Execute additional work of any kind necessary for completion of the work under the contract, and no such change shall in any way vitiate or invalidate the contract but the cost, if any, arising out of all such changes shall be taken into account in ascertaining the total amount of the contract price. Where the rate is available in the contract and the same is applicable to the additional work, in the opinion of the EIC, the cost of the additional work shall be determined as per this available rate. But, if the rate for additional work is not available in the contract, the same shall be determined by the EIC taking into account the market rate and labour cost at the site for similar works and shall be final.
- h. Deviations from the specifications as contained in the tender agreement including the make / model, shall not be accepted. In case of any such deviation, payment shall not be made for that part of the work / item, even if it is meeting the functional requirements and has been accepted by the purchaser. The payment for such portion of the work /

item can only be released if the contractor makes good the deviations before the expiry of the warranty period so as to meet the specifications of the tender agreement in all respects.

#### 4. Resolution of Dispute

a) The Board and the Contractor shall make every effort to resolve amicably by direct informal negotiations, any disagreement or dispute arising between them in connection with the contract. However, in case of failure of negotiation between the Board and the Contractor, the parties shall refer their present and future disputes relating to the contract itself or arising out of or concerning or in connection with or in consequence of the contract to the Chairman, DPT whose decision shall be final and binding on both the parties. The contract shall be governed by the Indian Contract Act, 1872.

##### b) Jurisdiction of Courts:

All such disputes, which could not be settled at the intervention of Chairman, DPT, shall be subjected to the jurisdiction of the courts at Gandhidham.

#### 5. Force Majeure:

- 5.1 In the event that the Contractor is delayed in performing its obligations in the contract, and such delay is caused by force majeure including war, civil resurrection, strikes (other than the strike solely by the Contractor's men), fire, flood, epidemics, earthquakes, extremely adverse climatic conditions, such delay may be excused and the period of such delay may be added to the time of performance of the obligations without any addition to the contract price.
- 5.2 If a force majeure situation arises, the Contractor shall promptly notify the Board in writing of such condition and the cause thereof, ***but not later than 7 days from its occurrence***. Unless otherwise directed by the Board in writing, the Contractor shall continue to perform its obligations under the contract as far as reasonably practicable. The Contractor shall demonstrate to the Board's satisfaction that it has used its best endeavor to avoid or overcome such causes of delay and the parties will mutually agree upon remedies to mitigate or overcome such causes of delay without having any right to any claim on account of such force majeure.
- 5.3 In any other situation, which is beyond the reasonable control of the Contractor in the opinion of the Engineer In-charge, and where the Contractor has promptly notified the Board in writing about such situation, it may be considered as "Force Majeure" situation.

#### 6. Compliance with Statutes, Regulations:

The Contractor shall comply in all respects, with all statutes and regulations as may be necessary, including clearance from State/Central Govt. authorities, Pollution Control Boards, labour enforcement and local authorities. The Contractor shall, at all times during the continuance of the contract, so far as it may be necessary, comply with all the existing enactments including Central and State legislation as well as any by-laws of any local authorities regarding labour, particularly the Minimum wages Act, Factories Act, Workmen's Compensation Act, Employees' Provident Fund and Family Pension Fund Act, Employees' State Insurance Act, Contract Labour (Regulation and Abolition) Act, Payment of Wages Act, Maternity Benefit Act, National and Festival Holidays Act, Shop

and Establishment Act, The Apprentice Act and keep DPT indemnified against any loss or claim arising out of contravention of the provisions of the above said enactments by the Contractor. The price quoted by the Contractor in the Bill of Quantity shall be deemed to include all expenses whatsoever the Contractor may be required to incur for the compliance with the provisions of the above said legislation. The Contractor shall make necessary arrangements for DPT to witness the payment made by the Contractor to his staff and labour.

**7. Payment Terms: (Modified as per Clause No. 3 under Special Conditions, Section-III)**

All payments shall be made in Indian rupees unless specifically mentioned.

**(I) In respect of tender for supply and installation (Changes to be made as per nature of the Work)**

- i. 70% of above item rate against receipt of material at site in good condition after obtaining insurance cover as per tender condition (if TPI appointed then after inspection & certification of the same by Third Party Inspection Agency).
- ii. 20% of item rate after completion of erection, installation, testing and commissioning, etc. (if TPI appointed then after inspection & certification of the same by Third Party Inspection Agency) and 90% of item rate for item covers only supply/laying/fixing (if any).
- iii. 10% will be released after successful completion of whole work (if TPI appointed then after inspection & certification of the same by Third Party Inspection Agency).

**II) In respect of lump sum work (Changes to be made as per nature of the Work)**

95% payment after deducting 5% as retention money towards performance security.

**NOTE:**

The payment shall be made through RTGS /NEFT and the Contractor should be furnished following details:-

Bank Payment Agreement Form

- a. Name of Party
- b. Account No.
- c. Branch Name
- d. Branch Station
- e. IFSC code of the bank
- f. MICR code
- g. Accepted for RTGS payment

:- NEFT payment or

Declaration by the party



I/We hereby declare that the above information furnished by me is correct and DPT is requested to pay my / our dues to this account for this work is concerned.

Signature of the party with the seal

Declaration by the bank

It is hereby informed that the details mentioned by the party is correct as per our records and any payment made by DPT to this account will be accepted either by RTGS/NEFT.

Signature of the bank manager with the seal.

## **8. Insurance: (This clause has been modified at clause no. 4 of Special Condition Section - III)**

- 8.1 The contract shall provide in the joint names of the employer and the contractor, insurance cover from the start date to the end of guarantee period for the following events which are due to the contractor risk:
- a) Loss of or damage to the works, plan and materials
  - b) Loss of or damage to equipment
  - c) Loss of or damage of property (except the works, plant, materials and equipment) in connection with contract, and
  - d) Personal injury or death
- 8.2 Policies and certificates for insurance shall be delivered by the contractor to the engineer in charge or his nominee before the commencement of work. All such insurances shall provide for compensation to be payable to the types and proportions of currencies required to be rectify the loss or damage incurred.
- 8.3 Alterations to the terms of insurance shall not be made without the approval of the engineer in charge or his nominee,
- 8.4 All the materials shall stand insured from the time of arrival at site till commencement of erection against fire, pilferage, damage and against natural calamities for the value of 90% of each item.
- 8.5 During erection and till the work is completed and satisfactory taken over by the D.P.T after testing the materials shall stand covered by suitable erection insurance also for the value of 110% of the item. The charges for the insurance shall be borne by the Contractor.

## **9. Time Extensions:**

The Contractor may claim extension of the time limits in case of;

- i) Changes ordered by DEENDAYAL PORT TRUST.

- ii) In case work is delayed on DPT's Account, i.e. due to delay in approval of drawings, non-availability of site clearance or any other reason, DPT will consider time extension of merit. However, no compensation will be paid to the Contractor if work is delayed on DPT's account. The Contractor shall submit the request for extension, within 30 days of occurrence of such delay, clearly indicating the justification for such extension.
- iii) Force Majeure.
- iv) All the incidents of delay should be entered in the hindrance register which will be base for granting any extension.

## **10. Time is the essence of the contract:**

Time is the essence of the contract and the Contractor shall ensure that all the obligations under the contract are completed within the agreed time schedule. The Contractor shall be solely responsible for all the delays including the delays caused by its vendors. In case of delay in progress of the works, DEENDAYAL PORT TRUST reserves the right to withhold the payment, cancel the contract unilaterally or complete the work departmentally.

## **11. Liquidated Damages:**

- 11.1** In case of delay in completing the contract, liquidated damages (LD) may be levied at the rate ½% of the contract value per week of delay or part thereof subject to a Maximum of 10% of the contract price.
- 11.2** The employer, if satisfied that the works can be completed by the contractor within a reasonable time after the specified time for completion may allow further extension of time at its discretion with or without the levy of LD. In the event of extension of time at its discretion with LD the employer will be entitled without prejudice to any other right or remedy available in that be half percent (½%) of the contract value of the works for each week or part of the week subject to the ceiling 10% of contract value.
- 11.3** The employer, if not satisfied that the works can be completed by the contract, and in the event of failure on the part of the contractor to complete work within further extension of time allowed as aforesaid shall be entitled without prejudice to any other right or remedy available in that behalf to rescind the contract.
- 11.4** The employer, if not satisfied with the progress of the contract and in the event of failure of the contract to recoup the delays in the mutually agreed time frame, shall be entitled to terminate the contract.
- 11.5** In the event of such termination of the contract as described in clauses (11.3) or (11.4) or both, the employer shall be entitled to recover LD up to ten percent (10%) of the contract value and forfeit the security deposit made by the contract besides getting the work completed by other means at the risk and cost of the contractor.
- 11.6** In case part/portion of the work can be commissioned and port operates the portion for commercial purpose, the rate of LD will be restricted to the uncompleted value of work, the maximum LD being on the entire contract value.

## **12. Variations:**

### **12.1 Variation in Conditions of Contract:**

In case of any variation in Instructions to Bidders (ITB), General Conditions of Contract (GCC) and the Special Conditions of Contract – if any special conditions of contract shall prevail. But in case of any requirement/condition specified in the Scope of Work, it shall prevail over all other conditions.

**12.2 Variation in Quantities of Schedule – B:**

The overall as well as individual variations shall be  $\pm 30\%$  in quantity for which the rate quoted by the bidder and accepted by the employer shall be applicable.

**13. Acceptance:**

Upon completion of work under this contract, the Board may accept the works and/or services after installation, if defects or shortcomings are not considered essential and, the Contractor agrees to make good the deficiencies in confirmation with this contract. No work shall be accepted before the Contractor clears the site of scraps, unused materials, work shed, equipment and all such materials which were used for execution of the work and not required any more at the work site. Also, the Contractor has to submit all the documents and final "as built" drawings as per the contract agreement without which no work shall be treated as complete.

Completion Certificate shall be issued by the employer after satisfactory completion of work as per tender and after taking trial.

**14. Guarantee: (Modified as per Clause No. 5 under Special Conditions, Section-III)**

- 14.1 The warranty period shall be valid up to six/twelve months (6 months for repairs and 12 months for new works including supplied items) with effect from the date of acceptance of the work and/or services, unless otherwise specified in the scope of work/Special Conditions of Contract (SCC).
- 14.2 The Contractor shall warrant the Board that the goods and services under this contract will comply strictly with the contract, shall be first class in every particular case and, shall be free from defects. The Contractor shall further warrant the Board that all materials, equipment and the supplies furnished by him will be new and fit for their intended purposes.
- 14.3 The Board shall promptly notify the Contractor in writing of any claim arising under this Warranty. Upon receipt of such notice, the Contractor shall promptly repair or replace the defective goods and/or services at no cost to the Board.
- 14.4 If the Contractor, having been notified, fails to rectify the defects in accordance with the contract, the Board may proceed to take such remedial action as may be necessary, at the Contractor's risk and cost.

**15 Taxes:****GST Clause:**

The contractor shall quote the price exclusive of GST. The contractor shall quote prevailing GST rate separately, which shall be reimbursed by DPT after ascertaining necessary compliance as per Goods & Service Tax, 2017.

All other duties, taxes, cesses applicable if any, shall be borne by the contractor.

**Deduction of Income-Tax & GST:**

Income-Tax deductions and surcharge & GST+TDS as applicable thereon shall be made good while making payments due to the contractor for carrying out the work and only net amount shall be paid as directed by the Central Board of Direct Taxes, Ministry of Finance, Government of India.

**Tax:** The rates quoted by the contractor shall be deemed to be inclusive of the taxes, duties etc. which the contractor will have to pay for the performance of this contract, except GST. The employer will perform such duties in regard to the deduction of such taxes at sources as per applicable law.

**16. Deduction:**

- 16.1 Deduction of taxes/income tax at source shall be made from the any bill of the Contractor in accordance with the prevailing rules of Govt.
- 16.2 While performing under the contract, the damages caused by the Contractor or his workers to any of the Port Trust property shall be promptly made good by the Contractor at his own cost. In case the Contractor fails to repair/replace the damage, DEENDAYAL PORT TRUST shall have the right to take steps to make good the damages and all the cost on this account shall be recovered from the bills of the Contractor or any money due to the Contractor from this contract or any other contract or any other transaction. In determination of the damage, the opinion of the Engineer-In-charge (EIC) shall be conclusive.
- 16.3 Any dues arising out of failure on the part of the Contractor to carry out any obligation under the contract shall be deducted from the bills of the Contractor or from any money due to the Contractor from this contract or any other contract.

**17. Subcontracts:**

The Contractor shall not be allowed to engage any sub-contract for all or any part of this contract.

**18. Idle Charges:**

All efforts shall be made for timely supply of materials and/or equipment where it is included in the scope of Deendayal Port. However, the Contractor shall not be entitled to any idle charges for delay in supply of materials and/or equipment by the Port Trust. Further, in case of any delay due to stoppage of work ordered by the Port Trust to avoid interruption in other important activities of Port Trust or any other reason, the Contractor shall not claim any idle charges.

**19. Personal Protective Equipment: (PPE)**

The Contractor shall be solely responsible, at his own cost, for the supply of required PPE to his workers and staff and he shall also ensure the use of PPE such as helmets, nose masks, hand gloves etc. by his staff at site.

**20. Conduct:**

The Contractor, at all times during the tenure of contract, shall take all measures to prevent any unlawful, riotous or disorderly conduct by or amongst his staff at the site and for the preservation of peace and protection of persons and property at the work site as well as in the enactment of the works.

**21. Accident:**

The Contractor shall, within 24 hours of the occurrence of any accident, at or about the work site or in connection with execution of the contract, report such accidents to the Engineer-In-Charge giving all the details in writing. He shall also provide additional information about the accident as requested by the EIC.

**22. Watch and ward:**

During the execution of the contract, it shall be the responsibility of the Contractor to arrange watch and ward of the work including the raw materials, machine/equipment/system used for the work at his own cost till the date of acceptance of the work by DEENDAYAL PORT TRUST.

**23. Termination:**

23.1 The Board may, without any prejudice to any other remedy for breach of contract, by written notice of default sent to the Contractor, terminate the contract in whole or in part:

- (i) if the Contractor fails to execute the work within the period as specified in the contract or any extension granted by the Board;
- (ii) if the Contractor fails to perform any other obligation under the contract and if the contractor does not cure the same after receipt of a notice of default, the nature of default as well as the time within which the default has to be cured by the Contractor.

23.2 In the event of Board's termination of the contract in whole or in part, the Board may execute the remaining work or procure goods similar to those undelivered by the Contractor and the Contractor shall remain liable to the Board for any excess cost for such works or goods and risks, if any.

23.3 The Board will pay the Contractor, for all the items that are completed and ready for delivery, within 30 days after termination. The payment shall be made only after all the afore-mentioned goods are supplied to and accepted by DEENDAYAL PORT TRUST. The amount so decided by the Engineer-in-Charge in this regard shall be final and binding.

23.4 In case of termination of contract for default by the Contractor, the Board may not permit the Contractor to participate in any of the future tender of DEENDAYAL PORT TRUST for a period decided by DPT.

23.5 The employer may terminate the contract if Contractor causes a fundamental breach of the contract.

23.6 Fundamental breaches of contract include, but shall not be limited to the following:

- a) The contractor stops work for 28 days and the stoppage has not been authorized by the Engineer-in-Charge or his nominee.
- b) The contractor becomes bankrupt.
- c) The contractor has delayed the completion of works by the number of days for which the maximum amount of liquidated damages can be paid as defined in the contract data and
- d) If the contractor, in the judgment of the employer has engaged in corrupt or fraudulent practices in competing for or in the executing the contract.
- e) For the purpose of this paragraph: "corrupt practice" means the offering, giving receiving or soliciting of anything of value to influence the action or public officials in the procurement process or in contract execution. "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the employer, and includes collusive practice. Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the employer of the benefits of free and open competition".
- f) If the contract is terminated the Contractor shall stop work immediately, make the site safe and secure and leave the site as soon as reasonably possible.
- g) Any material lying at site will not be removed without the prior written permission of Engineer in Charge.

#### **24. Arbitration Clause:**

(I) Except where otherwise provided in the contract, all questions and disputes relating to the meaning of the specifications, designs, drawings and instructions herein before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or any other thing whatsoever, in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders, or to the conditions or otherwise concerning the work or regarding the execution or failure to execute the same whether arising during the progress of the work or after the completion thereof as described hereinafter shall be referred to the Chairman for sole arbitration by himself or by any officer appointed by him.

(II) It will be no objection to any such appointment that the arbitrator is an employee of the Board or the Government, that he had to deal with the matters to which the contract relates and that in the course of his duties as an employee of the Board of the Government, he had expressed views on all or any of the matters in dispute or of difference.

The arbitrator, who has been dealing with the arbitration case, being transferred or vacating his office or in the event of his death or being unable to act for any reason, the Chairman then holding the office shall arbitrate himself or appoint any officer to act as arbitrator.

(III) It is also a term of this contract that no person other than the Chairman himself or any officer appointed by him shall act as arbitrator.

(IV) It is a term of this contract that only such questions and disputes as were raised during the progress of other work till its completion and not thereafter shall be referred

to arbitration. However, this would not apply to the questions and disputes relating to liabilities of the parties during the guarantee period after completion of the work.

(V) It is a term of the contract that the party invoking arbitration shall give a list of disputes with amount of claim in respect of each said disputes along with the notice seeking appointment of arbitrator.

(VI) It is also a term of the contract that if the Contractor does not make any demand for appointment of arbitrator in respect of any claims/disputes in writing, as aforesaid, within 120 days of receiving the intimation from the Engineer –in-charge that the final bill is ready for payment, the claim of the Contractor shall be deemed to have been waived and absolutely barred and the Port Trust shall be discharged and released of all liabilities under the contract in respect of these claims.

(VII) It is also a term of the contract that the arbitrator shall adjudicate only such disputes/claims as referred to him by the appointing authority and give separate award against each dispute/claim referred to him. The arbitrator will be bound to give claim wise detail and speaking award and it should be supported by reasoning.

(VIII) The award of the arbitrator shall be final, conclusive and binding on all the parties to Contractor.

(IX) The arbitrators from time to time, with the consent of both the parties, enlarge the time for making & publishing the award.

(X) Arbitration shall be conducted in accordance with the provisions of Indian Arbitration Act, 1996 or any statutory modifications or enactment thereof and rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause.

(XI) It is also a term of the contract that if any fees are payable to the arbitrator, this shall be paid equally by both the parties.

(XII) It is also a term of a contract that the arbitration shall be deemed to have been entered on the reference on the date he issues the first notice to both the parties calling them to submit their statement of claims and counter statement of claims.

(XIII) Venue of the arbitration shall be such place as may be fixed by the arbitrator at his sole discretion.

## **25. Indemnification:**

The Contractor shall indemnify, protect and defend at its own cost, DEENDAYAL PORT TRUST and its agents & employees from & against any/all actions, claims, losses or damages arising out of

- a. any violation by the Contractor in course of its execution of the contract of any legal provisions or any right of third parties;
- b. Contractor's failure to exercise the skill and care required for satisfactory execution of the contract.

## **26. Engineer-in-Charge or his nominee's Decisions**

Except where otherwise specifically stated, the Engineer-in-Charge or his nominee will decide contractual matters between the employer and the Contractor in the role representing the employer.

## **27. Delegation**

The Engineer-in-Charge or his nominee may delegate any of the duties and responsibilities to other people after notifying the Contractor and may cancel any delegation after notifying the Contractor.

## **28. Communications**

Communications between parties which are referred to in the conditions are effective only when in writing. A notice shall be effective only when it is delivered (in terms of Indian Contract Act 1872).

## **29. Personnel:**

- 29.1 The Contractor shall employ the key personnel named in the Schedule of Key Personnel as referred to in the Contract Data to carry out the functions stated in the Schedule or other personnel approved by the Engineer-in-Charge. The Engineer-in-Charge will approve any proposed replacement of Key personnel only if their qualifications, abilities, and relevant experience are substantially equal or better than those of the personnel listed in the Schedule.
- 29.2 If the Engineer-in-Charge asks the Contractor to remove a person who is a member of the Contractor's staff of his work force stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connections with the work in the Contract.

## **30. Employer's Obligation**

- (i) Electricity, water and land for execution of the work at site shall be provided on payment of applicable tariff of the employer subject to availability. If DPT is unable to provide electricity and water the same will be arranged by the contractor at his own cost.
- (ii) The employer will not provide Port Trust Quarters, during the tenure of contract.
- (iii) Administrative support only, for obtaining clearance from any statutory authority, shall be provided by the employer.
- (iv) On successful completion of all the obligations under the contract and on the request of the Contractor, the employer shall issue a "Completion Certificate with the approval of the Chief Mechanical Engineer, the employer.

## **31. Queries about the Technical Data**

The Engineer-in-Charge or his nominee will clarify queries on the Technical Data.

## **32. Approval by the Engineer-in-Charge or his nominee.**

The Contractor shall submit the makes of material, equipment's, specifications and drawings for proposed Work to the Engineer-in-Charge or his nominee, who is to approve them subject to compliance with the Technical specifications and drawings.



The Engineer-in-Charge or his nominee's approval shall not alter the Contractor's responsibility for the work.

All drawings prepared by the contractor for the work if any, are subject to prior approval by the Engineer In Charge or his nominee before procurement/execution.

### **33. Discoveries**

Anything of historical or other interest or of significant value unexpectedly discovered on the site is the property of the employer. The contractor is to notify the employer or his nominee of such discoveries and carry out the instructions of employer or his nominee for dealing with them.

### **34. Access to the site**

The contractor shall allow the Engineer in charge or his nominee and any person authorized by him access to the site to any place where work in connection with the contract is being carried out or is intended to be carried out and to any place where materials or plant are being manufactured, fabricated and/or assembled for the work.

### **35. Instructions**

The contractor shall carry out all instructions of the engineer or his nominee which comply with applicable laws where the site is located.

### **36. Safety**

The Contractor shall be responsible for the safety of all activities on the Site.

## **Quality Control**

### **37. Identification of Defects**

The Engineer-in-Charge or his nominee shall check the work carried out by Contractor and notify the Defects found if any. The Engineer-in-Charge or his nominee may instruct the Contractor to rectify the Defect.

### **38. Correction of Defects**

38.1 The Engineer-in-Charge or his nominee shall give notice to the Contractor of any Defects before the end of the Defects Liability Period (Guarantee Period), which begins at Completion and is defined in the Contract Data. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.

38.2 Every time notice of a Defect is given the Contractor shall correct the notified Defect within the length of time specified by the Engineer-in-Charge or his nominee's notice.

### **39. Uncorrected Defects**

If the Contractor has not corrected a Defect within the time specified, the Engineer-in-Charge or his nominee will assess the cost of having the Defect corrected, and the Contractor will pay this amount.

**40. Employer's right of Rejection:**

The employer shall reserve the right to reject a part portion or consignment thereof within a reasonable time after actual delivery thereof at the place of destination, if consignment is not in all respects in conformity with terms & conditions of the contract whether on account of any loss, deterioration or damage before dispatch or delivery or during transit or otherwise whatsoever.

