



**TRANSMISSION CORPORATION
OF
TELANGANA LIMITED**

**Tender No: CE/MZ/O&M/ew-07/2021-22
OF METRO ZONE/HYDERABAD**

Name of the Work:

**CONSTRUCTION OF 15 NOS. PLATFORMS (20X10 M) 8" HEIGHT
WITH A RAMP AT TLC STORES, SHAPURNAGAR HYDERABAD**

**Sd/-
CHIEF ENGINEER, METRO ZONE
OPP. CTI, GTS COLONY
ERRAGADDA, HYDERABAD.
Ph.No.040-23836703.**

TENDERER

**TENDER NOTICE NO.CE/MZ/HYD/O&M/ew-07/2021-2022 OF CHIEF ENGINEER/
METRO ZONE**

NOTICE INVITING TENDER (NIT)

1.	Department Name	Transmission Corporation of Telangana Limited
2.	Tender Subject	Construction of 15 Nos. Platforms (20X10 m) 8” height with a ramp at TLC Stores, Shapurnagar Hyderabad
3.	Estimated Contract value.	Rs. 47,49,391.00/-(Including Taxes)
4.	Period of Contract	6 months
5.	Form of Contract	LS
6.	Tender Type	Open on e-procurement platform
7.	Tender Category	Works
8.	EMD/BID SECURITY	2% of Estimated Contract Value i.e., Rs. 94,988/- (*EMD Exempted for the Individuals and Societies belonging to SCs/STs/Wadera/Sagara as per T.O.O (CE-Civil) Ms.No.511, Dt.03.01.2020.)
9.	Bid Security Payable to	In the shape of online payment or challan generation in favour of Superintending Engineer/OMC/Metro-Central/Hyderabad payable at Hyderabad and shall cover a period of 30 days over and above the period of bid validity.
10.	Bid validity	90 Days
11.	Transaction fee	Rs. 1,682/- which includes Goods and service tax
12.	Transaction fee payable along with tender to	Payable on line to MD, TSTS, Hyderabad.
13.	Schedule Available Date	27/07/2021 at 06:00 PM (IST)
14.	Schedule Closing Date	27/08/2021 at 01:00 PM (IST)
15.	Bid Submission closing Date & time	27/08/2021 at 03:00 PM (IST)
16.	Bid Submission	Online
17.	Bid Opening Date & Time	27/08/2021 at 04:00 PM (IST)
18.	Place of bid opening	At the office of Chief Engineer/Metro Zone/TSTRANSCO/Hyd.
19.	Officer Inviting Bids	Chief Engineer/Metro Zone /TSTRANSCO/Hyderabad.
20.	Address:	Chief Engineer, Metro Zone , TSTRANSCO, Opp. CTI, GTS Colony, Erragadda, Hyderabad – 500 045.
21.	Contact details / Telephone	Phone:040-23836703,e-mail:ce.metro@tstransco.in

For details visit www.tender.telangana.gov.in

1. ELIGIBILITY CRETERIA:

- The bidder should be a valid registered Contractor with TSTRANSCO/ TSGENCO/TS DISCOMs/Government or Govt. undertaking departments in Telangana state.
- Bidder should have achieved annual turnover equal to 100% of the value of the works proposed in the bid specification in any financial year during the last five financial years including current financial year duly certified by competent authority and enclose documentary evidence of works compulsorily.
- The bidder in his name should have executed civil works previously in TSTransco/TSGenco/TSDiscoms or Government or Government under taking departments **OR** any substation/line/bay works in any EHT substation or EHT lines within the last Ten(10) years and should enclose work completion certificate, performance certificate etc., issued by not less than Divisional Engineer/Executive Engineer Rank Officer.
- Copy of Goods and Service Tax Registration certificate.

The bids shall be treated as non-responsive in case of not uploading the above mandatory documents. However TSTRANSCO decision is final in Accepting (or) Rejecting any Tender.

**TENDER NOTICE NO.CE/MZ/HYD/O&M/ew-07/2021-2022 OF CHIEF ENGINEER/
METRO ZONE**

NAME OF WORK: Construction of 15 Nos. Platforms (20X10 m) 8” height with a ramp at TLC Stores, Shapurnagar Hyderabad.