**41. Removal of Rejected goods:**

Rejected goods shall under all circumstances lay at the risk of the contractor from the moment of rejection and if such goods are not removed by the contractor within 21 days from the date of intimation from the Engineer-in-Charge. Engineer-in-Charge may either return to the contractor at the risk and cost of the contractor by such mode of transport as the Engineer-in-Charge may select or dispose of such material at the contractor's risk on his account and retain such portion of the sale proceeds as may be necessary to recover any expenses incurred in such disposals.

**42. Use of Contract Document:**

The Contractor shall not, without prior consent, make use of any document except for the purpose of performing this contract.

**43. Memorandum of Settlement:**

The Contractor shall not sign any memorandum of settlement with any agency such as Trade Unions etc. in any form at any level without the prior written permission of the employer in relation to any work under taken by him in the Port premises.

**44. Deviations:**

The bidder must read the tender document carefully and prepare the bid for submission. It is important to note that deviations, if any, must be brought out clearly in the technical offer, which shall be examined by DEENDAYAL PORT TRUST. If the deviation statement submitted by the bidder does not contain any item, then it shall be construed that the bidder has accepted the same and no request from the Contractor, for any change, shall be accepted by DPT at a later stage. In any case, no change in specifications given in the tender agreement shall be permitted. However, only in unavoidable circumstances, DEENDAYAL PORT TRUST may consider such requests from the Contractor, provided the Contractor submits it's request with adequate justification.

**45. Approvals:**

The Engineer-in-Charge shall give specific approval in writing within 7 Days to Contractor after written submission regarding Makes of Material to be used for the Contract and Drawings, if any to be furnished by the Contractor to Engineer-in-Charge for approval. Any corrections to be suggested by Engineer-in-Charge in drawings, the days taken for rectification in drawings shall be in account of the Contractor.

**46. Third Party Inspection: (Modified as per Clause No. 6 under Special Conditions, Section-III)**

The Third Party Inspection Agency shall be arranged by DPT and cost of Third Party Inspection mentioned below shall be borne by DPT.

- i. The Third Party Inspection Agency will carry out approval of drawings if any, material inspection at manufacturer's works/site, dispatch clearance from manufacturer's work, certification for releasing stage payments as per payment terms of contract for all the material as per schedule/work till taken over by DPT.
- ii. The Third Party shall carry out inspection of work as per tender specification/relevant standard.
- iii. The above stage payment shall be released after certifying by the third party and copy of the same shall be produced by Contractor for releasing the stage payment as per **Payment Terms**.

#### **47. Bar Chart:**

The Contractor shall submit a bar chart, before signing the agreement, clearly indicating the plan for timely execution of the work. The bar chart must indicate the individual activities and commencement and completion dates of each activity. The bar chart shall be used for monitoring the progress of the work. **(Modified as per Clause No. 7 under special conditions, Section-III).**

#### **48. Engagement of Labour:**

The contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

#### **49. Police verification of Contract Labour:**

The Contractor who has been awarded the job through Work Order shall furnish necessary Police Clearance Certificate in respect of character and antecedents of all Contract Laborers engaged by them, before commencing the work at site.

This will be a part of Contractual Agreement, as entire Cargo Jetty, Oil Jetty area has been declared as **"Prohibited Area"**. Contractor who would be awarded contract is required to comply with the above requirements.

Contractor shall obtain such Police Clearance Certificate from Police available against a nominal fee per Certificate and they will submit this Certificate giving Work Order reference on it, to the Office of the Engineer In Charge of respective Divisions, to be forwarded to Commandant, CISF which our Security Department along with request for issuance of Entry Passes.

The Contractor shall, if required by the Engineer-in-Charge, deliver to the Engineer-in-Charge a return in detail, in such form and at such intervals as the Engineer-in-Charge may prescribe, showing the staff and numbers of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Engineer-in-Charge may require.

##### **a) Submission of Labour Reports by Every Fortnight:**

The contractor shall submit, by the 4<sup>th</sup> and 19<sup>th</sup> of every month, to the Engineer-in-Charge a true statement showing, in respect of the second half of the preceding month and the first half of the current month respectively.

1. The number of laborers employed by him on the work.
2. Their working hours.
3. The wages paid to them.
4. The accidents that occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused by them, and
5. The number of female workers who have been allowed Maternity Benefit, according to clause 19 F and the amount paid to them, failing which, the Contractor shall be liable to pay to Government a sum not exceeding Rs. 200/- for each default or materially incorrect statement. The decision of the Engineer-in-Charge shall be final in deducting from any bill due to the contractor the amount levied as fine and be binding on the contractor.

**b) No Labour Below 14 Years:**

No labour below the age of 14 (fourteen) years shall be employed on the work.

**50. Registers to be maintained at site**

**1. Site order Book:**

A site order book is to be maintained by the contractor at the site. The work orders and instructions written in the site order book shall be deemed to have been legally issued to the contractor shall sign each entry in the site order book as a token of his having seen the same. The site order book shall be property of the Board and shall be handed over to the Engineer-in-charge of the work in good condition on the completion of the work or whenever required by the Engineer-in-charge or his authorized representative.

**2. Hindrance Register**

Every type of hindrance arising during the execution of work should be invariably recorded in the hindrance register. The Hindrance Register is to be maintained by the Engineer In Charge at the site. The contractor shall sign each entry in the hindrance Register as a token of his having seen the same. The Hindrance Register shall be property of the Board.

**51. No damage, hindrance or interference to the Port activities:**

The contractor shall be required to execute the work in such a manner as not to cause any damage, hindrance or interference to the Port activities and the work going on in the area. The contractor shall have to make good the loss at his own cost and risk all damages caused by his workmen to Port property and no extra payment shall be made to him on that account.

**52. Tools & Tackles:**

All the tools, tackles, bricks, cement, ladders etc. for executing the work will have to be arranged by the contractor at his own cost. Arrangement for storing the materials, tools etc. will also have to be made by him. The EMPLOYER shall not be responsible for any theft/loss of any materials, tools, etc. stored/brought by the contractor for execution of work within the Port area.

**53. Hot work:**

In case of carrying out any hot work such as gas cutting and welding necessary regulations, prevailing at DEENDAYAL PORT TRUST for such works shall be observed by the tenderer and necessary fire watch permit and No Objection Certificate shall be obtained from the concerned authorities of the port and necessary charges at the scale of rate prevailing in the port at that time shall be paid by the contractor.

**54. Indian Dock Safety Regulations:**

Necessary Indian Dock Safety Regulations for the safety purpose shall be adhered to by the contractor and he will be held responsible for any violation of the same.

**55. Electrical Supervisor Certificate:**

The contractor shall also have a valid Electrical Supervisor's certificate of competency, issued from the Commissioner of Electricity, Energy & Petrochemical Department, (Inspection wing), Block No.18, 6<sup>th</sup> floor, Sector No.II, Udyog Bhavan, Gandhinagar, Government of Gujarat or equivalent authority from the other states/central Govt.

**56. Action where no Specifications are specified:**

The work shall be carried out in all respects in accordance with the instructions and requirements of the Engineer-in- Charge.

**57. Undertaking by the Contractor:**

Having understood all the terms and conditions of the tender document and having assessed the site conditions, we hereby confirm that the price offered by us is a firm price and includes all the taxes (excluding GST), duties, fees, Cess etc. and all incidental charges.

**58. Labour License:**

The contractor will have to obtain necessary License from Assistant Labour Commissioner (ALC), Gopalpuri, Gandhidham (Kutch), in case he is engaging ten or more workers on any day during execution of work.

**59. Fraudulent documentation by bidders:**

Submission of fraudulent documents shall be treated as major violation of the tender procedure and in such cases the Port shall resort to forfeiture of EMD (if any)/SD/BG of the bidder, apart from blacklisting the firm for the next 3 years.

**Signature & Seal  
of Contractor**

**Executive Engineer (E)  
Deendayal Port Trust**

## **SECTION –III**

### **SPECIAL CONDITIONS**

**(These special conditions will supersede the General Condition and ITB wherever applicable.)**

- 1. Clause No. 4.2.n (Methodology) of Instructions to Bidders (ITB), Section-I is not applicable.**
- 2. Clause No. 6 of Instructions to Bidders (ITB), Section-I (Joint Venture) is not applicable.**
- 3. The Clause No. 7 of General Condition of Contract (GCC), Section-II (Payment Terms) is modified and shall be read as under:**

**Payment Terms:**

All payments shall be made in Indian rupees unless specifically mentioned.

- i) **70%** payment will be released after receipt of material at site in good condition, after obtaining insurance cover as per tender condition and after inspection & acceptance of material by DPT & Certification by TPIA.
  - ii) **20%** of item rate after completion of erection, installation, testing and commissioning etc. and **90%** of item rate for item covers only laying/fixing etc & Certification by TPIA.
  - iii) **10%** will be released after successful completion of whole work and handing over to DPT & Certification by TPIA.
- 4. The Clause No. 8 of General Condition of Contract (GCC), Section-II (Insurance) is modified and shall be read as under:**

**Insurance:**

4.1 The contract shall provide in the joint names of the employer and the contractor, insurance cover from the start date to the end of guarantee period for the following events which are due to the contractor risk :

- a) Loss of or damage to the works, plant and materials
- b) Loss of or damage to equipment
- c) Loss of or damage of property (except the works, plant, materials and equipment) in connection with contract, and
- d) Personal injury or death

4.2 All the materials shall stand insured from the time of arrival at site till commencement of erection against fire, pilferage, damage and against natural calamities for the value of 90% of each item.

- 4.3 During erection and till the work is completed and satisfactory taken over by the DPT after testing the materials shall stand covered by suitable erection insurance also for the value of 110% of the item. The charges for the insurance shall be borne by the Contractor.

**5. The Clause No. 14 of General Condition of Contract (GCC), Section-II (Guarantee) is modified and shall be read as under:**

**Guarantee:**

- 5.1 The guarantee period shall be valid up to 12 (Twelve) months with effect from the date of declaration of work as completed by DPT.
- 5.2 The guarantee for water proofing work will be for a period of 05 years from the date of declaration of work as completed by DPT.
- 5.3 The Contractor shall give guarantee to the Board that the goods and services under this contract will comply strictly with the contract, shall be first class in every particular case and, shall be free from defects. The Contractor shall further give guarantee to the Board that all materials, equipment and the supplies furnished by him will be new and fit for their intended purposes.
- 5.4 The Board shall promptly notify the Contractor in writing of any claim arising under this guarantee. Upon receipt of such notice, the Contractor shall promptly repair or replace the defective goods and/or services at no cost to the Board.
- 5.5 If the Contractor, having been notified, fails to rectify the defects in accordance with the contract, the Board may proceed to take such remedial action as may be necessary, at the Contractor's risk and cost.

**6. Clause No.46 of General Condition of Contract (GCC), Section-II (TPI) is modified as under:**

- i. The Third Party Inspection Agency shall be arranged by DPT and cost of Third Party Inspection mentioned below shall be borne by DPT.
- ii. The Third Party Inspection Agency will carry out approval of drawings if any, material inspection at manufacturer's works/site, dispatch clearance from manufacturer's work and inspection at the site.
- iii. The Third Party shall carry out inspection of work as per tender specification/relevant standard.
- iv. The above stage payment shall be released after certifying by the third party and copy of the same shall be produced by Contractor for releasing the stage payment as per Payment Terms.

7. **Clause No.47 of General Condition of Contract (GCC), Section-II Bar Chart** is not applicable. Kindly see Section-XI.
8. The bidder shall execute the Integrity Pact provided as per Form no. VI.
9. As a part of Green-Port Initiative, afforestation has to be restored to, for which, provision for plantation has to be made as per the DPT Chief Engineer's letter no.EG/GN/1001/364 dated 15<sup>th</sup> June, 2019 as under:
  - For tenders costing Rs.2-5 crores: 50 saplings (min. 3 ft. high) have to be planted.

The plantation has to be completed within the contract period and handed over to the DPT by providing temporary guards, etc.

The location of the plantation and type of saplings to be planted shall be mutually decided by the Engineer in Charge of DPT and the Contractor. The cost of the above plantations and its maintenance has to be borne by the Contractor as a part of their social responsibility. No extra payment shall be made to the Contractor for the above.

**In case of failure on the part of the contractor for carrying out the plantation work before completion of the work, a compensation of Rs. 25,000.00 will be imposed on the contractor and final bill will be released.**
10. All consumables required for the completion of work shall be in successful bidder's scope.
11. Daily progress report shall be submitted.
12. The Successful Bidder shall keep one or more nominated competent person(s) as a Supervisor in each area of work to supervise quality of work and effective progress of work as scheduled and report submission to EIC.
13. All the tools & tackles required to carry out the work shall be in successful bidder's scope.
14. All works related to hoists, Cranes, and other lifting tools, etc. for lifting, shifting of the materials is in successful bidder's scope. The successful bidder has to arrange all resources for the same. Any reason for delay of the work for the want of the resources shall not be considered.
15. For the items, which are not supplied, or the works, which are not being carried out by the successful bidder, as the case may be, shall be completed at the risk and cost of the successful bidder.
16. If any specification is different from the specification mentioned in the tender documents but the differed specification is as per ISI, then the EIC can approve to use that specification. Any approval of technical specifications or items not in the existing approved list of Deendayal Port Trust can be approved if backed by a certificate clearly mentioning those specifications or items being used in GETCO, PGVCL, UGVCL, MGVCL or DGVCL along with relevant proofs.



17. The minimum planting depth of poles shall be maintained as mentioned in technical specification. However, if due to the ground conditions, e.g. water logged area etc. depth of planting of poles shall be suitably increased the bidder will supply the poles of suitable height in order to maintain the required clearances the vendor will submit the details of the same on case to case basis. In damp land, or on the instructions of EIC, whenever and wherever felt as per the site conditions, the pole excavation should be filled with precast concrete slab and relevant other materials like paver blocks to ensure strengthening of pole erection. Moreover, all the poles have to erected and aligned vertically for exact normality and checked using spirit level meter. All the poles have to be erected only using pole erection machine including land driller and pole holder. All the work related to pole excavation and pole erection has to be done with the help of machine driller and pole holder.
18. The relay co-ordination as per load flow analysis shall be in the scope of bidder, for which bidder has to deploy relay testing team with all required instruments/equipments. The bidder has thoroughly study the existing load flow, and accordingly relay setting/time gradation of relay shall be made as per entire satisfaction of Engineer-In-Charge.
19. Integrity Pact:  

The Integrity Pact duly signed by authorized person(s) with witnesses are to be submitted by the bidders along with the tender documents as per the format provided in Section IV.

Bidders are required to sign the integrity pact (as per given below with the tender document), failing which their bid shall be liable for rejection. The "principal" means "Deendayal Port Trust" and "Counterparty" means "Vendor / Supplier / Contractor".

If a Counter party commits a violation of its Commitments and Obligations under the Integrity Pact Program during bidding process, their entire Earnest Money Deposit, would be forfeited and in addition, they may be blacklisted from the DPT business in future.

In case of violation of the Integrity Pact by Counter party after award of the Contract, DPT shall be entitled to terminate the contract. DPT would forfeit the Security Deposits; encase the Bank Guarantee(s) and other payments to Counter party in such cases.
20. Contractor / Service provider / Supplier etc. has to ensure timely and proper filling of GSTRI so that Deendayal Port Trust can avail input tax credit in timely manner. In case DPT not allowed Input tax credit due to failure on part of the contractor / service provider / Supplier etc. it will be a financial loss to DPT and therefore same shall be recovered from the payment / deposit o the contractor / service provider / Supplier.

21. **Submission of separate bank guarantee for water proofing work (to be read with clause no. 33 of Section-I)**

After completion of the guarantee period of 12 months, the contractor can submit a separate Bank Guarantee/Demand Draft of the 3% of the value of item no. 22 and get the BG/DD released/refunded which has been submitted for the entire work. In case the contractor submits separate BG for water proofing work, the validity of separate bank guarantee should be till the guarantee period of water proofing work. In case, the contractor is not submitting the separate bank guarantee/DD towards guarantee of water proofing work, the BG/DD submitted for the entire work will be released/refunded after guarantee period of five years of water proofing work.

22. **Supply of material of particular brands/Make**

The contractor shall supply the materials of only the particular brands/Make specified in the tender. If none of the make/brands are available in the market then the department will accept the equivalent make/brand subject to the contractor producing a letter of non-availability from the manufacturer only. The EIC will ascertain the veracity of that letter directly from the manufacture. Such material will be accepted after obtaining the approval of the authority who approved the tender.

**Signature & Seal  
of Contractor**

**Executive Engineer (E)  
Deendayal Port Trust**

## SECTION IV

### FORMS OF BID

#### Part – I

#### To be submitted by Bidders with their Bids

| Nos. | Name of forms/format                      |
|------|---|
| 1    | Form of application                       |
| 2    | Pre-qualification of bidders              |
| 3    | Format for declaration                    |
| 4    | Letter of authority for submission of bid |
| 5    | Exceptions & Deviations                   |
| 6    | Integrity pact                            |

#### Part – II

#### To be used by successful Bidder

| Nos. | Name of forms/format  |
|------|---|
| 7    | Letter of intent  |
| 8    | Agreement form  |
| 9    | Specimen bank guarantee of Performance Guarantee/Security Deposit |
| 10   | Letter of authority from bank for all BGs                         |
| 11   | Format of Extensions (Part – I)                                   |
| 12   | Format of Extension (Part-II)                                     |

**Form -1**

**SPECIMEN OF APPLICATION**

(To be executed on bidder's letter head)

To

The EXECUTIVE ENGINEER

DEENDAYAL PORT TRUST

(Address \_\_\_\_\_)

\_\_\_\_\_

Pin Code: \_\_\_\_\_

Dist- Kutch (Gujarat)

We, the undersigned, declare that:

- (a) we have examined and have no reservations to the tender documents, including addenda and clarifications issued vide .....
- (b) we offer to execute the work in conformity with the tendering documents and in accordance with the delivery schedules specified in the schedule of requirements in accordance with the tender document bearing no **(EL/AC/\_\_\_)**
- (c) our tender shall be valid for the period of 120 days ,from the date fixed for the tender submission deadline and it shall remain binding upon us and may be accepted at any time before the expiration of that period or any extended period.
- (d) If our tender is accepted, we commit to submit a performance guarantee for the due performance of the contract, as specified in specimen form for the purpose.
- (e) No Joint Venture / Joint Venture.

- (f) Our firm, its affiliates or subsidiaries- including any subcontractors or contractors for any part of the contract – has not been declared ineligible by the port, under laws of India or official regulations.
- (g) We understand that this tender, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract agreement is prepared and executed.
  - I. We understand that you are not bound to accept the lowest evaluated tender or any other tender or you can also split the work that you may receive.
  - II. We also make a specific note clause of [ITB, NIT] under which the contract is governed.

Signed: [insert signature of person whose name and capacity are shown]

In the capacity of [insert legal capacity of person signing the form of tender]

Name:[insert complete name of person signing the form of tender]

Duly authorized to sign the tender for and on behalf of: [insert complete name of tenderer]

Dated on \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_(insert date of signing)

**Form -2****Specimen format for Pre-qualification of bidders**

The information to be filled in by the bidder in the following pages will be used for purposes of pre-qualification as provided for in the instructions to Tenderer.

**1. Only for individual bidders**

- 1.1 Constitution of legal status of Bidder (Attach copy)
- Place of registration:
  - Principal place of business
  - (power of attorney of signatory of Bid (Attach))

**2. Turnover of the Firm**

| Description  | Year    | Turn over |
|--|---------|-----------|
| (insert the year as per PQC)<br>i.e. last three financial years ending 31st march of the previous year | 2018-19 |           |
|  | 2019-20 |           |
|  | 2020-21 |           |

Attachment: financial reports for the last three years: balance sheet, profit and loss statements, auditor's reports (in case of companies/corporation) etc. List them below and attach copies.

Attested Copy of Annual Turnover during Last Three Year Ending on **March 2021**

**3. Similar works**

| Particulars   | Year    | No. of Woks | Value |
|---|---------|-------------|-------|
| Total value of completed Similar work as defined in the tender document during last 07 years. | 2014-15 |             |       |
|   | 2015-16 |             |       |
|   | 2016-17 |             |       |
|   | 2017-18 |             |       |
|   | 2018-19 |             |       |
|   | 2019-20 |             |       |
|   | 2020-21 |             |       |

Attachments: Supporting documents, viz., Successful completion certificate from clients, other documentations to substantiate the similarity of work as per definition of "Similar Work". Employer reserves the right to verify the information:

- 4. Information on bid capacity** (works for which bids have been submitted and works which are yet to be completed) as on the date of this bid.

1. Existing commitments and on-going works.

| Description of work | Place & State | Contract No. & Date | Name & Address of Port or Dept. | Value of Contract in Rs. | Stipulated Period of Completion | Value of remaining to be completed | Anticipated date of completion |
|---------------------|---------------|---------------------|---------------------------------|--------------------------|---------------------------------|------------------------------------|--------------------------------|
| <b>1</b>            | <b>2</b>      | <b>3</b>            | <b>4</b>                        | <b>5</b>                 | <b>6</b>                        | <b>7</b>                           | <b>8</b>                       |
|                     |               |                     |                                 |                          |                                 |                                    |                                |

## 2. Works for which bids already submitted

| Description of work | Place & State | Name & Address of Port or Dept. | Value of Contract in Rs. | Stipulated Period of Completion | Date when decision is expected | Remarks if any |
|---------------------|---------------|---------------------------------|--------------------------|---------------------------------|--------------------------------|----------------|
| 1                   | 2             | 3                               | 4                        | 5                               | 6                              | 7              |
|                     |               |                                 |                          |                                 |                                |                |

Attach attested certificates.

## 5. Information on litigation history in which the bidder is involved.

| Other party (ies) | Port | Cause of dispute | Amount | Remark involved showing present status. |
|-------------------|------|------------------|--------|---|
|                   |      |                  |        |   |
|                   |      |                  |        |   |
|                   |      |                  |        |   |

## 6. Additional information bidder may like to submit

Duly authorized to sign this authorization on behalf of: (insert complete name of Tenderer)

Dated on \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ (insert date of signing)

**Tendering Forms****Form-3****SPECIMEN FORMAT FOR DECLARATION**

(To be executed on bidder's Letter Head)

To. \_\_\_\_\_

(Project title)

Ref: \_\_\_\_\_

The undersigned, having studied the pre-qualification submission for the above mentioned project, hereby states:

- (a) The information furnished in our bid is true and accurate to the best of my knowledge.
- (b) That, in case of being pre-qualified, we acknowledge that the Employer may invite us to participate in due time for the opening of Price bid of the Tender on the basis of provisions made in the Tender Documents to follow.
- (c) When the call for Tenders is issued, if the legal, technical or financial conditions, or the contractual capacity of the firm changes, we commit ourselves to inform you and acknowledge your sole right to review the pre-qualification made.
- (d) We enclose all the required pre-qualification data format and all other documents and supplementary information required for the pre-qualification evaluation.
- (e) We also state that no changes have been made by us in the downloaded tender formats and understand that in the event of any discrepancies observed, the tender hoisted on website of procure is full and final for all legal/contractual obligations.
- (f) We also declare that, our firm has not been banned / de-listed by any government or PSUs.
- (g) We also give an undertaking that, we have not made any payment or illegal gratification to any person / authority connected with the bid process so as to influence the bid process and have not committed any offence under the PC Act in connection with the bid.

Date: \_\_\_\_\_ Place: \_\_\_\_\_

Name of Applicant: \_\_\_\_\_

Represented by (Name & capacity) \_\_\_\_\_



**Form-4****SPECIMEN LETTER OF AUTHORITY FOR****SUBMISSION OF BID**

(To be executed on Rs.300/- non Judicial Stamp Paper)

To

The

Dear Sir,

We-----  
do hereby confirm that Shri ..... (Name, designation and Address) is/are authorized to represent us to bid, negotiate and conclude the agreement on our behalf with you {copy of board resolution attached (in case of company)} for tender no. ----- for the work of \_\_\_\_\_ and his specimen signature is appended here to ..

We confirm that we shall be bound by all and whatsoever our said signatory shall commit.

We understand that the communication made with him by the employer/Board shall be deemed to have been done with us in respect of this Tender.

*[Specimen signature]*

Yours faithfully,

Signature:

Name & Designation:

For & on behalf of:

**Form-5****EXCEPTIONS AND DEVIATIONS**

As pointed out in the Tender Call Notice, Bidder may stipulate here exceptions and deviations to the bid conditions, if considered unavoidable.

| <b>Sr. No.</b> | <b>Page No. of Bid Document</b> | <b>Clause No. of Bid Document</b> | <b>Subject Deviation</b> |
|----------------|---------------------------------|-----------------------------------|--------------------------|
|                |                                 |                                   |                          |

Note: however, the Bidders may note that unacceptable deviations, if any, the bid shall be liable for rejection. Bidder is discouraged to deviate from bid conditions, specifications, delivery schedules, and commercial terms as per the tender document.

Duly authorized to sign this authorization on behalf of: [insert complete name of Tenderer]

Date on \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ [insert date of signing]

**Form-6****INTEGRITY PACT****BETWEEN**

**DEENDAYAL PORT TRUST (DPT) hereinafter referred to as “The Principal”**

**AND**

**(Name of the bidder and consortium members)..... hereinafter referred to as “the Bidder/Contractor”**

**Preamble:** The Principal intends to award, under laid down organizational procedures, contract/concession for Tender No. .... The Principal values full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidders. The Central Vigilance Commission (CVC) has been promoting Integrity, transparency, equity and competitiveness in Government / PSU transactions and as a part of Vigilance administration and superintendence, CVC has, recommended adoption of Integrity Pact and provided basic guidelines for its implementation in respect of major procurements in the Government Organizations in pursuance of the same, the Principal agrees to appoint an external independent Monitor who will monitor the execution of the contract for compliance with the principles mentioned above.

**Section 1 - Commitments of the Principal**

(1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-

(a) No employee of the Principal, personally or through family members, will in connection with the execution of a contract, demand, take a promise for or accept, for him/herself or third person, any material or immaterial benefit which he/she is not legally entitled to.

(b) The Principal will, during the pre-contract stage, treat all BIDDERS alike, and will provide to all BIDDERS the same information and will not provide any such information to any particular BIDDER which could afford an advantage to that particular BIDDER in comparison to other BIDDERS.

(c) The Principal will exclude from the process all known prejudicial persons.

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the relevant Anti-Corruption Laws of India, or if there be a substantive suspicion in this regard, the Principal will inform its

Vigilance Office and in addition can initiate disciplinary actions. In such a case, while an enquiry is being conducted by the Principal, the proceedings under the contract would not be stalled.

## **Section 2 - Commitments of the Bidder / Contractor**

**(1)** The Bidder/Contractor commits themselves to take all measures necessary to prevent corrupt practices, unfair means and illegal activities, during pre-contract as well as post contract stages. He commits himself to observe the following principles during the contract execution.

a. The Bidder/Contractor will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the execution of the contract or to any third person any material or immaterial benefit, which he/she is not legally entitled to, in order to obtain in exchange of advantage of any kind, whatsoever during the execution of the contract.

b. The Bidder/Contractor will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids, or any other actions to restrict competitiveness, or to introduce cartelization in the bidding process.

c. The Bidder/Contractor will not commit any offence, under the relevant Anticorruption Laws of India; further the Bidder/Contractor will not use improperly, for purposes of competition, or personal gain, or pass on to others, any information or document provided by the Principal, as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

d. The Bidder will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.

e. The Bidder/Contractor will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries, in connection with the award of the contract.

f. The Bidder commits to refrain from giving any compliant directly or through any other manner without supporting it with full and verifiable facts. g. The Bidder shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the Principal.

**(2)** The Bidder/Contractor will not instigate third persons to commit offences outlined above or be an accessory to such offences.

### **Section-3 Disqualification from or exclusion from future contracts**

If the Bidder, before award of contract, has committed a transgression, through a violation of Section-2 or in any other form, such as to put his reliability as Bidder, into question, the principal is entitled to disqualify the Bidder, from the tender process, or to terminate the contract, if already signed, for such reason.

1. If the Bidder/Contractor has committed a transgression, through a violation of Section-2, such as to put his reliability, or credibility into question, the Principal is entitled to disqualify the Bidder/Contractor from the tender process, terminate the contract if already awarded and also, to exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined, by the circumstances of the case, in particular the number of transgressions, the position of the transgressions, within the company hierarchy of the Bidder and the amount of the damage. The execution will be imposed for a minimum of 6 months and maximum of 3 years.

**Note:** A transgression is considered to have occurred, if in the light of available evidence, no reasonable doubt is possible.

2. The Bidder accepts and undertakes to respect and uphold, the principal's Absolute right to resort to and impose such exclusion and further accepts and undertakes, not to challenge or question such exclusion, on any ground, including the lack of any hearing before the decision, to resort to such exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.

3. If the Bidder/Contractor can prove that, he has restored/recouped the Damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely.

### **Section-4 Compensation for Damages**

1. If the Principal has disqualified the Bidder, from the tender process prior to the award, according to Section-3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/Bid Security.

2. If the Principal has terminated the contract according to Section-3, or if the Principal is entitled to terminate the contract according to Section-3, the Principal shall be entitled to demand and recover from the Contractor, liquidated damages equivalent to 5% of the contract value, or the amount equivalent to Security Deposit/Performance Bank Guarantee, whichever is higher.

3. The Bidder agrees and undertakes to pay the said amounts, without protest or demur, subject only to condition that, if the Bidder/Contractor can prove and establish that the termination of the contract, after the contract award has caused no damage or less damage than the amount of the liquidated damages,

the Bidder/Contractor shall compensate the principal, only to the extent of the damage in the amount proved.

### **Section-5 Previous transgression**

1. The Bidder declares that, no previous transgression has occurred in the last 3 years, with any other company, in any country, or with any other Public Sector Enterprises in India, that could justify his exclusion from the award of the contract.

2. If the Bidder makes incorrect statement on this subject, it can be declared disqualified for the purpose of the contract and the same can be terminated for such reason.

### **Section-6 Equal treatment of all Bidders/Contractors/Subcontractors**

1. The Bidder/Contractor undertakes to demand from all subcontractors, a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.

2. The Principal will enter into agreements with identical conditions as this one which all Bidders, Contractors and Subcontractors.

3. The Principal will disqualify from the tender process all Bidders, who do not sign this part or violates its provisions.

### **Section-7 Criminal charges against violating Bidders / Contractors / Sub - contractors**

If the principal obtains knowledge of conduct of a Bidder/Contractor or Subcontractor, or of an employee, or a representative, or an associate of a Bidder/Contractor, or Subcontractor, which constitutes corruption, or if the Principal has substantive suspicion, in this regard, the Principal will inform the Vigilance office.

### **Section-8 External Independent Monitor**

1. Pursuant to the need to implement and operate this Integrity Pact the Principal has appointed Shri S.K. Sarkar, IAS (Retd.) independent Monitor, for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent, the parties comply with the obligations under this agreement.

2. The Monitor is not subject to instructions, by the representative of the parties to the Chairperson of the Board of the Principal.

3. The Bidder/Contractor accepts that, the monitor has the right to access, without restriction to all Project documentation of the Principal, including that provided by the Contractor. The Bidder/Contractor will also grant the Monitor,

upon his request and demonstration of a valid interest, unrestricted and unconditional access, to the project documentation. The same is applicable to Subcontractors. The monitor is under contractual obligation, to treat the information and documents of the Bidder/Contractor/Subcontractor with confidentiality.

4. The Principal will provide to the Monitor, sufficient information about all meetings, among the parties related to the Project, provided such meetings could have an impact, on the contractual relations between the Principal and the Bidder/Contractor. The parties offer to the Monitor the option to participate in such meetings.

5. As soon as the Monitor notices a violation of this agreement, he will so inform the Management of the Principal and request the management to discontinue, or heal the violation. Or to take other relevant action. The Monitor can in this regard submit nonbinding recommendations. Beyond this, the Monitor has no right to demand from the parties, that they act in a specific manner, refrain from action or tolerate action.

6. The Monitor will submit a written report, to the Chairperson of the Board of the Principal, within 8 to 10 weeks, from the date of reference of intimation to him by the 'Principal' and, should the occasion arise, submit proposals for correcting problematic situations.

7. If the Monitor has reported to the Chairperson of the Board, a substantiate suspension of an offence, under relevant Anti-Corruption Laws of India, and the Chairperson has not, within reasonable time, taken visible action to proceed against such offence, or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.

### **Section-9 Pact Duration**

This Pact begins when both parties have signed it. It expires 12 months after the last payment under the contract Agreement is made. If any claim is made/lodged during this time, the same shall be binding and continue be valid, despite the lapse of this Pact, as specified above, unless it is discharged/determined Chairperson of the Principal. The Pact duration in respect of unsuccessful Bidders shall expire after 3 months of the award of the contract.

### **Section-10 Other Provisions**

1. This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. Gandhidham, Gujarat.

2. Changes and supplements as well as termination notices, need to be made in writing, before they become effective and binding on the both parties.
3. If the Bidder / Contractor is a partnership or a consortium, this agreement must be, signed by all partners or consortium members.
4. Should one or several provisions of this agreement, turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement, to their original intentions.

For the Principal

For the Bidder/Contractor

Place: Gandhidham

Witness-1.....

Witness-2 .....

Date: \_\_/\_\_/2021

1. The bidder has to execute Integrity Pact agreement with Deendayal Port Trust (as per Bid Response sheet No.10 and Smt. Meenakshi Mishra, IA&AS (Retd.) has been nominated as Independent External Monitor for the Integrity Pact whose address is as under:
2. Shri S.K. Sarkar, IAS (Retd.), 198B-104, Nayantara Appartment, Plot No. 8B, Sector-7, Dwarha, New Delhi- 110075.  
Mobile No. 9811149324  
Email id: [sksarkar1979@gmail.com](mailto:sksarkar1979@gmail.com)



**Form- 7**

**LETTER OF INTENT FORMAT**

No: \_\_\_\_\_

Date: \_\_\_\_\_

To \_\_\_\_\_

(Name and Address of the Contractor)

Sub: Tender No. EL/AC/2686

(Name of Work)

Ref : Your bid dated

And (list the correspondence with the Bidder)

Dear Sirs,

With reference to your above offer and subsequent correspondences on the subject, we are pleased to inform you that your offer has been accepted by the competent authority and you are hereby requested to initiate actions for fulfilment of all necessary formalities, as indicated in the tender document for the above said work, at the earliest.

The Engineer-In-Charge for this work shall be Mr.\_\_\_\_\_.

Agreed Schedule date of commencement of the work is \_\_\_\_\_ and Schedule date of completion of the work is \_\_\_\_\_. Total Contract Price is Rs.\_\_\_\_\_.

You are requested to sign the Agreement and fulfil other formalities as per the Tender conditions.

**Yours Faithfully,**

**(Signature of the controlling Officer)**

**CHIEF MECHANICAL ENGINEER**

**DEENDAYAL PORT TRUST**

**Form-8****SPECIMEN CONTRACT AGREEMENT**

(To be executed on Rs.300.00 non-judicial stamp paper)  
 [The successful tenders shall fill in this form in Accordance with the  
 instructions indicated]

This agreement made of this \_\_\_\_\_ day of \_\_\_\_\_ Two Thousand between the Board of Trustees of Deendayal Port of Kandla a body corporate under Major Ports Act, 1963 have its Administration Office Building at Gandhidham ( Kutch) (hereinafter called the 'Board' which expression shall unless excluded by or repugnant to the context , be deemed to include their successors in office ) of the one part and \_\_\_\_\_ (Name and address of all the partners if a partnership with all their address ) hereinafter called the 'Contractor' which expression shall unless excluded by or repugnant to the context be deemed to include his / their heirs, executors , administration , representatives and assignees or successors in office of the other part.

WHEREAS the Board is desirous to carrying out the work of \_\_\_\_\_  
 \_\_\_\_\_ And whereas  
 the Contractor has offered to execute and complete such work.

WHEREAS the Contractor has deposited a sum of Rs. \_\_\_\_\_  
 (Rupees \_\_\_\_\_ only) as security deposit in the form of  
 \_\_\_\_\_ Bank Guarantee/Demand Draft

NOW THIS AGREEMENT WITHINNESS AS FOLLOWS:-

1. In this agreement words and expression shall have the same meaning as are respectively assigned to them in the general condition (including special conditions, if any) of contract hereinafter referred to.
2. The following documents shall be deemed to form and read as construed part of this agreement viz.:
  - i) Notice inviting tender.
  - ii) Technical specifications.
  - iii) Special conditions of contract.
  - iv) Tender submitted by the Contractor.
  - v) The Board's "Drawing".
  - vi) The schedule items of work with quantities and rates.
  - vii) Any correspondence made between the Executive Engineer (E) and the Contractor after opening of the cover-I—as regards to contain clarifications/details called for vice versa.
  - viii) Common terms and conditions offered to Contractor and their acceptance including confirmation to withdrawal of their own terms and conditions offered with the tender i.e. 'Cover-I'.
  - ix) Bank Guarantee for security deposit.

3. The Contractor hereby covenants with the Board to complete the work of \_\_\_\_\_ in conformity in all respects, with the provisions of the contract.

4. The Board hereby covenants to pay the Contractor in consideration of such completion of the works, the contact price of Rs. \_\_\_\_\_(Rupees \_\_\_\_\_ only)at the time and in the manner prescribed of the contract.

IN WITNESS WHERE of the parties here unto have set their hands and seals the day and year first above written signed and sealed by the Contractor in the presence of:-

Witness

1. Name & Address \_\_\_\_\_  
Seal

Signature of Contractor

2. Name & Address \_\_\_\_\_  
Seal

Signed, sealed and delivered by Shri \_\_\_\_\_on behalf of the Board in presence of

1. \_\_\_\_\_

2. \_\_\_\_\_

(Chief Mechanical Engineer)  
Deendayal Port Trust

The common seal of the Board of Trustees of Deendayal Port of Kandla affixed in the presence of:

1. \_\_\_\_\_

2. \_\_\_\_\_

Secretary  
Deendayal Port Trust

**Form-9**

**SPECIMEN BANK GURANTEE TOWARDS PERFORMANCE**  
**GUARANTEE/SECURITY DEPOSIT**

(To be executed on Rs. 300/- non-judicial Stamp Paper)

To,  
 The Board of Trustees of Deendayal Port of Kandla,  
 DEENDAYAL PORT TRUST  
 A.O.Building, P.O.Box No.50,  
Gandhidham-Kutch.

1. In consideration of the Board of Trustees of Deendayal Port of [insert name of port] incorporated by the Major Port Trusts Act, 1963 as amended by Major Port Trust (Amendment) Act 1974 (hereinafter called "The Board" which expression shall unless excluded by or repugnant to the context or meaning thereof be deemed to include the Board of Trustees of the port of [insert name of port], its successors and assigns) having agreed to exempt \_\_\_\_\_ (hereinafter called the "contractor") (Name of the contractor/s) from the demand under the terms and condition of the contract, vide \_\_\_\_\_ (Name of the Department)'s letter No. \_\_\_\_\_ Date \_\_\_\_\_ made between the contractors and the Board for execution of \_\_\_\_\_ covered under Tender No. \_\_\_\_\_ dated \_\_\_\_\_ (hereinafter called "the said contract") for the payment of Security Deposit in cash or Lodgment of Government Promissory Loan Notes for the due fulfillment by the said contractors of the terms and condition of the said contract, on \_\_\_\_\_ production of a bank Guarantee for Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_) only we, the (Name of the Bank and Address) \_\_\_\_\_ hereinafter referred to as "the Bank") at the request of the contractors do hereby undertake to pay to the Board an amount not exceeding Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_) only against any loss or damage caused to or suffered by the Board by reason of any breach by the contractors of any of the terms and conditions of the said contract.

2. We, \_\_\_\_\_ (Name of Bank) (Name of Branch), do hereby Undertake to pay the amount due and payable under this guarantee without any demur merely on a demand from the Board stating that the amount claimed is due by way of loss or damage caused to or which would be caused to or suffered by the Board by reason of the contractors failure to perform the said contract. 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 any amount not exceeding Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_) only.

3. We, \_\_\_\_\_ (Name of Bank and Branch), undertake to pay to the Board any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any Court or Tribunal relating thereto our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the Contractor(s) shall have no claim against us for making such payment.

4. We, \_\_\_\_\_ (Name of Bank and Branch), further agree with the Board that the guarantee herein contained shall remain in full force and effect during the period that would be taken for performance of the said contract and that it shall continue to be enforceable till all the dues of the Board under or by virtue of the said contract have been fully paid and its claims satisfied or discharged or till the \_\_\_\_\_ (Name of the user department) of the said certifies that the terms and conditions of the said contract have been fully and properly carried out by the said Contractors and accordingly discharge this guarantee. PROVIDED HOWEVER that the Bank shall at the request of the Board but at the cost of the Contractors, renew or extend this guarantee for such further period or periods as the Board may require from time to time.

5. We, \_\_\_\_\_ (Name of Bank and Branch), further agree with the Board that the Board shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said contract or to extend the time of performance by the said contract or to extend the time of performance by the said Contractors from time to time or to postpone for any time or from time to time any of the powers exercisable by the board against the said Contractors and to forebear or enforce any of the terms and conditions relating to the said contract and we shall not be relieved from our liability by reason of any such variation or extensions being granted to the contractors or for any forbearance, act or omission on the part of the Board or any indulgence shown by the board to the Contractors or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, 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(s).

7. It is also hereby agreed that the Courts in [insert city] would have exclusive jurisdiction in respect of claims, if any, under this Guarantee.

8. We, \_\_\_\_\_ Bank lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Board in writing.

9. Notwithstanding anything contained herein :

(a) Our liability under this Bank Guarantee shall not exceed Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only);

(b) This Bank Guarantee shall be valid upto \_\_\_\_\_ ; and

(c) We are liable to pay the guarantee amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before \_\_\_\_\_ (date of expiry of Guarantee).”

10. (i) Name of Beneficiary's Bank is State Bank of India, Gandhidham.

(ii) IFSC No. of Beneficiary's Bank is SBIN0060239.

(iii) Bank Account No. of Beneficiary is 10316591671.

Date \_\_\_\_\_ day of \_\_\_\_\_ 20

For (Name of Bank)  
(Name)  
Signature

**Form-10****SPECIMEN LETTER OF AUTHORITY FROM BANK****FOR ALL BGs**

(To be executed on Bank's Letter Head)

Date:

To,

The Board of Trustees of Port [insert port],

Dear Sir,

Sub: Our Bank Guarantee No. \_\_\_\_\_

dated \_\_\_\_\_ for Rs. \_\_\_\_\_ favoring yourselves  
issued on a/c of

M/s. \_\_\_\_\_

(Name of contractor)

.....

We confirm having issued the above mentioned guarantee favoring yourselves, issued on account of M/s. \_\_\_\_\_ validity for expiry upto date \_\_\_\_\_ and claim expiry date up to \_\_\_\_\_. We also confirm 1) \_\_\_\_\_ 2) \_\_\_\_\_ is/are empowered to sign such Bank Guarantee on behalf of the Bank and his/their signatures is/are binding on the Bank.

Name of signature of Bank Officer

**Form-11**

**DEENDAYAL PORT TRUST**  
**Form of application by the Contractor for seeking**  
**extension of time**

**Part – 1**

1. Name of Contractor
2. Name of work as given in the agreement
3. Agreement No.
4. Estimated amount put to tender
5. Date of commencement of work as per agreement
6. Period allowed for completion of work as per agreement
7. Date of completion stipulated in agreement
8. Period for which extension of time has been given previously:
 

|   |       |       |      |
|---|-------|-------|------|
| (a) 1 <sup>st</sup> extension vide EE's No. | Dated | Month | Days |
| (b) 2 <sup>nd</sup> extension vide EE's No. | Dated | Month | Days |
| (c) 3 <sup>rd</sup> extension vide EE's No. | Dated | Month | Days |
| (d) 4 <sup>th</sup> extension vide EE's No. | Dated | Month | Days |

 Total extension previously given.
9. Reasons for which extensions have been previously given (Copies of the previous application should be attached)
10. Period for which extension is applied for
11. Hindrance on account of which extension is applied for with dates on which hindrances occurred and the period for which these are likely to last.
  - (a) Serial No.
  - (b) Nature of hindrance
  - (c) Date of Occurrence
  - (d) Period for which it is likely to last
  - (e) Period for which extension required for this particular hindrance
  - (f) Overlapping period if any, with reference to item.....
  - (g) Net extension applied for
  - (h) Remarks, if any.
 Total period on account of hindrance mentioned above.....  
 Month.....Days
12. Extension of time required for extra work
13. Details of extra work and amount involved:
  - (a) Total value of extra work
  - (b) Proportionate period of extension of time based on estimated amount put to tender on account of extra work.
14. Total extension of time required for 11 & 12

Submitted to the Sub-Divisional Officer.....

**Signature of Contractor**

**Dated:**

Form-12

**DEENDAYAL PORT TRUST**  
**APPLICATION FOR EXTENSION OF TIME**

**PART II**

**(To be filled in by the Sub-Divisional Office)**

1. Date of receipt of application from ..... Contractor for the work of..... in the Sub-Divisional Office.
2. Acknowledgement issued by S.D.O. vide his No.....dated
3. Remarks of S.D.O.  
 (on the reasons given by the contractor are correct and what extension, if any, is recommended by him. If he has not recommended the extension, reasons for rejections should be given.)

Signature of Divisional Officer  
Dated:

**(To be filled in by the Executive Engineer)**

1. Date of receipt in the Divisional Office.
2. Executive Engineers remarks regarding hindrances mentioned by the Contractor.
  - (1) Serial No.
  - (2) Nature of hindrance
  - (3) Date of occurrence
  - (4) Period for which hindrance is likely to last
  - (5) Extension of time applied for by the contractor
  - (6) Overlapping period, if any, giving reference to Items which overlap.
  - (7) Net period for which extension is recommended
  - (8) Remarks as to why the hindrance occurred  
And justification for extension recommended.
3. Executive Engineer's recommendations:  
 (The present progress of the work should be stated and whether the work is likely to be completed by the date upto which extension has been applied for. If extension of time is not recommended, what compensation is proposed to be levied under clause 2 of the agreement?)