I. OFFICER INVITING BIDS: Chief Engineer/Metro Zone/ TS Transco/Erragadda /Hyderabad

1. Bids are invited on the e-procurement platform for the above-mentioned work from the Contractors / Contracting firms/Company. The details of Tender conditions and terms can be downloaded from the electronic procurement platform of Government of Telangana i.e. www.tenders.telangana.gov.in
2. Approximate Estimated Contract value of work: **Rs. 47,49,391/- (Rupees Forty Seven Lakhs Forty Nine Thousand Three Hundred and Ninety One Only.)**
3. Contractors would be required to register on the e-Procurement Market place www.tenders.telangana.gov.in and submit their bids online. The department will not accept any bid submitted in the paper form.
4. E.M.D. to be paid through online payment in e-procurement platform for **Rs. 94,988/- (Rupees Ninety Four Thousand Nine Hundred and Eighty Eight Only)** (i.e., 2% of ECV) drawn in favour of Superintending Engineer/OMC/Metro-Central/Hyd. This will be retained with TSTransco as part of Security Deposit, in the case of successful tenderer, & the balance Security Deposit @ 3 % of Contract Value (total constituting to 5% of the Contract value) to be paid at the time of concluding agreement. All the bidders shall invariably upload the scanned copies of online payment status ID in the E-procurement system and this will be the primary requirement to consider the bid as responsive.

The successful bidder shall invariably furnish the all original Certificates/Documents of the uploaded scanned copies to the tender inviting authority (Chief Engineer/ Metro Zone/ TS Transco/Erragadda/Hyderabad) before entering into the agreement personally.

However, EMD Exempted for the Individuals and Societies belonging to SCs/STs/Wadera/ Sagara as per T.O.O (CE-Civil) Ms.No.511, Dt.03.01.2020.

NOTE:-

If any successful bidder fails to submit the original Hard copies of uploaded certificates /Documents, Online Payment ID towards EMD within the stipulated time or if any variation is noticed between the uploaded documents and the hard copies submitted by the bidder, the successful bidder will be suspended from participating in the tenders on e-procurements platforms for a period of 3 years. The e-procurement system would deactivate the user ID of such defaulting successful bidder based on the trigger / recommendation by the Tender inviting Authority in the system. Besides this, the Department shall invoke all process of law including criminal prosecution of such defaulting bidder as an act of extreme deterrence to avoid delays in the tender process for execution of the development schemes taken up by the Government.

5. Period of completion of work : **6 (Six) months**
6. The bidders can view/ down load the tender documents from the ‘e’ market place.
7. Form of contract – Lump sum contract.

II. Procedure for submission of Bids/ Preparation of Tenders:

- 8.1 Bidders need to contact Chief Engineer/Metro Zone /TS Transco / Erragadda / Hyderabad for information on e-Procurement.
- 8.2 Bidders need to register on the electronic procurement market place of Government of Telangana i.e., www.tenders.telangana.gov.in. On registration on the e-Procurement market place, they will be provided with a user Id and password by the system using which they can submit their bids online.
- 8.3 While registering on the e-procurement market Place, Bidders need to sign, scan and upload the required documents as per the Tender requirements onto their profile.

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- i) As per GO Ms No: 174, I & CAD (PW-Reforms) Dept. dated: 01-09-2008, the following changes are made. Submission of original Hard copies of the uploaded scan copies of DD/online payment ID towards EMD by participating bidders to the tender inviting authority before opening of the price bid is dispensed forthwith.
- ii) All the bidders shall invariably upload the scanned copies of DD/online payment status ID in e-procurement system and this will be the primary requirement to consider the bid as responsive.
- iii) The Department shall carry out the bid evaluation solely based on the uploaded certificates / documents, EMD in the e-procurement system.
- iv) The Department will notify the successful bidder for submission of original hard copies of all uploaded documents, DD prior to entering into agreement.

III. Language of the Tender.

All documents relating to the tender shall be in the English Language only.

9. DOCUMENTS COMPRISING OF THE TENDER SUBMISSION.

- i. The bidders who are desirous of participating in e-Procurement shall submit their technical bids, price bids etc., in the standard prescribed in the tender documents, displayed at e market place. The bidders should upload the scanned copies of all the relevant certificates, documents etc., in the e market place in support of their technical bids. The bidders shall sign on all the statements, documents, certificates, uploaded by him, owning responsibility for their correctness/authenticity.

If any bidder uploads the bid without paying BID SECURITY, the bid will be rejected and the bidder will be black listed. Similarly, if any of the certificates, documents, etc., furnished by the bidder is/are found to be false / fabricated / bogus, the bidder will be blacklisted and his BID SECURITY forfeited.

The bids shall be submitted with all particulars called for in the schedules enclosed to specification. Bid rates shall be furnished in the enclosed schedules only. There shall not be any deviation from the contents of the schedule. One copy of the schedule enclosed to the price bid shall be marked 'Original' and shall be given precedence and shall govern, should there be any conflict between the original and duplicate.

The information sought-for under schedules regarding qualification, financial status etc., shall be submitted in separate typewritten sheets in the formats attached, without interlineations, alterations or modifications. The bidder shall sign all pages of the bid at the modification.

Standard printed conditions attached to the bid will not be considered or accepted. Deviations from the provisions of the specification will not be considered.

It is the responsibility of the Bidder to submit all the documents in the PDF format required to prove regarding his responsiveness to participate in this bidding as per the Qualification Requirements.

The bids once submitted on e-procurement platform cannot be withdrawn after schedule bid submission closing date and also during bid validity period.

If any bid is withdrawn during the above period the bidder will be blacklisted apart from forfeiting of bid security.

9.1 Submission of Price Bids:

The estimated value of the works is given in the Schedule. The bidder has to quote in the percentage excess/ on par/ less on the total estimated value of the works given in the Schedule.

- (i) As per G.O. Ms. No. 174 dated 01-09-2008 of I&CAD (PWR) submission of original hard copies of the uploaded copies of EMD receipt and other certificates & departments by participating bidders to the tenders inviting authority is dispensed herewith.
- (ii) All the bidders shall invariably upload the scanned copies of online payment or challan generation in e-procurement system and this will be the primary requirement to consider the bid as responsive.

- (iii) The Department shall carry out the technical bid evaluation solely based on the uploaded certificates/documents, EMD receipt in the e-procurement system and open the price bids of the responsive bidders.
- (iv) The Department will notify the successful bidder for submission of original hard copies of all uploaded documents, EMD receipt prior to entering into agreement.
- (v) The successful bidder shall invariably furnish EMD receipt, certificates/ documents of the uploaded scanned copies to the Tender inviting authority before entering into agreement either personally or through courier or post and the receipt of the same within the stipulated date shall be the responsibility of the successful bidder. The department will not take any responsibility for any delay in receipt/non receipt of EMD receipt, certificates/documents, from the successful bidder before the stipulated time. On receipt of documents the department shall ensure the Genuinity of Payment towards EMD and all other certificates/documents uploaded by the bidder in e-procurement system in support of the qualification criteria before concluding the agreement.
- (vi) If any successful bidder fails to submit the original hard copies of uploaded certificates/ documents, EMD receipt within the stipulated time or if any variation is notices between the uploaded documents and the hard copies submitted by the bidder, the successful bidder will be suspended from participating in the tenders on e-procurement plat form for a period of 3 years. Besides this, TSTRANSCO the department shall invoke all processes of law including criminal prosecution of such defaulting bidder as an act of extreme deterrence to avoid delays in the tender process for execution of the development schemes taken up by the Government.

9.2 Bids will be opened at the time, date and place indicated in the NIT.

9.3 The bidders shall carefully examine the specification and all its enclosures and if they have any doubt as to the meaning of any portion of the specification or enclosures thereto, they shall obtain the required clarifications from the officer to whom the bids are to be addressed.

9.4 THE BIDS RECEIVED BY, OTHER THAN E-PROCUREMENT PLATFORM SHALL NOT BE ENTERTAINED UNDER ANY CIRCUMSTANCES.

9.5 Clarifications, amplifications, and/or any other correspondence from the bidder subsequent to the opening of bid will not be entertained. The bidders are therefore advised to ensure that their bids are sent in complete shape in the first instance itself. Post bid rebates, revisions or deviation in quoted price and/or conditions or any such offers which will give benefit to the bidder over others will not only be rejected straight but the original bid itself will get disqualified on this account and the bidder's bid security amount will be forfeited.