Signature of Executive Engineer  
Date

Dy. HOD/SE's recommendations

Signature of Executive Engineer  
Date

HOD's recommendations/approval.

Signature of Chief Mechanical Engineer  
Date



## **SECTION V**

### **Scope of work & Technical Specifications**

Deendayal Port Trust (earlier Known as Kandla Port Trust), is under Govt. of India, Ministry of Shipping; Deendayal port Trust intend to get the following work done at Kandla. The details of work are mentioned in schedule-B & below are brief of work. Though detailed work may not be explained but the firm will complete it perfectly, precisely & accurately to the entire satisfaction of Engineer in Charge.

- TPIA agency appointment by DPT for monitoring the work.
- After successful completion of whole work in all respect to carry out testing and commissioning of the complete work to the entire satisfaction of DEENDAYAL PORT TRUST.
- After Completion of all work successfully, contractor shall submit the four set work compendium which shall contain, complete lay out Drawing, All Testing & commissioning Report etc to EIC.
- The broad details of each item & Technical Specification of the work are shown in the Schedule “B” attached herewith.
- Any correction should be signed / initialed. White ink corrections not allowed & lead to rejection of quotation.
- All the rules and regulations governing DPT will be applicable.
- Force measure restricted only to the acts of the god.

The scope of work envisages the following. Bringing of all materials at site, assessment of site requirement, carrying out of site survey and check survey, etc.

#### **Technical Specification No.1**

Supply, Installation, testing and commissioning of 11kv line with 100 mm<sup>2</sup> aaac conductor(dog) with wind pressure 100 kg/m<sup>2</sup> on RSJ pole-11 mtr(span-40 mtr). This includes supply at site & stringing of stranded AAAC conductor code name DOG of size 100sqmm as per Indian Standard Title International Standard IS:398 (Part-IV) Aluminum Alloy IEC : 208-1966 stranded conductor BS-3242-1970 IS : 9997-1988 Aluminum Alloy Redraw Rods IEC 104-1987 IS : 1778-1980 Reels and Drums for bare conductors BS:1559-1949 in a minimum length of 2000meters length in wooden drum, the conductor manufacturing batch shall be of 2020 and same shall be submitted along with necessary documents same is to be string on HT pin and strain insulators, binding on insulators, jumpering, the jointing in HT line will be done by twisting sleeve joints as per standard practice. Care must be taken in handling the conductor to protect against cuts, scratches or kinks. The conductor must not be drawn over hard surface ground, where it is liable to be

damaged. AAAC conductors must be drawn on wooden or aluminum pulley only. Wastage and cutting should be avoided as far as possible.

Not more than 2% sag will be accepted in the materials account. The sag and spans and line erection/installation guidelines must be maintained as per PGVCL norms. Any 11kV line crossing on the way is also in the scope of the contractor and has to be executed as per the standard practice/norms of PGVCL with necessary accessories. This also includes painting with two coat of metal primer and three coat of silver paint, thereafter numbering the poles in 100mm round dia. This also includes planting the pole to 1/6<sup>th</sup> height in the ground strengthening with cement concrete and above ground level muffing is to be done.

The cross arms insulators must be so fixed that neither tilt nor bend from position. The rate quoted should be for three conductor route per kilometer. The sagging should be uniform for all conductors and uneven sagging will not be allowed. The ground clearance and line to line clearances, etc. have to be maintained as per latest IE Rules.

The land is soft, muddy type marshy land where poles are to be erected after excavation for erection of poles, a PCC carpet of 50mm thick shall be provided at the bottom and cured before erection of poles.

The vegetation below the line shall be removed by the contractor. The contractor shall prepare the drawing of the line work (5 copies) and shall submit all the required documents which are required for getting clearance from CEA. However, the submission, uploading of documents and payment of statutory charges are in the scope of DPT.

The relay co-ordination is in the scope of contractor. The bidder is suggested to visit the site for ascertaining actual requirement of items.

The below table indicates tentative (but not limited) items to be used for 1km of 11kV line.:

| SR | ITEM CODE  | PARTICULARS   | UNIT | QTY   |
|----|------------|---|------|-------|
| 1  | 3604000035 | RSJ POLE (116X110---11 MTR)   | NO.  | 25.00 |
| 2  | 2609000034 | 11KV V CROSS ARM.(From Angle of 65X65X6) <b>MS with Hot Dip Galvanization</b>       | NO.  | 25.00 |
| 3  | 2601000061 | Side clamp(65x65X6 <b>MS Angle with Hot Dip Galvanization</b> )                     | NO.  | 50.00 |
| 4  | 2601000084 | HT TOP fittings ( angle from 65x65X6 M.S - 150MM) <b>with Hot Dip Galvanization</b> | NO.  | 25.00 |
| 5  | 2614000002 | (a) Anchor rod - 1 No.  | NO.  | 4.00  |
| 6  | 2614000009 | (b) Turn buckle - 1 No.   | NO.  | 4.00  |
| 7  | 2614000012 | (c) Eye Bolt - 1No(16mmX590 mm Round Bar).  | NO.  | 4.00  |

|    |            |  |     |       |
|----|------------|--|-----|-------|
| 8  | 0103000014 | (d) Stay wire- 7/12  | KG  | 13.60 |
| 9  | 2003000001 | (e) HT Guy Insulator - 1 No.                                     | NO. | 4.00  |
| 10 | 2601000069 | (f) Guy Clamp - 1 Set.   | SET | 5.00  |
| 11 | 0103000002 | (a ) GI Wire No. 8 From Pole Top to Earthing Coil                | KG  | 34.00 |
| 12 | 2801000015 | (b) Rigid PVC Pipe -20mm dia ( 1.5 Mtr) - 1No                    | NO. | 25.00 |
| 13 | 0901000028 | ( c) Earthing Bolt   | NO  | 25.00 |
| 14 | 0901000024 | (d) Earthing Coil (GI Wire No 8)                                 | NO  | 25.00 |
| 15 | 0103000070 | Barbed wire  | NO. | 25.00 |
| 16 | 2699000006 | CAUTION & DANGER BOARD.  | NO. | 25.00 |
| 17 | 2001000008 | (a)22 KV Pin Insulator   | No  | 75.00 |
| 18 | 2010000012 | (b) 22 KV GI Pin   | No  | 75.00 |
| 19 | 2001000011 | (a) 11 KV Ball & Socket Type Comp(Polymer) Insulator(Long Rod)   | NO. | 24.00 |
| 20 | 2010000077 | (b) 11 KV Disc. Hardware <b>with Hot Dip Galvanization</b>       | Set | 24.00 |
| 21 | 0102000036 | AL.ALLOY CONDUCTOR 100 MM2 SIZE.                                 | KM. | 3.09  |
| 22 | 1501000024 | (a) M.S. Bolts & Nuts 65x16mm <b>with Hot Dip Galvanization</b>  | KG  | 1.60  |
| 23 | 1501000031 | (b) M.S. Bolts & Nuts 180x16mm <b>with Hot Dip Galvanization</b> | KG  | 35.60 |
| 24 | 2601000031 | (b) P.G. Clamp for 'DOG'/Wedge Connectors 100 sq.mm              | No  | 24.00 |
| 25 | 0101000003 | (c) Alu. Binding wire  | KG  | 0.90  |
| 26 | 1905000006 | (d) HT Tape  | Mtr | 18.00 |

## Technical Specification No.2

The work includes concreting with one part of cement, two parts of specified quality sand and four parts of grit (1:2:4). The mixture should be prepared on GI sheet and should be free from the dust. Cement river sand and metal should be used by contractor at his own cost. Concrete for muffing of poles and stay rods should be cement one part, sand two parts and four parts of Metal (1:2:4). Cement, sand and metal must be got approved from our civil department and work execution will also be in there scope regarding cement concrete. The concrete shall be used in above proportion and should be thoroughly mixed at least three times in dry state before water is added and as far possible a fairly wet mixture must be used all concrete must be mixed on watertight platform. In any case, the work finishing coat of cement plaster should be applied on outer surface of the smooth. One finishing coat of cement plaster should be applied on outer surface of the muffing. The concrete block, when slightly dried, should be kept wet continuously for period of 10 days. The location for concreting will be decided by the Engineer-in-charge and the contractor will follow his instructions scrupulously. If the concreting work is

not found as per the specifications and quality, the same is liable to be rejected. The cement concreting work and muffing has to be done in the presence of DPT representative only and work done in his absence will be rejected and no payment made thereof. The cement, sand, metal grit shall be procured by the contractor. The normal size of concreting/muffing of pole will be 5x2'x2.1/2' & that for stay 2'x2'x2' muffing for pole shall be 12" diax2x9" (1" above and 1' below ground) Muffing for stay shall be 12" diax2x9". The concreting of poles, Double pole structures and Four pole structures is included in this work.

### Technical Specification No.3

The work includes the supply, installation of addition stay set for erection of additional 11mtr RSJ pole for completion of work at new and existing site if any. Work comprises of anchor rod, turn buckle, eye bolt and excavation of suitable pit 4' deep, fixing of stay clamp on pole, binding of GI stay wire.

The stay insulators must be inserted in the stay wire on all stays as per standard practice. The wrapping of the Guy wire strands at both ends. The stay insulator must be even and must presents neat appearance and with good workmanship. No stay should be left loose but should be tight and straight to withstand in say cyclone or storm of 200Kmph, the item includes refilling by cement concrete mix of ratio 1:2:4.

If stays are not required to be concreted, second option is a pre casted cement concrete block may be made by contractor will have to transport at his own cost to the site of work and will have to use for fixing of anchor rod at site. The work includes all material and labour and to the entire satisfaction of Engineer-in-charge.

The below table indicates tentative items to be used per pole for supply, installation of addition stay set of 11kV line as per PGVCL norms:

| SR | ITEM CODE  | PARTICULARS                                 | UNIT | QTY  |
|----|------------|---|------|------|
| 1  | 2614000009 | (b) Turn buckle - 1 No.                     | NO.  | 2.00 |
| 2  | 2614000012 | (c) Eye Bolt - 1No (16mmX590 mm Round Bar). | NO.  | 2.00 |
| 3  | 0103000014 | (d) Stay wire- 7/12                         | KG   | 6.80 |
| 4  | 2003000001 | (e) HT Guy Insulator - 1 No.                | NO.  | 2.00 |
| 5  | 2601000069 | (f) Guy Clamp - 1 Set.                      | SET  | 2.00 |

### Technical Specification No.4

The work involves Supply, Installation, Testing and commissioning of DP structure with 11KV A.B. Switch & H.G Fuse on 11MTR RSJ POLE. The Double pole structures have to be firmly installed on the site and two layers of anticorrosive coating and three layers of high quality paint with best workmanship is to be done. This also includes painting numbering the poles in 100mm round dia. Double pole structure should be solidly earthed from two points with individual earthing and a 'Danger' sign board should be provided on the Double Pole structure as instructed by Engineer in Charge. The below table shows tentative items (but not limited) to be used for this work. The same may be used for reference. However, the bidder is suggested to visit the site for ascertaining actual requirement of items.

| DOUBLE POLE STRUCTURE WITH 11 KV A.B.SWITCH & DO FUSE ON 11 MTR RSJ POLE |            |   |      |       |
|--|------------|---|------|-------|
| SR   | ITEM CODE  | PARTICULARS   | UNIT | QTY   |
| 1  | 3604000035 | RSJ POLE (116X110---11 MTR)                                 | NO.  | 2.00  |
| 2  | 3611000016 | M.S.Angle Top FEBRI.65x65x6mm - 2750mm                      | No   | 2.00  |
| 3  | 3611000038 | M.S.Angle 11 KV A.B.Switch - Fabri 65x65x6mm- 2750mm        | No   | 4.00  |
| 4  | 3611000039 | M.S. Angle Fabri. 65x65x6mm - 2750mm for cross bracing      | No   | 4.00  |
| 5  | 0613000003 | 11 KV A.B. SWITCH 400 AMP.                                  | SET  | 1.00  |
| 6  | 2601000061 | Side Clamps for mounting A.B Switch (M.S Flat of size 50X6) | NO   | 16.00 |
| 7  | 2614000002 | (a) Anchor rod - 1 No.                                      | NO.  | 4.00  |
| 8  | 2614000009 | (b) Turn buckle - 1 No.                                     | NO.  | 4.00  |
| 9  | 2614000012 | ( c ) Eye Bolt - 1No(16mmX590 mm Round Bar).                | NO.  | 4.00  |
| 10   | 0103000014 | (d) Stay wire- 7/12   | KG   | 13.60 |
| 11   | 2003000001 | (e) HT Guy Insulator - 1 No.                                | NO.  | 4.00  |
| 12   | 2601000069 | (f) Guy Clamp - 1 Set.                                      | SET  | 4.00  |
| 13   | 0103000002 | (a ) GI Wire No. 8 From Pole Top to Earthing Coil           | KG   | 2.72  |
| 14   | 2801000015 | (b) Rigid PVC Pipe -20mm dia ( 1.5 Mtr) - 1No               | NO.  | 2.00  |
| 15   | 0901000028 | ( c ) Earthing Bolt   | NO   | 2.00  |
| 16   | 0901000024 | (d) Earthing Coil (GI Wire No 8)                            | NO   | 2.00  |
| 17   | 2001000011 | (a) 11 KV Porcelyn Disc Insulator                           | No   | 12.00 |
| 18   | 2010000077 | (b) 11KV Disc. Hardware                                     | Set  | 6.00  |
| 19   | 1306000006 | 11 KV COMPOSITE POLYMERIC D O FUSE                          | No   | 3.00  |
| 20   | 1501000024 | (a) M.S.Bolts & Nuts 65x16mm                                | KG   | 7.20  |
| 21   | 1501000031 | (b) M.S.Bolts & Nuts 180x16mm                               | KG   | 2.49  |
| 22   | 2601000027 | ( c ) P.G.Clamp for Weasel or Rabbit                        | No   | 9.00  |
| 23   | 1905000006 | (d) Binding tape HT for jumpering                           | Mtr  | 20.00 |
| 24   | 0101000003 | (e) Alu. Binding wire                                       | KG   | 0.50  |

### Technical Specification No.5

The work involves Supply, Installation, Testing and commissioning of Four Pole structure with 11KV A.B. Switch & H.G Fuse on 11MTR RSJ POLE. The Four pole structure has to be firmly installed on the site and two layers of anticorrosive coating and three layers of high quality paint with best workmanship is to be done. Four pole structure should be solidly earthed from two points with individual earthing and a 'Danger' sign board should be provided on the Four Pole structure as instructed by Engineer in Charge.

This also includes painting numbering the poles in 100mm round dia.

The below table shows tentative items (but not limited) to be used for double pole structure installations. The same may be used for reference, and since the list in the table shows items for double pole, the four pole structure would have

double the quantity of the items indicated in the below table. However, the bidder is suggested to visit the site for ascertaining actual requirement of items.

| DOUBLE POLE STRUCTURE WITH 11 KV A.B.SWITCH & DO FUSE ON 11 MTR RSJ POLE |            |   |      |       |
|--|------------|---|------|-------|
| SR   | ITEM CODE  | PARTICULARS   | UNIT | QTY   |
| 1  | 3604000035 | RSJ POLE (116X110---11 MTR)                                 | NO.  | 2.00  |
| 2  | 3611000016 | M.S.Angle Top FEBRI.65x65x6mm - 2750mm                      | No   | 2.00  |
| 3  | 3611000038 | M.S.Angle 11 KV A.B.Switch - Fabri 65x65x6mm- 2750mm        | No   | 4.00  |
| 4  | 3611000039 | M.S. Angle Fabri. 65x65x6mm - 2750mm for cross bracing      | No   | 4.00  |
| 5  | 0613000003 | 11 KV A.B. SWITCH 400 AMP.                                  | SET  | 1.00  |
| 6  | 2601000061 | Side Clamps for mounting A.B Switch (M.S Flat of size 50X6) | NO   | 16.00 |
| 7  | 2614000002 | (a) Ancher rod - 1 No.                                      | NO.  | 4.00  |
| 8  | 2614000009 | (b) Turn buckle - 1 No.                                     | NO.  | 4.00  |
| 9  | 2614000012 | ( c ) Eye Bolt - 1No(16mmX590 mm Round Bar).                | NO.  | 4.00  |
| 10   | 0103000014 | (d) Stay wire- 7/12   | KG   | 13.60 |
| 11   | 2003000001 | (e) HT Guy Insulator - 1 No.                                | NO.  | 4.00  |
| 12   | 2601000069 | (f) Guy Clamp - 1 Set.                                      | SET  | 4.00  |
| 13   | 0103000002 | (a ) GI Wire No. 8 From Pole Top to Earthing Coil           | KG   | 2.72  |
| 14   | 2801000015 | (b) Rigid PVC Pipe -20mm dia ( 1.5 Mtr) - 1No               | NO.  | 2.00  |
| 15   | 0901000028 | ( c ) Earthing Bolt   | NO   | 2.00  |
| 16   | 0901000024 | (d) Earthing Coil (GI Wire No 8)                            | NO   | 2.00  |
| 17   | 2001000011 | (a) 11 KV Porcelain Disc Insulator                          | No   | 12.00 |
| 18   | 2010000077 | (b) 11KV Disc. Hardware                                     | Set  | 6.00  |
| 19   | 1306000006 | 11 KV COMPOSITE POLYMERIC D O FUSE                          | No   | 3.00  |
| 20   | 1501000024 | (a) M.S.Bolts & Nuts 65x16mm                                | KG   | 7.20  |
| 21   | 1501000031 | (b) M.S.Bolts & Nuts 180x16mm                               | KG   | 2.49  |
| 22   | 2601000027 | ( c ) P.G.Clamp for Weasel or Rabbit                        | No   | 9.00  |
| 23   | 1905000006 | (d) Binding tape HT for jumpering                           | Mtr  | 20.00 |
| 24   | 0101000003 | (e) Alu. Binding wire                                       | KG   | 0.50  |

## Technical Specification No.6

The work includes Supply at site 3CX185 Sq. mm 11kV HT XLPE insulated, aluminum conductor armored cable as per IS 7098 (P-I) 1985, in this regard contractor shall submit the relevant documents. Before supplying the cable, contractor shall take approval for make. However, the cable make is mentioned in the approved make list of DPT. During the supply of the cable, firm shall produce the Type Test, Routine Test certificate at site. Unless otherwise specified, the cable shall conform in all respect to IS: 7098 (Part-II)-1985 with latest amendment thereof. 11 KV (E) Grade XLPE, 3-Core, power cable shall be of high conductivity, stranded compacted, H.D. aluminum circular shaped conductor with XLPE (cross linked Poly Ethelene) Dry/Gas cured insulation provided with shielding of extruded semi-conducting materials over conductor and XLPE insulation. Each insulated core shall have copper tape screen, laid together and provided with common covering of PVC Inner Sheath (Extruded). Overall galvanized steel strip armour and PVC outer sheath shall be provided. The specification for manufacture of cable shall be conforming to IS: 7098 (Part-II) 1985 (latest edition) for 11KV (E), 3-phase, 50 Hz. Earthed systems.

Outer sheath shall be designed to afford high degree of mechanical protection and shall also be heat, oil, chemical and weather resistant, Common acid, alkalis and sealing solution shall not have adverse effect on material of PVC sheath. Cable shall be suitable for laying in covered trenches or FRP cable trays or buried under-ground in outdoor. The cable conductor shall be made from high conductivity stranded High Density aluminum to form compacted circular shaped conductor having resistance within limits specified in IS: 8130/1984 and any latest amendment to it. The conductor having semi-conducting screen shall ensure perfectly smooth profile & avoid concentration of

stress. The conductor screen shall be extruded in the same operation as the insulation. The semiconducting polymer shall be cross linked.

The XLPE insulation shall be suitable for 11 KV system voltage and should be manufactured with Dry / Gas curing process. The bidder shall submit the description of dry / gas curing process, with the clear inclusion of equipments / parameters involved. The manufacturing process shall ensure that the insulation shall be free of voids. The insulation shall withstand mechanical and thermal stress under steady state and transient operating conditions. The extrusion method should give very smooth interface between semi-conducting screen and insulation. The insulation of the cable shall be of high standard quality generally conforming to IS: 7098 (Part – II) – 1985 and any latest amendment to it.

| Cable Parameters : |   |        |   | 11 KV               |
|--------------------|---|--------|---|---------------------|
| (i)                | Voltage grade (Uo / U)  | KV     | : | 6.35 / 11           |
| (ii)               | Cores (Nos)   |        | : | 3                   |
| (iii)              | Nominal system voltage  | KV     | : | 11                  |
| (iv)               | Highest system voltage  | KV     | : | 12                  |
| (v)                | System frequency  | Hz     | : | 50                  |
| (vi)               | Variation in frequency  | %      | : | ± 3                 |
| (vii)              | (a) Maximum allowable temp. of conductor during continuous normal operation at rated full load current. | °C     | : | 90                  |
|                    | (b) Maximum allowable temp. under short circuit condition   | °C     | : | 250                 |
| (viii)             | 1.2/50 microsecond lightning impulse withstand voltage wave value.                                      | KVp    | : | 75                  |
| (ix)               | 5 Min, Power frequency withstand voltage  | KV rms | : | 17                  |
| (x)                | System earthing   |        |   | Effectively Earthed |

Non-metallic semi-conducting shield shall be provided over the insulation to confine electrical field to the insulation. The insulation shield shall be extruded in the same operation as the conductor shield and the insulation by suitable extrusion process. The XLPE insulation shield shall be of tanded type. The copper metallic overlapped tape shield shall be provided.

Fillers and Inner-sheath should be confirming to IS: 7098(Part-II)-1985. The sheath shall be suitable to withstand the site conditions and the desired temperature. It shall be of consistent quality and free from all defects. The PVC sheath shall be extruded. The material of fillers and inner-sheath shall be compatible with the temperature ratings of the cable and shall have no deleterious effect on any other component of the cable. Central filler shall also, be provided with other peripheral fillers to have proper circular section.

Armouring of galvanized steel strip shall be provided. The dimensions of steel strips shall be as per latest edition of IS: 3975 – 1979.

Extruded type ST-2 PVC outer-sheath, conforming to IS: 5831-(1984) (latest edition) over armouring with suitable additives (to prevent attack by redents & termites), shall be provided.

The cable shall have suitable fillers laid up with insulation cores to have subsequently circular cross-section before the inner sheath is applied. The fillers shall be suitable for operating temperature of the cable.

All materials used in manufacturing of cable shall be new, unused and of finest quality. All materials should comply with the requirements / tests as per applicable IS / IEC specification, Indian Electricity Rules and any other statutory provision of rules & regulations.

The PVC material used in the manufacture of cable shall be of reputed manufacturer. No recycling of PVC is permitted. The purchaser reserves the right to ask for documentary evidence of the purchase of various materials, (to be used for the manufacture of cable) as per checking of quality control. Quality Assurance plans shall be submitted.