The tender comprise the following.

- (a) Bid Documents, drawings and price bid (Schedule). [Available online at www.tenders.telangana.gov.in]
- (b) Qualification information and supporting documents [to be uploaded by the tenderer]

10. Bid Offer:

10.1 Bill of Quantities called "Schedule" and the bid offer accompanies the tender document. It shall be explicitly understood that the Tender Inviting Officer does not accept any responsibility for the correctness or completeness of this Schedule and this Schedule is liable to alterations by omissions, deductions or additions at the discretion of the tender inviting authority or as set forth in the conditions of the contract. The Schedule shall contain the description of items of work and the approximate quantities and unit rates for all items. The percentage quoted by the contractor shall be applicable to all items of work mentioned in the Schedule. The tenderers will have to state clearly their willingness to execute the work at certain specific percentage of excess or less or at par of the ECV indicated at the space provided therein in Schedule. The tenderer should quote his lump sum tender based on the schedule of quantities. He should quote his offer as an overall tender percentage.

The Schedule (or Price-bid) contains not only the quantities but also the rates worked out by the Department and the amount for each item and total value of the estimated contract. The tenderer should workout his own rates keeping in view the work, site conditions and quote his overall tender percentage with which he intends to execute the work. The rates shall be inclusive of maintenance till the completion of Defects liability period.

10.2 The bid offer shall be for the whole work and not for individual items / part of the work.

10.3 All duties, taxes, and other levies payable by the contractor as per State / Central Government rules shall be included in the tender percentage quoted by the tenderer.

- 10.4 The tendered contract amount as computed based on overall tender percentage is subject to variation during the performance of the Contract in accordance with variation in quantities etc.

11. Validity of Tenders:

- a. Tenders shall remain valid **for a period of not less than 90 days** from the date of opening of Price bid specified in NIT.
- b. During the above-mentioned period no plea by the tenderer for any sort of modification of the tender based upon or arising out of any alleged misunderstanding of misconceptions or mistake or for any reason will be entertained.
- c. In exceptional circumstances, prior to expiry of the original time limit, the Tender Inviting Officer may request the bidders to extend the period of validity for a specified additional period. Such request to the Tenderers shall be made in writing. A Tenderer may refuse the request without forfeiting his EMD. A Tenderer agreeing to the request will not be permitted to modify his Tender, but will be required to extend the validity of his E.M.D. for a period of the extension.

12. BID Security/Earned Money Deposit:

- 12.1 The Tenderer shall furnish, Bid Security an amount of **Rs.94,988/- (Rupees Ninety Four Thousand Nine Hundred and Eighty Eight Only)** (which is equivalent to 2% of ECV along with the tender as specified in NIT). This BID SECURITY shall be in the form of online payment or challan generation from any Nationalized/Scheduled Bank.

As per T.O.O (CE/Civil), Ms.No.511, Dt. 03-01-2020 clause (II) Exemption of EMD:

- i. Exemption of EMD shall be for the works costing up to 1.00 crore (ECV) for SCs/STs, Waddera and Sagara(Uppara) contract Co-operative societies and individuals, for works in TSTRANSCO.
 - ii. However, in order to provide level playing field to all, EMD will be recovered from running bills after expenditure of 25% of the concerned works. This will also inculcate the responsibility for completion of the works.
- 12.2 The Bid security of the successful tenderer can be adjusted as part of Performance Security and the balance security deposit @ 3% of total Contract Value shall be paid (total 5%) at the time of concluding Agreement by the successful tenderer.
- 12.3 The Bid Security deposited by the successful tenderer will not carry any interest and it will be dealt with as provided in the conditions stipulated in the tender. The Demand Draft furnished by the tenderer towards Additional security deposit amount shall be released after the work is completed in all respects.

13. The BID SECURITY shall be forfeited in the following cases:

- i. When the successful bidder does not accept the order after issue of preliminary acceptance letter or the Letter of Intent.
- ii. When the successful bidder fails to furnish the Performance Security within 15 days from the date of issue of preliminary acceptance letter or the Letter of Intent.
- iii. When a bidder withdraws his bid or alters the prices after schedule bid submission closing date and before the expiry of the bid validity period or does not accept the correction of errors made in his bid or Offers post Bid rebates, revisions or deviations in quoted prices and / or conditions or any such offers.
- iv. No alteration which is made by the tenderer in the contract form, the conditions of the contract, the drawings, specifications or statements/formats or quantities accompanying the same will be recognized; and, if any such alterations are made the tender will not be considered.
- v. If, at any time, the Engineer-in-Charge is of the opinion that the Contractor is delaying Commencement of the work or violating any of the provisions, if the Contractor is neglecting or delaying the progress of the work as defined by the tabular statement "Rate of progress" in the Articles of Agreement", he shall so advise the Contractor in writing and at the same time demand compliance in accordance with conditions of Tender notice. If the Contractor neglects to comply with such demand within seven days after receipt of such notice, it shall then or at any time thereafter, be lawful for the Engineer-in-Charge to take suitable action in accordance with Clause.60 of APSS.

- 13.1 Online payment receipt towards Non-refundable transaction fee of **Rs.1,682/- (Rupees One thousand Six Hundred and Eighty Two Only)** (0.03% of ECV + GST @ 18 % in favour of MD TSTS, HYDERABAD.
- 13.2 The Tenderer should pay 0.04% of ECV i.e., **Rs.2,242/- (Rupees Two Thousand Two Hundred and Forty Two Only)** in the form of DD to MD, TSTS, Hyderabad towards e-procurement corpus fund and hand over the same to Chief Engineer/Metro Zone/ Erragadda/TS Transco/Hyderabad at the time of concluding Agreement.
- 13.3 The tenderer is subjected to be black listed and the EMD forfeited if he is found to have misled or furnished false information.
- 13.4 Even while execution of the work, if found that the contractor had produced false/fake certificates of experience he will be black listed and the contract will be terminated.

II. INSTRUCTIONS TO TENDERERS

A – GENERAL

Name of work: **“Construction of 15 Nos. Platforms (20X10 m) 8” height with a ramp at TLC Stores, Shapurnagar Hyderabad”**

ECV put to tender : **Rs. 47,49,391/-**

- a) Period of completion : **6 (Six) months**
- b) SSR adopted : **SSR 2020-21**
- c) Rates adopted vide sanction No.**46/2021-2022** of Chief Engineer/Metro Zone.
 - a) Cement: **Rs. 5,600/MT**
 - b) Reinforcement steel **Rs. 55,000/MT**
 - c) Structural Steel: **Rs. 46,000/MT**
- d) Details of provisions included in the ECV put to tender
 - i) Seigniorage charges: as per clause 11 in other conditions of contract in the Tender Document.
 - ii) Overhead charges & Contractor’s profit @ 11.765%
 - iii) Corpus Fund to NAC- 0.1%
 - iv) GST – 18%
- e) Reimbursable Provisions.
 - i) Technical personnel : - Nil
 - ii) Insurance premium : - Nil

1. The **Chief Engineer/ Metro Zone/TSTRANSCO/ Erragadda/ Hyderabad** invites bids for the above work during the period, for which dates and time specified in the NIT and will be opened by him at this office on the date and time mentioned in the NIT.
- 1.1 The intending Tenderers would be required to enroll themselves on the ‘e’-procurement market place at WWW.tenders.telangana.gov.in
- 1.2 The Tenders should be in the prescribed form invited on e-procurement by the **Chief Engineer/ Metro Zone/TSTRANSCO/Erragadda/Hyderabad** (As specified in NIT) that can be downloaded at free of cost from the website WWW.tenders.telangana.gov.in
- 1.3 The dates stipulated in the tender notice are firm and under any circumstances they will not be relaxed unless officially extended.
- 1.4 The Tenderer should upload scanned copies as specified in checklist and produce copies (EMD & Transaction Fee) before the date of opening of Price bid. Contractor should produce the originals of all documents for verification if asked for by the Competent Authority within specified time.
- 1.5 The Tender opening authority will not consider any tender received after expiry of date and time fixed (As specified in NIT) for receipt of tenders
- 1.6 The successful Tenderer is expected to complete the work within the time period specified in the NIT.
2. **Tenderers / Firms eligible to Tender:**
- 2.0 The Tenderers / Firms who

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- i) Possess the Eligibility Criteria as per Clause I.
- ii) Are not blacklisted or debarred or suspended by the Government for whatever the reason, prohibiting them not to continue in the contracting business Have complied with the eligibility criteria specified in the NIT and are the eligible Tenderers /Firms.