The indicative values of continuous current carrying capacities at Maximum conductor temperature of 90°C (for design purpose by field) of 3 core 185sqmm cable, Continuous Current Carrying Capacity (For 11 KV cable) 270A in Ground and 310A in air. Short circuit rating for 185sqmm Conductor should be 17.4 kA (rms).

The current rating shall be based on maximum conductor temperature of 90 degree with ambient site condition specified for continuous operation at the rated current. Cable shall be suitable for operation under frequency variation of +3% and voltage variation of +10% to -15% and combined frequency - voltage variation of 10% (absolute sum).

The bidder shall have to submit, well in advance, the test certificates for the following routine test for approval prior to inspection of the materials for the complete lot offered for inspection at a time. (a) Conductor resistance test (b) Partial discharge test (c) High-voltage test for 5 minutes [as per Clause 19.7.2 of IS: 7098 (Part-II) – 1985]. DPT reserves the right to insist for witnessing the acceptance / routing tests of the bought out items.

### **Technical Specification No.7**

The work includes laying of 3Cx185sqmm underground cable through the various mediums. For any length of cable that extends beyond the standard drum length of the cable, such extension has to be done with proper cable joining kits and techniques as per latest IE standards with excellent workmanship. All the cable ends that terminate at double pole structures or four pole structures should be brought out from the ground only in HDPE pipes of appropriate size carrying single individual cable inside each HDPE pipe. The cable end should be terminated as per standard practice as per IE rules with best workmanship. Tagging of the cables with precise nomenclature is mandatory.

The vegetation on the way of laying the cable shall be removed by the contractor. The contractor shall prepare the drawing of the line work (5 copies) and shall submit all the required documents which are required for getting clearance from CEA. However, the submission, uploading of documents and payment of statutory charges are in the scope of DPT. The relay co-ordination is in the scope of contractor.

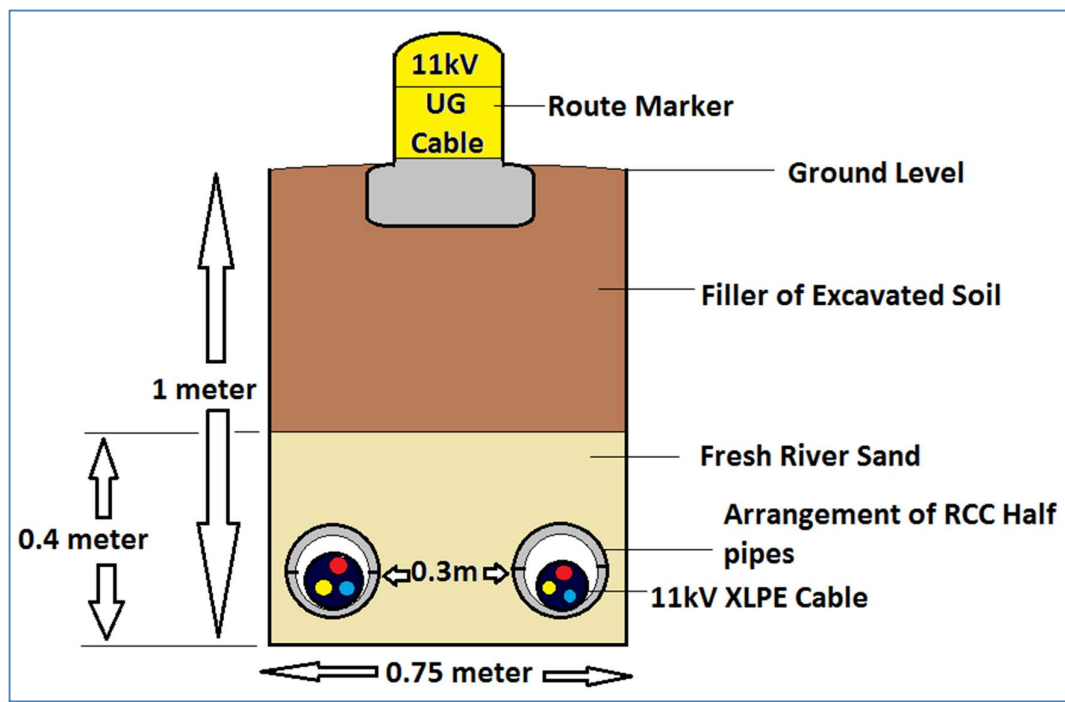


### Technical specification No.7a: Through Hard/Soft Soil

This includes laying of double circuit 3 core x 185 Sq.mm HT armored aluminum Conductor XLPE Cable of 11KV Grade (excluding supply of cable) through excavation of trench 0.75 meter wide and 1 meter deep in soft/hard soil. Each cable should be placed inside RCC Half Round Pipe of 6" inner Dia and 1 Meter length and such RCC Half Round Pipes must be placed in such a fashion so as to provide support under the cable with one half and covering over the cable with the other half. The same trench would be used to place two circuits (cables) side by side in horizontal fashion and these cables would run through two RCC pipes individually. The minimum distance between such RCC pipe throughout the route length should be 0.3m.

The bed of 50mm of river sand shall be provided in the bottom of the excavated trench. The RCC Pipe shall be laid over the bed of river sand. This includes filling of gaps by fresh river sand and filling the trench upto atleast 400mm height from bottom by fresh river sand. The remaining filling of the trench shall be done with the excavated stuff & should be watered and rammed properly to its original position. The excess excavated stuff shall be disposed off from the Site of work and spread in low lying areas as directed by Engineer in Charge or his nominee. The contractor shall provide heat shrinkable straight through joints of relevant size of approved make if the laying of cable shall be more than standard drum length. This includes all labour and material as directed by Engineer-in-Charge. Such cable joints shall be under the scope of work of the contractor at no extra cost or obligation from DPT. Such cable joining work is completely to be done by the contractor at his own cost.

The below figure indicates the expected arrangement of laying of cables:



## **CABLE ROUTE AND JOINT MARKERS**

- Permanent means of indicating the positions of joints on site should be provided. During the course of permanent reinstatement cable and joint markers, should be laid directly above the route of the cable and the position of the joint respectively.
- Wherever it is not possible to place the marker directly over the cable route or joint the marker should be suitably placed near the cable route or joint on which the distance of the cable route or joint at right angles to and parallel to the marker should be clearly indicated.
- The site requirement & position of fixing the markers will be decided by the Engineer-In-charge or his nominee.
- The type of route marker & letters to be written on the route marker will be decided while execution by the Engineer-in-charge.
- Route marker should be visible and the pedestal should be buried underneath the ground firmly by providing CC foundation.
- Route Marker of C.C. (1:2:4) 150x150x750 (in mm) Concrete Stone (DPT Mark with Approved Yellow Color Embedded in Earth atleast 300 mm below the ground Level at Approx. Distance 10 Meter or as directed by EIC

Cable laying, shall include the route marker, cable tagging, dressing, removing the old unused cable from the RCC Trench, appropriate size of glands & ferrule work as per requirement etc.

### **Technical specification No.7b: Through DWC HDPE for Road/Railway/RCC crossing**

This includes Laying 3 core x 185 Sq.mm 11kV XLPE cable by putting suitable diameter Double Wall Corrugated HDPE pipe, through road/Rail/RCC crossing. If the Road/RCC crossing length more than length of DWC HDPE seamless pipe, then the firm shall join pipes and make a strong and trouble free connection so that pushing and pulling of cable within such pipes is unaffected and fuss free & then lay across the Road crossing. Single cable shall be passed through one pipe, the excavated stuff shall be disposed off from the Site of work and spread in low laying area. After that re-filling with Fresh River sand cushioning & 300mm CC/RMC work must be done on by proper curing or its restoration to original position. In case of Rail Crossing, firm shall put earthing across rail track, both end, their own cost as per IE rule & act. The DWC HDPE pipe should be laid using Horizontal Boring for all the Road/Railway/RCC crossings.

Cable lying, which shall include the route marker, cable tagging, dressing, removing the old unused cable from the RCC Trench, appropriate size of glands & ferrule work as per requirement etc.

#### **Technical specification No.8: Outdoor Cable Termination**

This includes providing & making end Termination kit on HT (11 KV) 3CX185 Sq.mm (E) cable at both end, HT Joint shall be carried out by certified joiner. Make:- 3M, Raychem , Mahindra , Compaq. This work includes all labour and material as directed by Engineer-in-Charge. The Heat Shrinkable Outdoor Termination offered shall be complete with all parts necessary for their effective and trouble-free operation. Such parts will be deemed to be within the scope of the supply irrespective of whether they are specifically indicated. It is not the intent to specify herein complete details of design and construction of Heat Shrinkable Outdoor Termination. The Heat Shrinkable Outdoor Termination offered shall conform to the relevant standards and be of high quality, sturdy, robust and of good design and workmanship complete in all respects and capable to perform continuous and satisfactory operations in the actual service conditions at site and shall have sufficiently long life in service as per statutory requirements. The Heat Shrinkable Outdoor Termination offered shall be reliable, fast and easy-to install jointing termination system to assure and maintain high network reliability in the most severe conditions and under high electrical, thermal, mechanical and environmental stress. The design, manufacture and performance of the Heat Shrinkable Outdoor Termination shall comply with all currently applicable statutes, regulations and safety codes. Nothing in this specification shall be construed to relieve the bidder off his responsibilities. Unless otherwise specified, the Heat Shrinkable Indoor and Outdoor Termination offered shall conform to the latest applicable Indian, IEC, British, U.S.A. or International Standards and in particular.

The outdoor cable termination is to be mandatorily used for 11kV 185sqmm XLPE cables termination. The cable termination at Double pole structures and four pole structures should be done with HDPE pipe of suitable diameter and as per standard practice of PGVCL. Each such HDPE pipe should contain only one cable.

#### **Technical specification No.9: Earthing coils at each end of the cable**

The work includes supply and installation of Earthing coils at each end of the cable individually for each cable. Earthing coils shall be fabricated from soft GI Wire Hot Dip Galvanized. The Hot Dip galvanized wire shall have clean surface and shall be free from paint enamel or any other poor conducting material. The coil shall be made as per REC constructions standard. The Hot Dip galvanizing shall conform to IS: 2629/1966, 2633/1972 and 4826/1969 with latest amendments.

**DIMENSIONAL REQUIREMENT:-**

Nominal dia. of GI Wire -4 mm (Tolerance $\pm$ 2.5%)

Minimum no. of turns – 115 Nos.

External dia of Coil (Min) – 50 mm

Length of Coil (Min) – 460 mm

Free length of GI Wire at one end coil (Min.) – 2500 mm

The turns should be closely bound. Weight of one finished Earthing Coils (min.) – 1.850 Kg.

**Technical specification No.10: 4 Way RMU**

4 Way Gas Insulated Maintenance free outdoor RMU with IP54, 12kV, 630A, 21kA, 3 sec with Robotically welded SS304 tank manufactured according to ISO 9001, 14001 and OHSAS 18001 to be supplied and installed at existing VCB room on divider opposite to GETCO Kandla S/s. All equipments and materials shall be designed manufactured and tested in accordance with the latest applicable IEC standard. The electrical installation shall meet the requirement of Indian Electricity Rules 1956 as amended up to date; relevant IS code of practice and Indian Electricity Act 1910. In addition other rules and regulations applicable to the work shall be followed. In case any discrepancy, the most stringent and restrictive one shall be binding.

4 Way 11KV Gas (SF6) Insulated RMU with 2Nos 630A Load break switches and 2Nos. SF6 Insulated VCB of suitable rating. The objective of the RMUs is for extremely small construction width, compact, maintenance free, independent of climate, easy installation, operational reliability, Safe and easy to operate, minimum construction cost, minimum site work and minimum space requirement. The RMUs shall conform in all respects to high standards Of Engineering design, workmanship and latest revisions of relevant standards at the time of offer. The type of the 11 KV circuit breaker shall be VCB and insulating medium for load break isolators, Earth switch, 11 KV Buses and other associated equipments should be SF6 gas.

- Necessary current sensors / transformers for protection and metering (wherever required).
- All necessary dry (potential-free) contacts for indications relevant to RMU monitoring status and control.
- A PT Panel including auxiliary power transformer for measurement of system voltage and for charging the batteries.
- Battery and battery charger, to provide stable power as per motor rating, 24 VDC, power for the RMU's motors.
- Capacitor voltage dividers serving live-line cable indicators and all the indicators shall have to be visible from outside without opening the doors.
- The incomer CTs (3 nos. in each feeder) shall be circular with 250/5A and the outgoing shall be provided with circular CTs (3 nos. in each) with 250/5A ratio with 5VA load for all the CTs.

The RMU and combination shall be tropicalised and outdoor metal enclosed type. The RMU metal parts shall be of high thickness, high tensile steel which must be grit/short blasted, thermally sprayed with Zinc alloy, phosphate or should follow the 7 tank pretreatment process and be subsequently painted with polyurethane/PP based powder paint. The overall paint layer thickness shall be not less than 80 microns. Relevant IE rules for clearances, safety and operation inside the enclosure shall be applicable. The enclosure shall be IP 54 and type tested for weather proof at EREDA/CPRI. All live parts except for the cable connections in the cable compartments shall be insulated with SF6 gas. The SF6 gas tank shall be made of robotic or TIG or MIG welded stainless steel, to have the best weld quality. The gas cubicle shall be metal enclosed with stainless Steel of thickness as per IEC tested/ designed so as to provide safety and to avoid leakage of gas and should be provided with a pressure relief arrangement away from operator.

The cable termination chamber of isolators and circuit breakers both should be of front access type as per site requirement. Any accidental over pressure inside the sealed chamber shall be limited by the opening of a pressure-limiting device in the top or rear-bottom part of the tank or enclosure. Gas will be release to the rear of the switchboard away from the operator and should be directed towards the bottom, into the trench to ensure safety of the operating personnel and the pedestrians / civilians. All the manual operations should be carried out on the front of the switchboard.

Fixed type SF-6 gas insulated / Vacuum circuit breakers. It should be maintenance free, having stainless steel robotically/ TIG / MIG welded enclosure for RMU. However, offer with high quality of the welding which has necessary extensive leakage test with leak rate of 0.075% or less per annum can be accepted.

- Low gas pressure devices- 1.3 Bar pressure. 1.3 bar pressure of SF6 gas in chamber of RMU is required.
- Live cable indicators- High operator safety.
- Fully rated integral ear thing switch on each device.
- Back up relay with auxiliary supply (24V DC) shall be provided.
- For indoor Cable boxes should be front access and interlocked with earth switch.
- Cable testing possible without disconnection of cables.
- Compact in dimension
- Circuit Breaker with back up relay with auxiliary supply (24V DC) shall be provided
- Low pressure, sealed for life equipment, can operate at “0” bar pressure.
- Cable ear thing switch on all switching device-standard, for operator safety.
- Enclosure with IP 54 standard protection for OUTDOOR RMU.
- All live parts should be inside a stainless steel enclosure for RMU & minimum 2 mm thickness of stainless steel robotically/TIG/MIG welded

enclosure for RMU.

- Earth Fault, Over Current, etc. protection numerical relays with all appropriate configuration and other parameters to be installed.
- The relays shall have all the latest features with wide range of settings.
- Analogue Manometer gauge for gas pressure indicator is to be installed.
- Relay setting and co-ordination is in the scope of contractor.
- The RMU shall be provided with multifunction meter.
- The numerical relay shall be provided with RS485 facility to establish the connectivity with SCADA through modbus. The installation should be such that SCADA connectivity establishments can be retrofitted for the future needs.
- The CT ratings and accuracy class and tolerances for protection CT and measurement CT should be precisely as per latest applicable IE rules and standards. The CT should be bidirectional.
- The standard accuracy classes of current transformer as per IS-2705 is 0.2 for metering CT.
- The standard accuracy class for the protection current transformer, as per IS-2705 is 5P.

#### **ELECTRICAL DATA:**

12kV - 28kV-1min Nominal voltage: 11 kV

Rated frequency: 50Hz

Rated current bus bars: 630A

Rated current cable switch disconnecter: 630A

Short time withstands current:

Cable switch disconnecter with interface C (400-bolt) bushing: 21kA RMS 3sec

Vacuum circuit breaker with interface C (400-bolt) bushing: 21kA RMS 3sec

Rated current for transformer T-off: 630A

Impulse withstands voltage: To earth and between phases: 95 kV

Insulation level: Power frequency 1 min: 28 kV

#### **Relay & Protection Scheme:**

Numerical Relay with Control Supply 24V DC, 50HZ. Phase current input Relay shall be suitable for 1A and %A CT secondary (selectable at site) Relay shall be suitable for 2CT as well as 3CT connection. Ground current input Relay shall be suitable for residually connected CT input and also for CBCT input. The relay shall have provision for digital inputs, speed switch inputs. Communication. System the relay shall be equipped with RS485 for remote communication or for connection to DCS, SCADA or PLC. The relay shall be suitable for RS485 port for connection to Laptop and PC preferably of

front. The relay shall support multiple / universal protocols for communication with any type of DCS / SCADA. Output relays having Minimum 4(four) programmable relays with contact rating 5A at 110V Dc continuous with latching option of output relays. The relay shall support minimum following protection elements. Triple pole instantaneous over current in all three phases (equivalent to CAG-37). Sensitive earth fault protection (equivalent to CTUM - 15). Shot circuit protection. Instantaneous Earth fault. Relay can operate Inst., definite time and Inverse type protection of over current. S/c and earth fault. Inst. under voltage relay (Incomer) Master tripping.

All relays and timers in protective circuits shall be flush mounted on panel front with connections from the inside. They shall have transparent, dust tight cover, removable from the front. All protective relays shall have for easy replacement. They shall either have built-in test facilities or shall be provided with necessary test blocks and test switches located immediately below each relay. The auxiliary relays and timers may be furnished in non-draw out cases. The contact multiplying auxiliary relays if any may be located inside the auxiliary compartment and may be of fixed type.

### **Module Description:**

Each circuit breaker module shall have the following accessories: Two core current transformers in each phase. One core balance Current transformer (CBCT). Protection relay shall be provided Numerical type with instantaneous relay 3 phase o/c, S/C, earth fault, definite time o/c, Inverse type. Meters shall be digital type with Amps, Volts, Frequency, P.F KWh, KVAR etc. Indicating LED lamps, red, green, blue with series resistor. Anti-pumping relay spring charging motor with its protection and control. Auxiliary contacts. Terminal blocks.

Out of 4 ways, two would be used for incoming and two for outgoing. All the modules shall be erected by using suitable size of GI channel foundation bolts including grouting of the bolts of each panel. Each panel shall be connected with 2 separate and distinct Earthing. After installation of GIB panel, necessary test and trial are to be carried out for proper functioning of safety, devices, relay etc. and before charging panel all the tests required under relevant ISS and IEC – Rules 1956 shall be carried out and the result shall be in conformity with specifications and copies of test results shall be furnished to Engineer-in-Charge. The complete work shall be carried out as directed by Engineer-in-Charge. The side cable fix/adopter box wherever necessary/required shall be provided. The work includes all Labour & material required for installation & commissioning of 4way RMU and shall be done as directed by Engineer-in-Charge.

The CT, PT shall be Tested in ERDA Lab and in this regard contractor shall submit the Test Report of CT, PT Works comprise with all material, licensing, labour tolls & tackles as directed by Engineer-in-Charge. The panels of RMU should be properly labeled with reflective red coloured strickers/radium paint as directed by Engineer-in-charge.

### **Technical specification No.11: Dismantling of Old 11kV Overhead line**

Complete dismantling of 11kV overhead line and poles with the relevant accessories after installation and charging of newly installed double circuit. All the items dismantled have to be minutely recorded and handed over to the main store of DPT. If any old poles or structures are found useful for proving support for the newly erected line, the same have to be reinstalled/shifted to the new place without any additional charges and at the contractor's own cost. No extra payment would be done for such reinstallation/shifting. The existing old overhead line network starts near power house and moves towards Kandla S/s till Oil Jetty Gate including tapping points at various locations that stretch upto Water tower 1, Water Tower 2 and Kandla Estate office. Total route length is approximately 4.5km.

### **Technical specification No.12: 5kVA transformer 1 phase**

#### **11kV/0.250kV**

The work includes supply, installation, testing and commissioning of outdoor type 5kVA transformer 1 phase 11kV/0.250kV distribution transformer with all the auxiliaries and accessories in the VCB room at road divider opposite to Getco Kandla S/s.

The transformer body should be properly earthed as per IE rules and installation should include all the safety norms as per latest standards. The transformer has to be wall mounted inside the room. The transformer incoming and outgoing cables should be connected using appropriate size lugs and no part of the electrical connection should be openly accessible so as to avoid any direct human contact. The installation should have utmost safety.

### **Technical specification No.13: 5kVA LT distribution Cabinet**

The work includes design, manufacture, supply, installation, testing and commissioning of L.T. Distribution Cabinet suitable for installation on Plinth for 5kVA, 11/0.250kV Transformer LT output side. All fittings or accessories necessary or usual for this equipment and their efficient working shall be provided by the contractor without extra charges.

The Box shall have double door with locking arrangement and a door handle conforming to IS 8623/1977. The roof of the box shall be slightly slanting both



sides with an overhang of 50mm to the front and back side. For maintenance point of view doors may be provided front side as per the requirement. The nuts, bolts, washers used in the box shall be galvanized to avoid rusting. The door hinges shall not be visible from outside. The box shall have a solid earthing point and arrangement for sufficient ventilation. The boxes should confirm to IP 65 degree of protection. The bidders shall have to enclose type test certificate for degree of protection (IP-65). The LT Distribution box should be made out of GI frames and GI sheet of minimum thickness 3mm and should be coated with two layers of anti-corrosive paint and three layers of excellent quality white coloured oil paint.

The box shall have provision of bus bars of Electrolytic Cooper mounted on epoxy resin cast bus insulators fixed on suitable fixing arrangement. The bus bars shall be conveniently placed so as to provide adequate clearance from the body of the box conforming to I.E. Rules applicable for L.T. supply. The LT distribution cabinet shall consist of one incoming of two pole MCCB (Phase & Neutral - for single phase system) and 5 no. of two pole MCB (Phase & Neutral - for single phase system) for outgoing. Suitable cable glands of heavy duty, double compression type shall be provided at the bottom of the box. One for incoming cable and three for outgoing cables, Detachable plates shall be provided for fixing of cable glands.

#### **Technical specification No.14: Shifting of HT 11kV panel**

The work includes shifting of the HT 11kV from VCB room opposite Kandla S/s and shifting it inside Oil Jetty S/s2. The panel has to be de-energized and lifted from one location and placed at another location which is at about 1.25km away from its existing location. The location to which the said panel has to be moved already has one unused panel (Unused panel is at Oil Jetty S/s2). Thus, the unused panel at Oil Jetty S/s2 has to be moved to the main store initially and later the HT panel from VCB room has to be brought to the Oil Jetty S/s2 and placed in place vacated by the old unused panel.

**Technical specification No.15: Refurbishing of VCB room**

This work includes refurbishing of VCB room. This involves cementing of damaged structures with concrete mix 1:2:4 of Cement:Sand:Metal and water proofing entire room. The VCB room is approximately 33feetx12feetx12feet in size. It has main door which is about 8feetx6feet towards Northern side and the same has to be replaced with solid metallic door with lockable arrangement. The room has small rear door on the southern side with approximate size 6feetx2.5ft. The rear door is also to be replaced with solid metallic door with lockable arrangement. Both the front and rear doors should be made with stainless steel metal sheet grade304 of minimum thickness 3mm. The metal sheet should be of reputed brand like Jindal / Tata / Sail / Essar or equivalent. The metallic doors should be framed with 2inchx2inch square GI pipe of minimum 3mm thickness and the metallic sheet should be welded to the frame of GI pipe. These framed doors should be mounted on the door seals made of square GI pipes of 4inchx4inch of minimum 5mm thickness. Door seals are the frames attached to the wall of the room and are to be strongly affixed with the concreted structure of the room. The door seals have to be properly grouted to the walls of the room by using appropriate grouting methods. All the structures including door seals, door frames, door metallic sheet, hinges, handle, etc. have to be painted with double coat of anticorrosive primer followed by double layer high quality white colour oil paint. The workmanship should be excellent and to the entire satisfaction of Engineer-in-charge.



The main door should be such that it can split into two parts from the centre while opening. There are 6 ventilation windows in the VCB room with approximate size 2feetx1.25feet. These ventilation windows have to be installed with box type GI grills protruding outside the room. These GI grills have to be firmly grouted and bolted with the civil structure so that they cannot be removed after installation without cutting the structure itself. These box grills should protrude at least 6inch outside the civil structure. Any existing grills in the ventilation windows have to be removed and returned to DPT store. These GI grills have to be painted with double coat of anticorrosive primer and double layer of white colour oil paint. Post installation of the box grills, the ventilation windows have to be installed with powder coated white colour aluminum section framed Aluminium Composite Panel (ACP) Sheet of white colour. These frames with acp sheet have to function as open-able windows with hinges at top and stopper at bottom. These top hung windows have to be easy to open and close from inside the room and made and installed with excellent workmanship. These top hung windows, when closed, should not allow any water to sip

through them. Use of silicon gap filler and water proof m-seal or similar adhesive is mandatory to ensure leak proof installation. The below figure can be used for reference of expected installation.



The civil structure of VCB room is damaged at various places inside and outside, thus the same has to be made good as per the instructions of Engineer-in-charge. The contractor is advised to visit the site to ascertain actual requirements for repair. Complete roof has to be reworked with appropriate water proofing and cementing after removal of damaged structure as the need be. The walls inside and outside, base, pillars and roof have to be cemented and applied with two coats of water proofing agent. Post application of water proofing agent, three coats of light blue (sky) colour paint have to be done outside the VCB room and three coats of white colour paint have to be done inside the VCB room. The roof is also to be painted with three coats of white colour oil paint post complete water proofing.

To further ensure water proofing, the roof has to be covered with Chemical and Corrosion Resistant white coloured opaque FRP sheet with necessary GI fabrication. The roof FRP sheet should have a minimum overhang of 9 inch on East and west sides of the VCB room and should have overhang of at least 5

feet on Northern and Southern side of the VCB room. This overhang would help protect the VCB room from the exposure of rain and heat.

The GI frame used for fixing the FRP sheet should be painted with two coats of anticorrosive paint and three coats of white coloured oil paint. The FRP sheet should not leak after installation and the joints/bolts/revets should be of anticorrosive metals like aluminium or ss304. The minimum thickness of FRP sheet has to be 4mm and it should be of corrugated type elevated from centre and slanting on Eastern and western side of the room. The slope of this FRP sheet on the roof should be such that during the rain, the water drains towards southern side of the VCB room. The corrugations lines should stretch from North to South hence making the drainage of rain water possible towards southern side (rear door side) of the VCB room.

All the outside pillars of the VCB room have to be painted with three coats of Yellow coloured radium paint with three coats of red coloured radium strips painted across the roof line and base. A legible logo of DPT in Dark blue colour has to be painted on the wall on top of the main door of VCB room with “DPT 11kV RMU Room” marking in a circular fashion as directed by Engineer-in-charge.

The outside of the room has to be fitted with 12V DC LED water proof (IP67) LED strip (not exceeding 25W) fitted inside aluminium casing and translucent capping with warm white light so that the DPT logo, “DPT 11kV RMU Room” and main and front doors are clearly visible during the night. The care must be taken that the aluminium casing is installed such that it is at a height which is inaccessible for human height and no loose wires are visible from outside. The driver of this LED strip light has to be kept inside the room. The LED strip and driver should be covered under replacement warranty (incase of fading/dimming/stopping of light for atleast 1 year post completion of work by the contractor. The inside of the room has to installed with PVC casing capping of single phase wiring for installing tubelights and fans and the provision of total 10 holders and three fans have to be made. Two 15A sockets have to be

installed inside the VCB room and two switch boards with three 5A sockets and switches for operation of fans, tubelights and 5A sockets. Tubelights/lights and fans would be provided by DPT. If the roof hooks are not available or existing roof hooks of fans are not usable, the same have to be installed by the contractor.

Any material which is inside the VCB room which is loose or taken out has to be deposited the stores of DPT. The workmanship of all the works have to be excellent and any work which is not up to the satisfaction of Engineer-in-charge is liable to be rejected.

### **Technical specification No.16: 11kV Line with ABC**

Supply, Installation, testing and commissioning of 11kv line using ABC (aerial Bunched Conductor) of size 11kV 3x120sqmm + 100sqmm on 13mtr RSJ poles with wind pressure 100 kg/m<sup>2</sup> on RSJ pole-11 mtr (span-40 mtr).

The composite cable shall comprise three single-core cables twisted around a bare aluminium alloy messenger wire, which will carry the weight of the cable. The rated voltage of the cables shall be 6.35KV/11KV and the maximum operating voltage shall be 12 KV. Unless otherwise stipulated in this Specification, the following Standards shall be applicable: i) IS: 7098 (Part-II) - 1985 – Cross linked Polyethylene Insulated PVC Sheathed Cables ii) IS: 8130-1984 - Conductors for Insulated Cables iii) IS: 398 (Part-IV) - 1979 - Aluminium Alloy Conductors iv) IEC- 60502 (Part-II) 2005 - Polyethylene Outer Sheath

The cable conductors shall be of round, stranded and compacted aluminium of nominal cross sectional area 120mm<sup>2</sup>. The conductor screen shall be of extruded semi-conducting cross inked polyethylene compound of thickness not less than 0.5mm. The insulation shall be of extruded cross linked polyethylene (XLPE), Dry Gas cured/wet cure process, of nominal insulation thickness 3.6mm and its properties shall conform to IS: 7098 (Part-II). The insulation screen shall comprise extruded semi-conducting compound and/or semiconducting tape. Thickness of the screen shall be not less than 0.6 mm. The metallic screen shall consist of Copper tape of thickness not less than 0.045mm. The outer sheath shall be black polyethylene. The nominal thickness of sheath shall be 2 mm and it shall conform to the technical requirements of ST-7 of IEC-60502 (Part-II) 2005.

The dimensional and electrical data for single-core cable is given below:

| Sr. No. | Description   | Nominal Area of Conductors |
|---------|---|----------------------------|
|         |   | 120mm <sup>2</sup>         |
| i)      | Nominal conductor diameter (mm) / No. of wires in conductor | 13.1/15                    |
| ii)     | Approx. over dia. of cable (mm)                             | 28                         |
| iii)    | Max. D.C resistance at 20°C Ohm/Km                          | 0.253                      |
| iv)     | Max. SC current for 1 sec. kA                               | 11.32                      |
| v)      | Max. Continuous load (Amps.)                                | 260                        |

The bare messenger wire shall be of 100 mm<sup>2</sup> (nominal area) aluminium alloy, generally conforming to IS:398 (Part-IV) - 1994, comprising of 7 strands and shall be suitably compacted/non compacted to have smooth round surface to avoid damage to the outer insulating sheath of single-core phase cables twisted around the messenger. There shall be no joints in any wire of the stranded messenger conductor except those made in the base rod or wires before finally drawing.

The technical characteristics of the messenger wire shall be as follows:

| Sr. No. | Item   | Nominal Area of Messenger |
|---------|--|---------------------------|
| i)      | Nominal sectional area (mm <sup>2</sup> )              | 100                       |
| ii)     | No. of wires   | 7                         |
| iii)    | Nominal dia. of wires/compacted conductor (Approx.) mm | 4.26/12.78                |
| iv)     | Approx. mass Kg/Km                                     | 272.86                    |
| v)      | DC resistance at 20° C Ohm/Km                          | 0.339                     |
| vi)     | Breaking load (KN)                                     | 29.26                     |

**Note:** The value in item (v) above is to be guaranteed. A tolerance of (-) 5% is permissible on the value in item (vi) above.

The designation and parameters of finished cables are given in the following table:

| Sr. No. | Designation                                   | Complete Bunched Cable   |                            |
|---------|---|--------------------------|----------------------------|
|         |   | Overall dia (approx.) mm | Total mass (approx.) Kg/Km |
| i)      | 3 x 120 mm <sup>2</sup> + 100 mm <sup>2</sup> | 67                       | 2650                       |

**Note:** The first part of the designation refers to the number and size of phase conductor and the second to the size of messenger wire. The sizes shown represent the nominal cross sectional areas in mm.

All the cable sizes i.e. items offered should have been fully type tested as per the relevant standards at any NABL accredited/Govt. of India's recognized Laboratory. The bidder shall furnish the type test reports along with the offer. These type tests must have been conducted within last five years prior to date of Bid opening. For any change in design/type, already type tested and the design / type offered against this specification, the purchaser reserves the right to demand repetition of type tests without any extra cost. DPT also reserves the right to have tests carried out at his own cost by an independent agency, whenever there is a dispute regarding the quality of supply.

All the relevant Type tests and Routine Tests shall be carried out on the cables as per IS: 7098 (Part-II) & Type tests and Routine Tests certificates shall be furnished invariably before delivery on site.

This includes supply at site & stringing of 11kV 3x120sqmm + 100sqmm ABC as per IE rules and latest applicable standards and same is to be string on HT pin and strain insulators, binding on insulators, jumpering, the jointing in HT line will be done by twisting sleeve joints as per standard practice. Care must be taken in handling the ABC to protect against cuts, scratches or kinks. The ABC must not be drawn over hard surface ground, where it is liable to be damaged. ABC must be drawn on wooden or aluminum pulley only. Wastage and cutting should be avoided as far as possible. Not more than 2% sag will be accepted in the materials account. The sag and spans and line erection/installation guidelines must be maintained as per PGVCL norms.

This also includes painting with two coat of metal primer and three coat of silver paint, thereafter numbering the poles in 100mm round dia. This also includes planting the pole to 1/6<sup>th</sup> height in the ground strengthening with cement concrete and above ground level muffing is to be done.

The cross arms insulators must be so fixed that neither tilt nor bend from position. The rate quoted should be for 3x120sqmm + 100sqmm ABC route per kilometer. The sagging should be uniform for all conductors and uneven sagging will not be allowed. The ground clearance and line to line clearances, etc. have to be maintained as per latest IE Rules.

The land is soft, muddy type marshy land where poles are to be erected after excavation for erection of poles, a PCC carpet of 50mm thick shall be provided at the bottom and cured before erection of poles.

The vegetation below the line shall be removed by the contractor. The contractor shall prepare the drawing of the line work (5 copies) and shall submit all the required documents which are required for getting clearance from CEA. However, the submission, uploading of documents and payment of statutory charges are in the scope of DPT. The relay co-ordination is in the scope of contractor.



Below are the tentative locations for installation of 13MTR RSJ POLES:

| <b>Sr. No.</b> | <b>Quantity</b> | <b>All the Locations are inside Oil Jetty</b> |
|----------------|-----------------|---|
| <b>1</b>       | 1               | 23.02921364040412, 70.22024289160939          |
| <b>2</b>       | 1               | 23.029455548458046, 70.22030458238824         |
| <b>3</b>       | 1               | 23.02987024696718, 70.22039309530324          |
| <b>4</b>       | 1               | 23.030242980843354, 70.22049501924194         |
| <b>5</b>       | 1               | 23.030430581610208, 70.22054329900176         |

Tentatively, 5 no. of 13mtr RSJ single poles would be needed to be installed for stringing of 11kV ABC lines. Please note that the need for poles for Double Pole Structures using 13mtr RSJ poles is separately mentioned in technical specification no.17 as per item no.17 of Bill of Quantities. The total ABC line length would be approximately 0.3km and would be supported by 13mtr RSJ single poles and started/terminated by Double pole structures made of 13mtr RSJ poles at most places except at one place near Oil Jetty gate where the starting of ABC 3x120sqmm + 100sqmm would be from Four pole structure made of 11mtr RSJ poles.

The below table indicates tentative (but not limited) items to be used for 1km of 11kV ABC line which may be used for reference:

| <b>Particulars</b>  | <b>Unit</b> | <b>Quantity</b> |
|---|-------------|-----------------|
| RSJ POLE(150X150X13MTR)   | No.         | 25              |
| Anchor Rod - 1 No   | No.         | 8               |
| Turn Buckel - 1 No  | No.         | 8               |
| Eye Bolt - 1 No   | No.         | 8               |
| Stay wire - 7/12  | kg          | 27.20           |
| HT Guy Insulator - 1 No   | No          | 8               |
| Guy Clamp - 1 Pair  | pair        | 8               |
| (a) GI Wire No. 8 From Pole Top to Earthing Coil                  | Kg          | 34              |
| (b) Rigid PVC Pipe -20mm dia ( 1.5 Mtr) - 1No                     | No.         | 25              |
| (c) Earthing Bolt   | No.         | 25              |
| (d) Earthing Coil (GI Wire No 8)                                  | No.         | 25              |
| 11 KV 3x120sq.mm. + 100sq.mm. bare messenger Aerial Bunched cable | km          | 1.05            |
| Self tightening anchoring (Dead                                   | No.         | 4               |

|  |     |    |
|--|-----|----|
| end) clamp with pole bracket using Stainless Steel Strap & Buckle  |     |    |
| Self locking Suspension Clamp with pole bracket using Stainless Steel Strap & Buckle   | No. | 21 |
| Providing & fixing Heat Shrinkable type Cable Jointing kit suitable for 11 KV 1Cx120 sqmm AB Cable for Outdoor Termination application | No. | 18 |
| Stainless Steel of Size Strap 20mm*0.7mm & Buckle width 20 mm  | No. | 50 |

### **Technical specification No.17: DP structure with 11KV 13MTR RSJ POLE**

The work involves Supply, Installation, Testing and commissioning of DP (double pole) structure with 11KV A.B. Switch & H.G Fuse on 13MTR RSJ POLE.

The Double pole structures have to be firmly installed on the site and two layers of anticorrosive coating and three layers of high quality paint with best workmanship is to be done. This also includes painting numbering the poles in 100mm round dia. These DP structures would serve as the termination or starting ends for 11kV ABC 3x120sqmm + 100sqmm.

The same DP structures would also serve as starting or ending points for Underground 185sqmm XLPE cables. Hence, necessary accessories have to be mandatorily used for this work.

Double pole structure should be solidly earthed from two points with individual earthing and a 'Danger' sign board should be provided on the Double Pole structure as instructed by Engineer in Charge. The below table shows tentative items (but not limited) to be used for this work. The same may be used for reference. However, the bidder is suggested to visit the site for ascertaining actual requirement of items. Moreover, all the MS items mentioned in the below table must be hot dip galvanized.

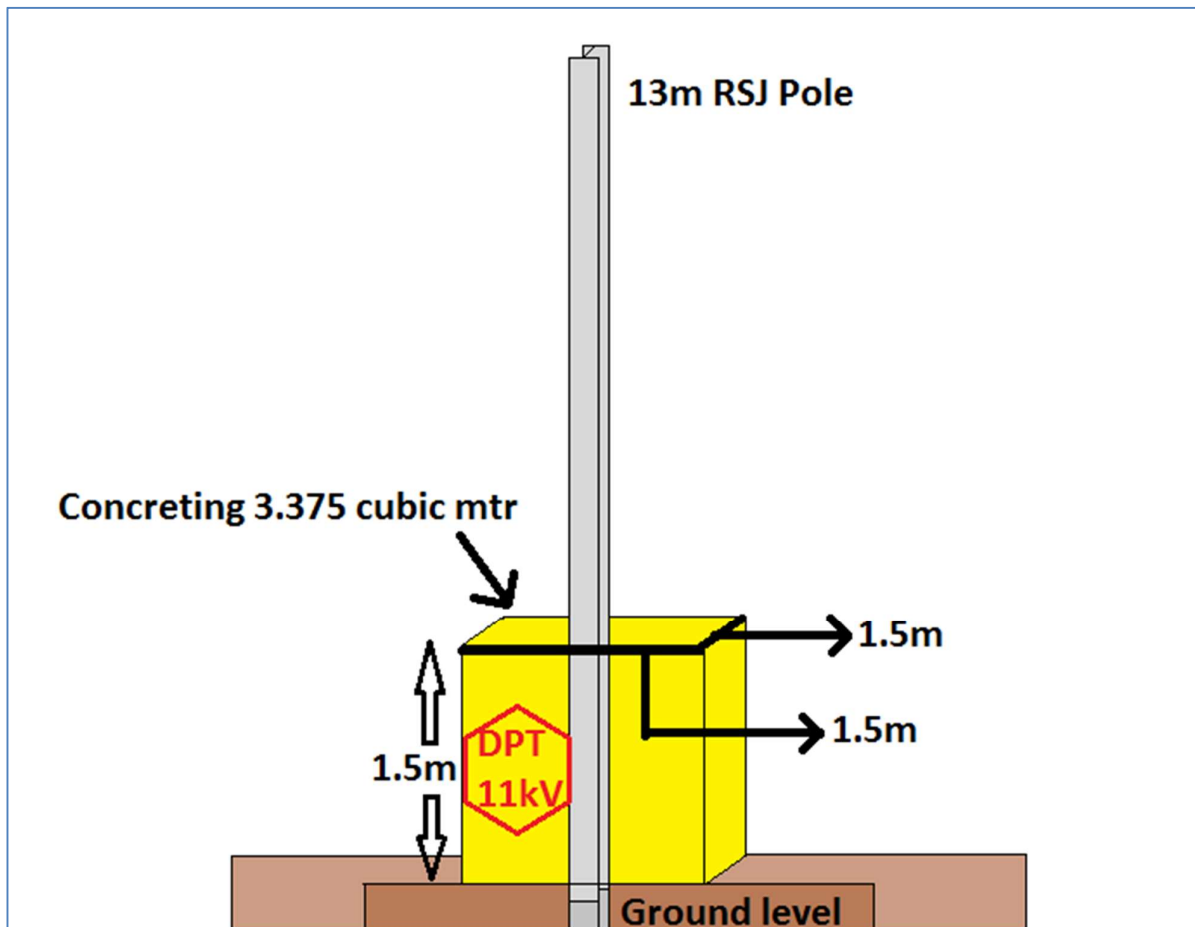
| <b>DOUBLE POLE STRUCTURE WITH 11 KV A.B.SWITCH &amp; DO FUSE</b> |             |            |
|--|-------------|------------|
| <b>ON 13 MTR RSJ POLE</b>  |             |            |
| <b>PARTICULARS</b>   | <b>UNIT</b> | <b>QTY</b> |
| RSJ POLE(150X150X13 MTR)   | NO.         | 2.00       |
| M.S.Angle Top FEBRI.65x65x6mm - 2750mm                           | No          | 2.00       |
| M.S.Angle 11 KV A.B.Switch - Fabri 65x65x6mm- 2750mm             | No          | 4.00       |
| M.S. Angle Fabri. 65x65x6mm - 2750mm for cross bracing           | No          | 4.00       |
| 11 KV A.B. SWITCH 400 AMP.                                       | SET         | 1.00       |
| Side Clamps for mounting A.B Switch (M.S Flatof sie 50X6)        | NO          | 16.00      |
| (a) Anchor rod - 1 No.   | NO.         | 4.00       |
| (b) Turn buckle - 1 No.  | NO.         | 4.00       |
| ( c ) Eye Bolt - 1No(16mmX590 mm Round Bar).                     | NO.         | 4.00       |
| (d) Stay wire- 7/12  | KG          | 16.00      |
| (e) HT Guy Insulator - 1 No.                                     | NO.         | 4.00       |
| (f) Guy Clamp - 1 Set.   | SET         | 4.00       |
| (a ) GI Wire No. 8 From Pole Top to Earthing Coil                | KG          | 3.12       |
| (b) Rigid PVC Pipe -20mm dia ( 1.5 Mtr) - 1No                    | NO.         | 2.00       |
| ( c ) Earthing Bolt  | NO          | 2.00       |
| (d) Earthing Coil (GI Wire No 8)                                 | NO          | 2.00       |
| (a) 11 KV Ball & Socket Type Comp(Polymer) Insulator(Long Rod)   | No          | 6.00       |
| (b) 11KV Disc. Hardware  | Set         | 6.00       |
| 11 KV COMPOSITE POLYMERIC D O FUSE                               | No          | 3.00       |
| (a) M.S.Bolts & Nuts 65x16mm                                     | KG          | 7.20       |
| (b) M.S.Bolts & Nuts 180x16mm                                    | KG          | 2.49       |
| ( c ) P.G.Clamp for Weasel or Rabbit                             | No          | 9.00       |
| (d) Binding tape HT for jumpering                                | Mtr         | 20.00      |
| (e) Alu. Binding wire  | KG          | 0.50       |

Below are the tentative locations for installation of DP structures of 13MTR RSJ POLES:

| <b>Sr. No.</b> | <b>Quantity</b> | <b>Location</b>                     |
|----------------|-----------------|-------------------------------------|
| <b>1</b>       | 1 no. of DP     | Behind Power House                  |
| <b>2</b>       | 1 no. of DP     | To the North of Bunder area gate    |
| <b>3</b>       | 1 no. of DP     | To the South of Bridge near Thermal |
| <b>4</b>       | 1 no. of DP     | To the North of Bridge near Thermal |
| <b>5</b>       | 1 no. of DP     | Near Oil Jetty S/s2                 |

#### **Technical specification No.18: Concreting of 13mtr RSJ poles**

All the 13mtr RSJ poles (including single poles and Double Pole Structures) have to be concreted thoroughly with a cubical and dimensions as shown in the below figure:



The work includes concreting with one part of cement, two parts of specified quality sand and four parts of grit (1:2:4). The mixture should be prepared on GI sheet and should be free from the dust. Cement, river sand and metal should be used by contractor at his own cost. Concrete for muffing of poles and stay rods should be cement one part, sand two parts and four parts of Metal (1:2:4). Cement, sand and metal must be got approved from our civil department and work execution will also be in there scope regarding cement concrete. The concrete shall be used in above proportion and should be thoroughly mixed at least three times in dry state before water is added and as far possible a fairly wet mixture must be used all concrete must be mixed on watertight platform. In any case, the work finishing coat of cement plaster should be applied on outer surface to smoothen out any irregularities. One finishing coat of cement plaster should be applied on outer surface of the muffing. The concrete block, when slightly dried, should be kept wet continuously for period of 10 days. The location for concreting will be decided by the Engineer-in-charge and the contractor will follow his instructions scrupulously. If the concreting work is not found as per the specifications and quality, the same is liable to be rejected. The cement concreting work and muffing has to be done in the presence of DPT representative only and work done in his absence will be rejected and no payment made thereof. The poles

should be firmly gripped with the ground/base and should be unshakable and strongly grouted. The cement, sand, metal grit shall be procured by the contractor. After 10 days of watering the concrete block and complete dry out, two coat of water proofing agent has to be applied followed by application of two coats of bright yellow colour on the whole exterior surface of concreted block. After painting with bright yellow colour, bright red coloured logo of “**DPT 11kV**” of size clearly visible from a distance of 10m has to be painted over the surface with legible and precise fonts.

#### **Technical specification No.19: G.I. Earth strips**

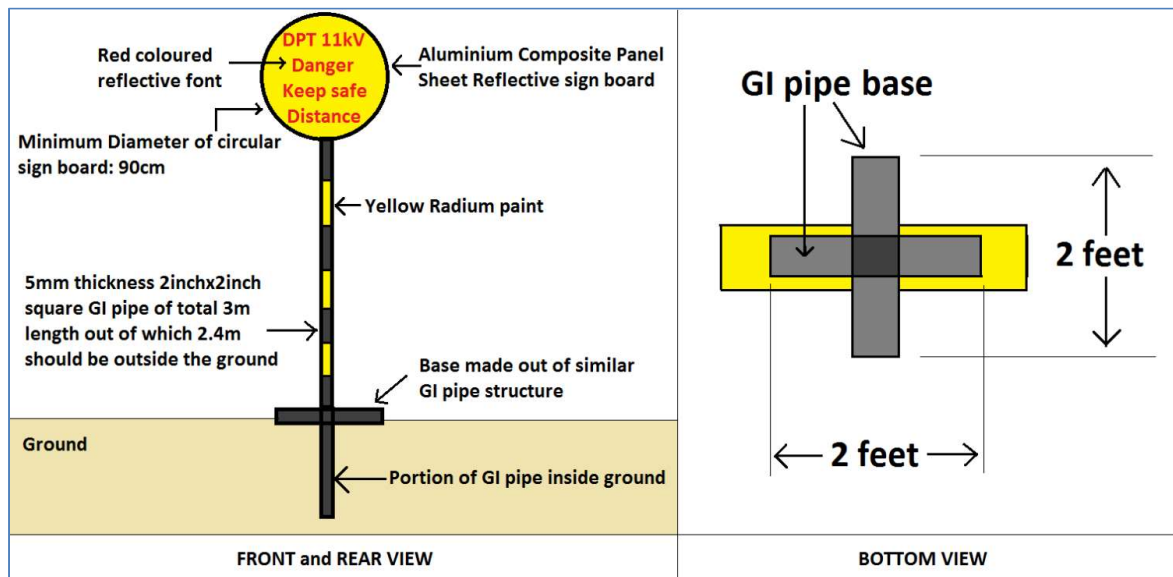
This includes supply, Laying & connecting, Hot Dip G.I. strip of size 50 X 6 mm. Hot DIP coating on GI as per the earthing system, connected to two separate and distinct main earth as directed and shall be clamped suitably on wall /floor or buried in the ground/pucca trench as directed. The pieces of GI strips shall be connected using GI nut bolts rigidly and the GI strip shall be laid either on RCC with proper clamping or in the ground minimum 300 mm. below the ground level as the case may be and as directed and shall be buried properly or as directed by Engineer-in-charge.

#### **Technical specification No.20: Earth Station**

This includes preparation of earth station with chemical treated back filled compound 85 mm diameter Pipe In Pipe GI Type 3 Mtr Depth, Maintenance free including all accessories & Masonry work Enclosure with cover plate. The value of earth pit shall be less than 5ohm. A cement concrete (ratio of Cement:Sand:Metal should be 1:2:4) chamber of at least 30cm x 30cm shall be provided just below the surface of ground over the funnel for watering and having RCC/CI cover of suitable size as directed. This also includes removal of extra-excavated earth from the site. The work shall be carried out to entire satisfaction of Engineer-in-charge. This work includes all labour and material as directed by Engineer-in-Charge.

### Technical specification No.21: Reflective sign boards

This includes supply and installation of reflective sign boards at various locations as directed by Engineer-in-charge. The reflective sign boards have to be made out of Aluminium composite panel sheet with at least 3mm thickness and circular shape with minimum 90cm diameter of the circular sign board with reflective yellow coloured background and reflective red coloured bold fonts that are legible at least from a distance of 10meter. The reflective sign boards should be mounted on square GI pipes of minimum thickness 3mm and minimum length 3meter. Out of 3meter length of the GI pipe, 2.4meter should be above the ground level post installation and rest has to be grounded firmly. The base of the GI pipe should also be made with the similar GI pipe and the 'X' base formed should be welded properly with the main pole GI pipe using appropriate welding rods for GI pipe welding. Improper workmanship or fit and finish is liable to be rejected and is at the sole discretion of Engineer-in-charge. The GI pipe should be painted with double coats of anti-corrosive paint and later with black colour and reflective yellow colour alternatively as referred to in the below figure.

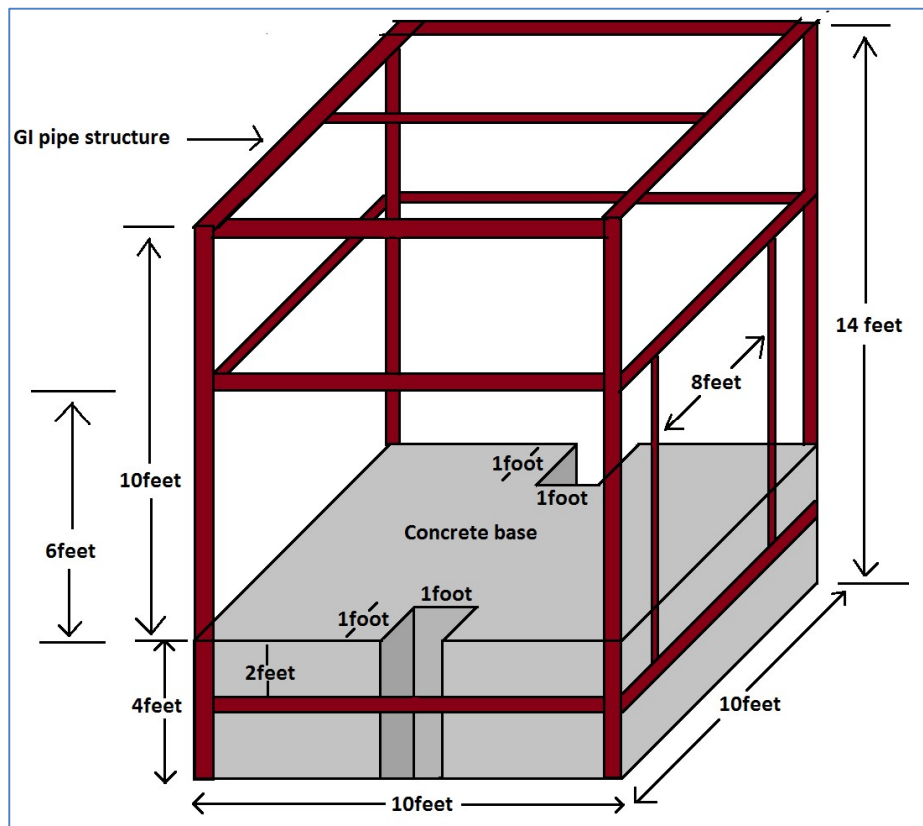


The installation of GI pipe should be perfectly vertical so as to make the sign board perfectly erect without any tilt and all the sign boards should be meticulously installed at almost the same height. The GI pipe

base should be affirmed by muffling the base with 2.5feetx2.5feetx2feet concreting of the ratio 1:2:4 of Cement:sand:metal. The concreted structure has to be painted with waterproofing coating twice and later with two layers of yellow coloured radium paint and black paint in form of strips. Please note that the concrete structure is not shown in the above figure but has to be compulsorily installed for all the sign board GI pipes without fail. The above figure is indicative and can be used for reference for better understanding of the requirements. The land is soft, muddy type marshy land hence a PCC carpet of 50mm thick shall be provided at the bottom and cured before erection of GI pipes of sign boards wherever necessary as directed by Engineer-in-charge.

### **Technical specification No.22: Construction of room for transformer**

This includes construction of a room of inner usable size 10feetx10feetx10feet for placement of an existing 250kVA transformer inside Oil Jetty area near water tower no.3. The below figure would help understand type of construction expected for the room.



The figure includes only basic outline and the minimum structural features that must be included in the construction of the room. The concreting of base has to be done with mixture of 1:2:4 Cement:Sand:Metal and GI pipe structure

should be made out of 2inchx2inch square pipe of minimum 5mm thickness welded with only GI pipe compatible welding rods. After construction of concrete base, it should be watered for atleast 10days and post drying out, it should be painted with two coats of water proofing agent and later with three coats of bright yellow coloured oil paint. The GI pipe structure has to be firmly grouted/bolted to the concrete base. The GI pipe structure has to be double coated with anti-corrosive paint and later with three coats of excellent quality white coloured oil paint with best workmanship. The figure includes minimum structural requirement, any additional fixtures/fittings/structure to support the frame/whole structure which might not be part of the figure should also be installed by the contractor as per the site condition or directed by the Engineer-in-Charge at no extra cost.

After completion of the base and frame, the structure has to be covered with White coloured Aluminium Composite Panel (ACP) sheet with minimum thickness of 3mm. The Aluminium composite panel sheet has to be installed on both the sides, that is, outside as well as inside the room. The ACP sheet should be firmly attached with the structure and no part of the structure should be visible either from inside or outside after installation of ACP sheet. Support structures required for ACP sheet over and above the GI pipe structure have to be made using 2inchx2inch square Aluminium pipe of minimum 3mm thickness. White coloured silicon sealant/white m-seal has to be used to fill in the gaps/joints of ACP sheets. The joining of ACP sheet with support structure may be done by using appropriate bonders of any colour since these bonders won't be visible post installation.

Four Ventilation windows with flame proof exhaust fans, one in each direction, should be installed above the height 6feet of the room. The ventilation windows have to be protected with GI grills and GI grills have to be painted with two coats of anti-corrosive paints and three coats of excellent quality white coloured oil paint. These GI grills have to be firmly attached with the main GI frame structure. The ceiling of the room is to be covered with ACP sheet inside as well as outside. The ceiling of the room should house a hook for installation



of flame proof ceiling fan and provision for installation of flame proof tubelights. Supply of two flame proof fans, Installation of one flame proof fan, supply and installation four flame proof tubelights is in the scope of contractor. The relevant PVC Casing-Capping wiring including supply and installation switchboard housing minimum 4nos. 20A MCBs, 2 nos. 15A sockets, 2 nos. 15A switches, 4nos. of 5A switches and relevant accessories is in the scope of the contractor. All the electrical fittings have to be compulsorily flame proof. Two flameproof LED fittings of minimum 50W have to be installed outside the room as well such that their switching can be done from switchboard inside the room.

The door of the room has to be on the northern side and it should be such that it can split into two parts from the centre while opening and it should be lockable. The width of the door has to be 8feet and it should be 6 feet tall. The seal of the door has to be made of 2inchx2inch square GI pipe of minimum thickness 5mm. The door should be attached to this seal (part of main structure). The door should be made of ACP sheet of white colour of minimum thickness 3mm and should be made of white coloured power coated aluminum frame. The door should be very sturdy in construction and should be installed properly to avoid any visible gaps when closed and locked. The lock has to be part of the frame itself and should be preinstalled with door handle.

To ensure excellent waterproofing, the roof of the room has to be covered with Chemical and Corrosion Resistant white coloured opaque FRP sheet with necessary GI fabrication. The roof FRP sheet should have a minimum overhang of 4feet in all the directions of the room. This overhang would help to protect the room from the exposure of rain and heat.

The GI frame used for fixing the FRP sheet should be painted with two coats of anticorrosive paint and three coats of white coloured oil paint. The FRP sheet should not leak after installation and the joints/bolts/revets should be of anticorrosive metals like aluminium or ss304. The minimum thickness of FRP sheet has to be 4mm and it should be of corrugated type elevated from centre

and slanting on Eastern and western side of the room. The slope of this FRP sheet on the roof should be such that during the rain, the water drains towards southern side of the room. The corrugations lines should stretch from North to South hence making the drainage of rain water possible towards southern side of the room.

The existing transformer is currently lying on the concrete floor in open area. The same has to be placed inside the room after construction of the room. The transformer weighs about 1240kg.

The existing 11kV HT cable has to be brought inside the transformer room from the accessibility channel (accessibility channel of 1footx1footx4feet) of concrete base on western side of the room along with new installation of 11kV 185sqmm XLPE cable from the nearest double pole structure and LT cable has to be moved out from the transformer room from eastern accessibility channel (accessibility channel of 1footx1footx4feet) of the concrete base. Both the incoming and outgoing channels have to be properly covered both from inside and outside to make sure no foreign materials enters the room or no material inside the room falls outside. These covers should be properly installed using appropriate ss304 screws/bolts and should be of removable type. The incoming and outgoing cables have to be tagged properly. The transformer has to be placed properly on the concrete base such that it does not move post installation. Appropriate arrangements have to be done.

All the necessary permissions with respect to working inside Oil Jetty area have to be obtained from DPT before doing any work on the site for the said work since this is Hazardous area with high fire risk.

The room should be painted with a circular DPT logo of dark blue colour and 'DPT 250kVA transformer room' as directed by Engineer-in-charge.

The work also includes design, manufacture, supply, installation, testing and commissioning of L.T. Distribution Cabinet suitable for installation on Plinth for 250kVA, 11/0.433kV Transformer LT output side. All fittings or

accessories necessary or usual for this equipment and their efficient working shall be provided by the contractor without any extra charges. The Box shall have double door with locking arrangement and a door handle conforming to IS 8623/1977. The roof of the box shall be slightly slanting both sides with an overhang of 50mm to the front and back side. For maintenance point of view doors may be provided front side as per the requirement. The nuts, bolts, washers used in the box shall be galvanized to avoid rusting. The door hinges shall not be visible from outside. The box shall have a solid earthing point and arrangement for sufficient ventilation. The boxes should confirm to IP 65 degree of protection. The bidders shall have to enclose type test certificate for degree of protection (IP-65). The LT Distribution box should be made out of GI frames and GI sheet of minimum thickness 3mm and should be coated with two layers of anti-corrosive paint and three layers of excellent quality white coloured oil paint.

The box shall have provision of bus bars of Electrolytic Cooper mounted on epoxy resin cast bus insulators fixed on suitable fixing arrangement. The bus bars shall be conveniently placed so as to provide adequate clearance from the body of the box conforming to I.E. Rules applicable for L.T. supply. The LT distribution cabinet shall consist of one incoming 4 pole MCCB and 4 no. of two pole MCB for outgoing. Suitable cable glands of heavy duty, double compression type shall be provided at the bottom of the box. One for incoming cable and three for outgoing cables, Detachable plates shall be provided for fixing of cable glands. All the electrical components of Distribution box should be flame proof type. Four no. of heavy duty plastic chairs and one heavy duty aluminium ladder stool of at least 6 feet height should also be supplied by the contractor and kept inside the room. The room should be leakage proof and all the measures should be taken by the contractor to ensure that it stays water proof in heaviest of the rains and should provide at least 5 years standard water proofing warranty and free repairs in case of leakage for 5 years post completion of the work. The complete work should be done with excellent

workmanship and to the entire satisfaction of Engineer-in-Charge. Improper work is liable to be rejected.

**Note:**

1) If any ancillary work arises during the execution of work the Contractor shall complete the item/items by carrying out such ancillary work without any extra payment.

2) The work shall be carried out with entire satisfaction of Engineer-in-Charge.

**Signature & Seal  
of Contractor**

**Executive Engineer (E)  
Deendayal Port Trust**

| <b>Approved Make List for Electrical Items</b> |  |   |
|--|--|---|
| <b>Sr. No.</b>                                 | <b>Description</b>                                   | <b>Recommended Makes</b>  |
| 1  | HV VCB   | SIEMENS / CROMPTON GREAVES/ABB/Schneider  |
| 1(a)   | HV Gas Insulated Breakers                            | SIEMENS /Schneider/ABB  |
| 2  | POWER TRANSFORMERS                                   | VOLTAMP/CROMPTON GREAVES /BHARAT BIJLEE/ BHEL/ SIEMENS/ABB/ Schneider/T&R                             |
| 3  | DISTRIBUTION TRANSFORMERS                            | EMCO/KIRLOSKAR/PATSON/VOLTAMP/ABB/Schneider/ T&R  |
| 4  | RESIN CAST TRANSFORMERS                              |   |
|  | A) RESIN CAST IMPREGNATED                            | VOLTAMP / KIRLOSKAR / EMCO  |
|  | B) DRY CAST  | VOLTAMP/KIRLOSKAR/EMCO  |
| 5  | HT XLPE CABLES                                       | POLYCAB/TORRENT/RPG ASIAN/ NICCO/GLOSTER/ UNISTAR/ UNIVERSAL / RAVIN-PRIME CAB                        |
| 6  | LT XLPE CABLES                                       | POLYCAB/TORRENT/RPG ASIAN/ NICCO/ RALLISON/PRIMECAB/ HAVELLS/ UNIVERSAL/ UNISTAR/AVOCAB/ ADCAB /ATLAS |
| 7  | LT ACB   | SIEMENS/L&T/SCHNEIDER/C&S   |
| 8  | PROTECTION RELAYS                                    | AREVA/L&T/SIEMENS/ABB/C&S   |
| 9  | LT PANEL   | CPRI APPROVED   |
| 10   | CHANGE OVER SWITCH                                   | SIEMENS/L&T/ABB/C&S/SCHNIDER/ LEGRAND / INDOASIAN   |
| 11   | SFU FOR MAIN LT DISTRIBUTION PANELS                  | SIEMENS/L&T/ABB/C&S   |
| 12   | SFU FOR DISTRIBUTION PANELS & FEEDER PILLERS         | SIEMENS/L&T/ABB/C&S/ SCHNEIDER/ LEGRAND/ INDOASIAN/HAVELLS  |
| 13   | MCCB FOR MAIN LT DISTRIBUTION PANELS                 | SIEMENS/L&T/ABB/C&S   |
| 14   | MCCB FOR DISTRIBUTION PANELS AND FEEDER PILLERS      | SIEMENS/L&T/ABB/C&S/ SCHNIDER/ LEGRAND/ INDOASIAN/HAVELLS   |
| 15   | MCB/ELCB/RCCB/ RCCBO FOR MAIN LT DISTRIBUTION PANELS | SIEMENS/HAGER L&T/ABB/C&S   |
| 16   | MCB FOR DISTRIBUTION PANELS AND FEEDER PILLERS       | SIEMENS/L&T/ABB/C&S/ SCHNEIDER/ LEGRAND/ INDOASIAN/ HAVELLS/ STANDARD                                 |
| 17   | MCB DISTRIBUTION BOARD                               | STANDARD / HENSEL/LEGRAND / INDOASIAN / HAVELLS / C&S   |

| <b>Sr. No.</b> | <b>Description</b>  | <b>Recommended Makes</b>   |
|----------------|---|--|
| 18             | MULTI FUNCTION DIGITAL METER FOR MAIN LT DISTRIBUTION PANELS/DIGITAL KWH METERS | L&T/ENERCON/SECURE/L&G/ RISHABH  |
| 19             | ANALOG VOLT/AMPARE METER FOR DISTRIBUTION PANELS AND FEEDER PILLERS             | RISHABH/AE/ENERCON/L&T   |
| 20             | SLECTOR SWITCH FOR VOLTMETER/AMPARE METER                                       | L&T/SIEMENS/C&S  |
| 21             | POWER CONTACTOR & OVER LOAD RELAYS  | L&T/SIEMENS/ABB  |
| 22             | QUARTZ TIME CLOCK SWITCH  | L&T/INDOASIAN/SIEMENS  |
| 23             | PVC WIRE WITH COPPER CONDUCTOR  | POLYCAB/MILEX/GUJCAB/ STANDARD/ FINOLEX/ANCHOR   |
| 24             | FLUSH TYPE SWITCHES, SOCKETS, HOLDERS AND CEILING ROSES & ELECTRONIC REGULATORS | ANCHOR/MK/NORTHWEST  |
| 25             | DOOR BELLS/CALL BELLS   | ANCHOR/LEGEND/MK/NORTHWEST   |
| 26             | MODULAR SWITCHES, SOCKETS, PLATES & BOXES                                       | ANCHOR / MK / NORTHWEST / LEGRAND /  |
| 27             | PVC CONDUIT/OVAL CONDUIT & CASSING CAPPING AND ACCESSORIES                      | PRECISION/VULCAN/FINOLEX/ GARWARE/RESTOPLAST/SWASTIK/BPI   |
| 28             | GLS LAMPS & FLUORESCENT LAMPS   | PHILIPS / BAJAJ / WIPRO / CROMPTON GREAVES / OSRAM / SURYA ROSHNI /GE  |
| 29             | HPSV, HPMV & METAL HELIDE LAMPS   | PHILIPS / BAJAJ / WIPRO / CROMPTON GREAVES / OSRAM / SURYA ROSHNI /GE  |
| 30             | IGNITORS FOR HPSV, METAL HELIDE LAMPS   | PHILIPS / BAJAJ / WIPRO / CROMPTON GREAVES / OSRAM / SURYA ROSHNI /GE  |
| 31             | LUMINARIES  | PHILIPS/BAJAJ/WIPRO/CROMPTON GREAVES / OSRAM / SURYA ROSHNI /GE / C&S  |
| 31a            | LED Luminaries  | Philips /Bajaj/Wipro/CG/Surya/Pyrotech/Syska/Nessa/ C&S having surge Protection $\geq 10KV$ for fittings & internal Surge Protection for Driver of $\geq 4KV$ , LED Chip only OSRAM/CREE/Philips Lumileds//Citizen/ with LM-79, 80 CERTIFICATION |

| <b>Sr. No.</b> | <b>Description</b>                       | <b>Recommended Makes</b>                                    |
|----------------|--|---|
| 32             | CEILING FANS                             | BAJAJ/ORIENT/USHA/CROMPTON GREAVES / ALMONARD/GEC           |
| 33             | WALL MOUNTING FANS                       | BAJAJ/ORIENT/USHA/CROMPTON GREAVES / ALMONARD/GEC           |
| 34             | EXHUAUST FANS                            | BAJAJ/ORIENT/USHA/CROMPTON GREAVES / ALMONARD/GEC           |
| 35             | HEAVY DUTY INDUSTRIAL WALL MOUNTING FANS | BAJAJ/ORIENT/USHA/CROMPTON GREAVES / ALMONARD/GEC           |
| 36             | WATER COOLER                             | VOLTAS/SHRIRAM USHA/BLUE STAR                               |
| 37             | AIR CONDITIONERS                         | VOLTAS/CARRIER/BLUESTAR/USHA/ HITACHI/LG/ SAMSUNG/ONIDA     |
| 38             | REFRIGERATORS                            | VOLTAS/CARRIER/BLUESTAR/USHA/ HITACHI/LG/ SAMSUNG/WHIRLPOOL |
| 39             | VOLTAGE STABILIZER                       | VEELINE / CAPRI   |
| 40             | INVERTERS                                | SUKAM / MICROTEK  |
| 41             | D.G. SETS                                |   |
|                | A) ENGINE                                | CUMMINS/GREAVES/KIRLOSKAR/ CATERPILLAR/ ASHOK LEYLAND/VOLVO |
|                | B) ALTERNATOR                            | STAMFORD/CROMPTON GREAVES /JYOTI/ KIRLOSKAR ELECTRIC        |
| 42             | ELECTRIC MOTOR                           | ALSTOM/CROMPTON GREAVES /SIEMENS/ KIRLOSKAR/ABB             |
| 43             | WATER PUMPS                              | SWASTIK / KSB   |
| 44             | WATER GEYSER                             | BAJAJ/USHA / CROMPTON GREAVES / SPHEREHOT / RACOLD          |
| 45             | LUGS & CABLE GLANDS                      | DOWELLS / JAINSON / BRACO                                   |

**Signature & Seal  
of Contractor**

**Executive Engineer (E)  
Deendayal Port Trust**

**Section VI****Bill of Quantities****Name of Work : Strengthening of 11KV overhead line from thermal to Port Power House and Oil Jetty at DPT, Kandla**

| <b>Sr NO</b> | <b>Description</b>   | <b>Qty</b> | <b>Unit</b> | <b>Per Unit Supply Rate in INR</b> | <b>Total Price</b> | <b>Per Unit Labour rate</b> | <b>Total Labour Amount</b> |
|--------------|--|------------|-------------|------------------------------------|--------------------|-----------------------------|----------------------------|
| 1            | Supply, Installation, Testing and commissioning of 11KV overhead line With 100 MM2 AAAC Conductor with wind pressure 100kg/m <sup>2</sup> on RSJ 11mtr pole (SPAN-40 MTR) as per technical specification no.1      | 1          | km          |                                    |                    |                             |                            |
| 2            | Supply, Installation, Testing and commissioning of Cement Concreting of 1:2:4 ratio mixtures for Poles / Guys (Extra) including CC for extra Poles and Guys as per site requirement as per tech specification no.2 | 10         | Mtr cube    |                                    |                    |                             |                            |
| 3            | Supply, Installation, testing and commissioning of Stay Set (Extra) with Erection as per technical specification no.3  | 12         | No.         |                                    |                    |                             |                            |
| 4            | Supply, Installation, Testing and commissioning of DP structure with 11KV A.B. Switch & H.G Fuse on 11MTR RSJ POLE as per technical specification no.4   | 6          | No.         |                                    |                    |                             |                            |
| 5            | Supply, Installation, Testing and commissioning of Four pole structure on 11MTR RSJ POLE for cable joining and separation as per technical specification no.5  | 5          | No.         |                                    |                    |                             |                            |



|    |   |   |                       |  |  |    |    |
|----|---|---|-----------------------|--|--|----|----|
| 6  | Supply at site XLPE 3Cx185sqmm insulated armoured aluminium conductor cable as per Technical Specification No.6   | 6550  | Mtr                   |  |  | NA | NA |
| 7  | <p>Laying of Double circuit (two parallel cables) 3CX185 Sq.mm (E) XLPE Cable through various mediums as per Technical Specification No.7.</p> <p>(a) Through Hard/Soft Soil Excavation and laying through Half Round Pipe (2 Nos.) 6" inner Diameter and 1 Meter length as per technical specification no.7a</p> <p>(B) Through RCC/Road/Rail Crossing by Putting Suitable Diameter Double Wall <b>Corrugated</b> HDPE pipe in between Crossing as per technical specification no.7b</p> | <p>6000<br/>(total of both cables)<br/><b>Route length 3000m</b></p> <p>550<br/>(total of both cables)<br/><b>Route length 275m</b></p> | <p>Mtr</p> <p>Mtr</p> |  |  |    |    |
| 8  | Supply, fixing and testing of Outdoor Cable Termination kit for 11kV 185sqmm XLPE Cable as per technical specification no.8   | 58  | No.                   |  |  |    |    |
| 9  | Supply and installation of Earthing coils at each end of the cable individually for each cable as per technical specification no.9  | 58  | No.                   |  |  |    |    |
| 10 | Supply, Installation, Testing and Commissioning of 4 Way Gas Insulated Maintenance free RMU IP54 12kV 630A 21kA 3 sec with Robotically welded SS304 tank manufactured according to ISO 9001, 14001 and OHSAS 18001 as per technical specification no.10   | 1   | No.                   |  |  |    |    |

|    |   |              |                               |    |    |  |  |
|----|---|--------------|-------------------------------|----|----|--|--|
| 11 | Dismantling of old 11kV overhead line as per technical specification no.11  | 4500         | Mtr                           | NA | NA |  |  |
| 12 | Supply, Installation, testing and Commissioning of 5kVA 11kV/0.250kV outdoor type transformer as per technical specification no.12                              | 1            | No.                           |    |    |  |  |
| 13 | Supply, Installation, testing and commissioning of 5kVA LT Distribution cabinet as per technical specification no.13  | 1            | No.                           |    |    |  |  |
| 14 | Replacement of 11kV HT panel as per technical specification no.14   | Complete Job | Complete Job                  | NA | NA |  |  |
| 15 | Refurbishing of VCB room as per technical specification no.15   | Complete Job | Complete Job                  |    |    |  |  |
| 16 | Supply, Installation, Testing and Commissioning of 11kV Line using ABC of size 11kV 3x120sqmm + 100sqmm on 13mtr RSJ poles as per technical specification no.16 | 300          | mtr                           |    |    |  |  |
| 17 | Supply, Installation, Testing and commissioning of DP structure with 11KV A.B. Switch & H.G Fuse on 13MTR RSJ POLE as per technical specification no.17         | 5            | No.                           |    |    |  |  |
| 18 | Concreting for 13mtr RSJ poles (for 15no. of 13mtr RSJ poles – including 5 single poles and 5 double pole structures) as per technical specification no.18      | 50.625       | m <sup>3</sup><br>(Cubic mtr) |    |    |  |  |
| 19 | Supply, laying, fixing including termination / connection of following type and size of earth strips and as per technical specification no.19 50X6              | 50           | mtr                           |    |    |  |  |

|                    |  |    |     |  |  |  |  |
|--------------------|--|----|-----|--|--|--|--|
|                    | mm Hot Dip GI strips   |    |     |  |  |  |  |
| 20                 | Preparation and installation of Earth Station as per technical specification no.20                     | 4  | No. |  |  |  |  |
| 21                 | Supply and installation of reflective sign boards as per technical specification no.21                 | 30 | No. |  |  |  |  |
| 22                 | Construction of room for placement of existing 250kVA transformer as per technical specification no.22 | 1  | No. |  |  |  |  |
| <b>TOTAL</b>       |  |    |     |  |  |  |  |
| <b>GRAND TOTAL</b> |  |    |     |  |  |  |  |

**(Grand Total In Words Rupees .....**  
.....  
.....**Only)**

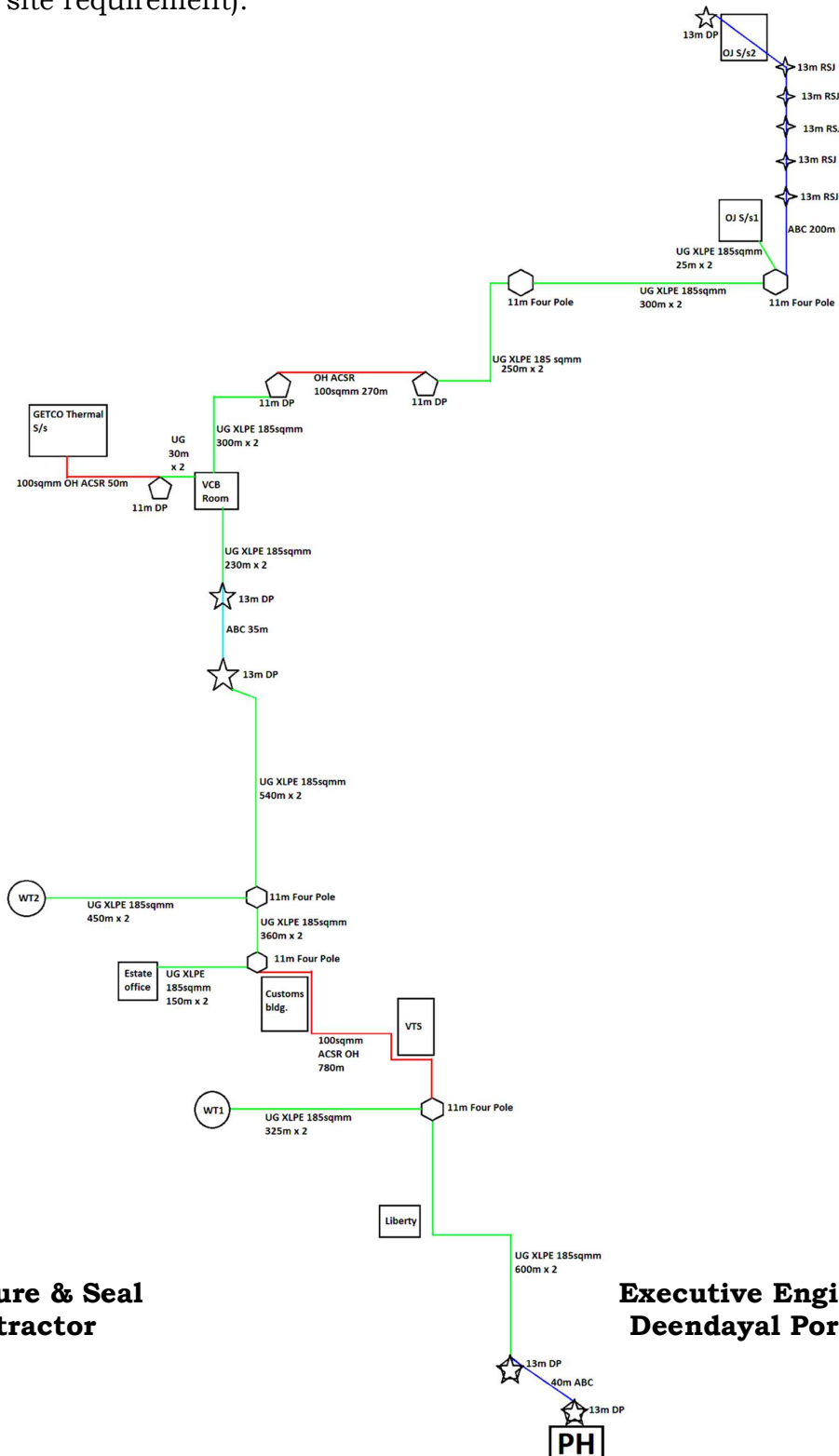
**(NOTE:** The rates should be inclusive of All Taxes, Duties, Fees, Cess etc and all incidental charges but exclusive GST. Also note that the rates for both the items should be mentioned in the BOQ table above, unfilled cell of BOQ table will not be accepted. Incomplete bid would be rejected. Both the items have to be quoted by the same bidder.).

**Signature & Seal  
of Contractor**

**Executive Engineer (E)  
Deendayal Port Trust**

## **Section VII** **Drawings**

Route map and relevant drawings to be prepared by the contractor within 2 weeks of Award of work on a full size chart with colored ink with accurate details of all the locations and type of line mentioning Overhead, Underground, etc. and relevant markings and approval from Engineer in Charge. DPT will provide assistance to the contractor to understand the route as per site requirement. A tentative map is attached below (the actual map might vary as per the site requirement).



**Signature & Seal  
of Contractor**

**Executive Engineer (E)  
Deendayal Port Trust**

**SECTION VIII**  
**BID SECURING DECLARATION FORM**

Date: \_\_\_\_\_

Tender No. \_\_\_\_\_

To (insert complete name and address of the Employer/Purchaser)

I/ We. The undersigned, declare that:

I/We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration.

I/We accept that I/ We may be disqualified from bidding for any contract with you for a period of **three** years from the date of notification if I am / We are in a breach of any obligation under the bid conditions, because I/ We

- a) have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or
- b) having been notified of the acceptance of our Bid by the employer/purchaser during the period of bid validity (i) fail or refuse to execute the contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders,

I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Signed: \_\_\_\_\_ (insert signature of person whose name and capacity are shown)

in the capacity of \_\_\_\_\_ (insert legal capacity of person signing the Bid Securing Declaration)

Name: \_\_\_\_\_ (insert complete name of person signing the Bid Securing Declaration)

Duly authorized to sign the bid for and on behalf of (insert complete name of Bidder)

Dated on \_\_\_\_\_ day of \_\_\_\_\_ (insert date of signing)

Corporate Seal (where appropriate)

(Note: In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid)

**SECTION IX**  
**EVIDENCE TOWARDS SITE VISIT**

I, Shri \_\_\_\_\_ authorized representative of  
M/s. \_\_\_\_\_

\_\_\_\_\_ (authorization letter issued by the firm with my specimen  
signature and passport size photo and adhaar card are enclosed) have visited the  
site on \_\_\_\_\_ with DPT representative Shri \_\_\_\_\_, (Designation)  
\_\_\_\_\_ for the work of "Strengthening of 11KV overhead line from thermal to  
Port Power House and Oil Jetty at DPT, Kandla" and inspected both cranes and  
other issues related to tender to my satisfaction.

|   |   |  |
|---|---|--|
|   |   |  |
| <b>Seal, name and<br/>signature of the<br/>bidder</b> | <b>Name, designation<br/>and signature of DPT<br/>representative who<br/>assisted bidder during<br/>site visit.</b> | <b>Seal, name and<br/>signature of XEN (E)</b> |

## **SECTION X**

### **GUARANTEE BOND TO BE EXECUTED BY CONTRACTOR FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF WATER PROOFING WORKS (On non-judicial stamp paper of Rs. 300.00)**

The Agreement made this \_\_\_\_\_ day of \_\_\_\_\_ two thousand and \_\_\_\_\_ between \_\_\_\_\_ son of \_\_\_\_\_ of \_\_\_\_\_ (hereinafter called the Guarantor of the one part) and the PRESIDENT OF INDIA (hereinafter called Government of the other part).

WHEREAS this agreement is supplementary to a contract (hereinafter called the Contract) dated \_\_\_\_\_ and made between the GUARANTOR of the one part and the Government of the other part, whereby the Contractor. Inter alia, undertook to render the buildings and structures in the said contract recited completely water and leak-proof.

AND WHEREAS GUARANTOR agreed to give a guarantee to the effect that the said structures will remain water and leak-proof for five years from the date of giving of water proofing treatment.

NOW THE GUARANTOR hereby guarantees that water proofing treatment given by him will render the structures completely leak-proof and the minimum life of such water proofing treatment shall be five years to be reckoned from the date after the maintenance period prescribed in the contract.

Provided that the guarantor will not be responsible for leakage caused by earthquake or structural defects or misuse of roof or alteration and for such purpose.

- (a) Misuse of roof shall mean any operation which will damage proofing treatment, like chopping of firewood and things of the same nature which might cause damage to the roof;
- (b) Alteration shall mean construction of an additional storey or a part of the roof or construction adjoining to existing roof whereby proofing treatment is removed in parts;
- (c) The decision of the Engineer-in-Charge with regard to cause of leakage shall be final.

During this period of guarantee the guarantor shall make good all defects and in case of any defect being found, render the building water-proof to the satisfaction of the Engineer-in-Charge at his cost, and shall commence the work for such rectification within seven days from the date of issue of the notice from the Engineer-in-Charge upon him to rectify the defects, failing which the work shall be got done by the Department by some other contractor at the GUARANTOR'S cost and risk. The decision of the Engineer-in-Charge as to the cost, payable by the Guarantor shall be final and binding.

That if GUARANTOR fails to execute the water proofing or commits breach thereunder then the GUARANTOR will indemnify the Principal and his successors against all loss, damage, cost expense or otherwise which may be incurred by him by reason of any default on the part of the GUARANTOR in performance and observance of this supplementary agreement. As to the amount of loss and/or damage and/or cost incurred by the Government the decision of the Engineer-in-Charge will be final and binding on the parties.

IN WITNESS WHEREOF these presents have been executed by the obligor \_\_\_\_\_ and by \_\_\_\_\_ and for and on behalf of the PRESIDENT OF INDIA on the day, month and year first above written.

Signed, sealed and delivered by OBLIGOR in the presence of \_\_\_\_

- 1.
- 2.

Signed for and on behalf of THE PRESIDENT OF INDIA by \_\_\_\_\_ in the presence of \_\_\_\_

- 1.
- 2.

**SECTION XI**

| Sr. NO | Description  | Qty   | Unit     | Month           |                 |                 |                 |                 |
|--------|--|---|----------|-----------------|-----------------|-----------------|-----------------|-----------------|
|        |  |   |          | 1 <sup>st</sup> | 2 <sup>nd</sup> | 3 <sup>rd</sup> | 4 <sup>th</sup> | 5 <sup>th</sup> |
| 1      | Supply, Installation, Testing and commissioning of 11KV overhead line With 100 MM2 AAAC Conductor with wind pressure 100kg/m <sup>2</sup> on RSJ 11mtr pole (SPAN-40 MTR) as per technical specification no.1      | 1   | km       | S               | S               | I&T             | C               |                 |
| 2      | Supply, Installation, Testing and commissioning of Cement Concreting of 1:2:4 ratio mixtures for Poles / Guys (Extra) including CC for extra Poles and Guys as per site requirement as per tech specification no.2 | 10  | Mtr cube | S               | S               | I&T             | C               |                 |
| 3      | Supply, Installation, testing and commissioning of Stay Set (Extra) with Erection as per technical specification no.3  | 12  | No.      | S               | S               | I&T             | C               |                 |
| 4      | Supply, Installation, Testing and commissioning of DP structure with 11KV A.B. Switch & H.G Fuse on 11MTR RSJ POLE as per technical specification no.4   | 6   | No.      | S               | S               | I&T             | C               |                 |
| 5      | Supply, Installation, Testing and commissioning of Four pole structure on 11MTR RSJ POLE for cable joining and separation as per technical specification no.5  | 5   | No.      | S               | S               | I&T             | C               |                 |
| 6      | Supply at site XLPE 3Cx185sqmm insulated armoured aluminium conductor cable as per Technical Specification No.6  | 6550  | Mtr      | S               | S               |                 |                 |                 |
| 7      | Laying of Double circuit (two parallel cables) 3CX185 Sq.mm (E) XLPE Cable through various mediums as per Technical Specification No.7.  | 6000<br>(total of both cables)<br><b>Route length 3000m</b> | Mtr      |                 |                 | L               | L               |                 |
|        | (a) Through Hard/Soft Soil Excavation and laying through Half Round Pipe (2 Nos.) 6" inner Diameter and 1 Meter length as per technical specification no.7a  |   | Mtr      |                 |                 |                 |                 |                 |
|        | (B) Through RCC/Road/Rail Crossing by Putting Suitable Diameter Double Wall <b>Corrugated</b> HDPE pipe in between Crossing as per technical specification no.7b   | 550<br>(total of both cables)<br><b>Route length 275m</b>   | Mtr      |                 |                 |                 |                 |                 |



**BAR CHART**

| Sr. NO  | Description   | Qty          | Unit                       | Month           |                 |                 |                 |                 |
|---|---|--------------|----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|   |   |              |                            | 1 <sup>st</sup> | 2 <sup>nd</sup> | 3 <sup>rd</sup> | 4 <sup>th</sup> | 5 <sup>th</sup> |
| 8   | Supply, fixing and testing of Outdoor Cable Termination kit for 11kV 185sqmm XLPE Cable as per technical specification no.8   | 58           | No.                        |                 | S               | S               | F&T             |                 |
| 9   | Supply and installation of Earthing coils at each end of the cable individually for each cable as per technical specification no.9  | 58           | No.                        |                 | S               | S               | I               |                 |
| 10  | Supply, Installation, Testing and Commissioning of 4 Way Gas Insulated Maintenance free RMU IP54 12kV 630A 21kA 3 sec with Robotically welded SS304 tank manufactured according to ISO 9001, 14001 and OHSAS 18001 as per technical specification no.10 | 1            | No.                        | S               | S               | S               | I&T             | C               |
| 11  | Dismantling of old 11kV overhead line as per technical specification no.11  | 4500         | Mtr                        |                 |                 |                 | D               | D               |
| 12  | Supply, Installation, testing and Commissioning of 5kVA 11kV/0.250kV outdoor type transformer as per technical specification no.12  | 1            | No.                        | S               | S               | I&T             | C               |                 |
| 13  | Supply, Installation, testing and commissioning of 5kVA LT Distribution cabinet as per technical specification no.13  | Complete Job | Complete Job               | S               | S               | I&T             | C               |                 |
| 14  | Replacement of 11kV HT panel as per technical specification no.14   | Complete Job | Complete Job               |                 |                 |                 | Rp              | Rp              |
| 15  | Refurbishing of VCB room as per technical specification no.15   | 1            | No.                        | Re              | Re              | Re              |                 |                 |
| 16  | Supply, Installation, Testing and Commissioning of 11kV Line using ABC of size 11kV 3x120sqmm + 100sqmm on 13mtr RSJ poles as per technical specification no.16   | 300          | mtr                        | S               | S               | S               | I&T             | C               |
| 17  | Supply, Installation, Testing and commissioning of DP structure with 11KV A.B. Switch & H.G Fuse on 13MTR RSJ POLE as per technical specification no.17   | 5            | No.                        | S               | S               | I&T             | C               |                 |
| 18  | Concreting for 13mtr RSJ poles (for 15no. of 13mtr RSJ poles – including 5 single poles and 5 double pole structures) as per technical specification no.18  | 50.625       | m <sup>3</sup> (Cubic mtr) |                 |                 | Cot             | Cot             |                 |
| 19  | Supply, laying, fixing including termination / connection of following type and size of earth strips and as per technical specification no.19 50X6 mm Hot Dip GI strips   | 50           | mtr                        | S               | S               | S               | L&F             |                 |
| 20  | Preparation and installation of Earth Station as per technical specification no.20  | 4            | No.                        | P               | P               | I               |                 |                 |
| 21  | Supply and installation of reflective sign boards as per technical specification no.21  | 30           | No.                        |                 | S               | S               | S               | I               |
| 22  | Construction of room for placement of existing 250kVA transformer as per technical specification no.22  | 1            | No.                        | Con             | Con             | Con             |                 |                 |
| <b>S – Supply      I&amp;T – Installation and Testing      F&amp;T – Fixing and Testing</b><br><b>C – Commissioning      L – Laying      Rp – Replacement      Re – Refurbishing</b><br><b>Cot – Concreting      Con – Construction</b> |   |              |                            |                 |                 |                 |                 |                 |

**Signature & Seal  
of Contractor**

**Executive Engineer (E)  
Deendayal Port Trust**