2.1 **Tenderers / Firms ineligible to Tender:**

- (i) A retired officer of the Govt. of Telangana or Govt. of India executing works is disqualified from tendering for a period of two years from the date of retirement without the prior permission of the Government.
- (ii) The Tenderer who has employed any retired officer as mentioned above shall be considered as an ineligible tenderer.
- (iii) The contractor himself or any of his employee is found to be Gazetted Officer who retired from Government Service and had not obtained permission from the Government for accepting the contractor's employment within a period of 2 years from the date of his retirement.
- (iv) The Contractor or any of his employees is found at any time after award of contract, to be such a person who had not obtained the permission of the Government as aforesaid before submission of the tender or engagement in the Contractor's service.
- (v) Contractor shall not be eligible to tender for works in TS TRANSCO where any of his near relatives are employed in the rank of Assistant Engineer or Assistant Executive Engineers and above on the Engineering side and Assistant Accounts Officer and above on the accounts side. The Contractor shall intimate the names of persons who are working with him in any capacity or are subsequently employed. He shall also furnish a list of Gazetted /Non-Gazetted State Government Employees related to him. Failure to furnish such information tenderer is liable to be removed from the list of approved contractors and his contract is liable for cancellation.

Note: Near relatives include

Sons, step-sons, daughters, and step-daughters.
 Son-in-law, and daughter-in-law.
 Brother-in-law, and sister-in-law.
 Brothers and Sisters.
 Father and Mother.
 Wife / Husband.
 Father-in-law and Mother-in-law
 Nephews, nieces, uncles and aunts
 Cousins and
 Any person residing with or dependent on the contractor.

3. **QUALIFICATION REQUIREMENTS OF THE TENDERERS:**

- 3.1** The tenderer shall furnish the following particulars in the formats provided online and supported documentary evidence shall be uploaded.

Attested copies of documents relating to the Registration of the firm, Registration as Electrical Licensed Contractor, Partnership deed, Articles of Association, Commercial Tax Registration, Latest Income Tax Clearance certificate / latest IT return, Goods and Service Tax and PAN number from IT Department etc. including the mandatory documents as per clause (1) of eligibility criteria (Physical Experience).

Note: The Partnership firms, which are registered as Contractors shall intimate the change in partnership deed, if any, as per GO Ms No.58, I & CAD, dt.23.4.2002 within one month of such change. Failure to notify the change to the registration authority in time will entail the firms to forfeit their registration and their tender will be rejected. The intimation of change of partners if any and the acceptance by the Registration authority may be enclosed.

Availability of key personnel for administration /site management and execution viz., technical personnel required for the work.

The bids shall be treated as non responsive in case of not uploading the mandatory documents

- 3.2** Tenders from Joint Ventures are not acceptable unless specifically stated otherwise.
- 3.3** **Qualification criteria for opening of the price bid:** Should upload all the mandatory documents as detailed in the specification.

- 3.4** Even though the tenderers meet the above qualification requirements, they are liable to be disqualified / debarred / suspended / blacklisted if they have
- 3.4.1 Furnished false / fabricated particulars in the forms, statements and /annexure submitted in proof of the qualification requirements and/or
 - 3.4.2 Not turned up for entering into agreement, when called upon within the time specified in the letter of acceptance
 - 3.4.3 Record of poor progress such as abandoning the work, not properly completing the contract, inordinate delays in completion, litigation history or financial failures etc. and/or
 - 3.4.4 Participated in the previous bidding for the same work and had quoted unreasonably high tender percentage and
 - 3.4.5 A history of criminal record in which the tenderer is involved if any.
 - 3.4.6 Even while execution of the work, if found that the work was awarded to the Contractor based on false /fake certificates of experience, the Contractor will be blacklisted and work will be taken over invoking clause 61 of PS to APSS.
 - 3.4.7 History of litigation with Govt. during the last 5 years in which the tenderer is involved.
- 3.5** The rate quoted by the bidder less by more than 10% of the TSTRANSCO's total estimated cost will be considered as abnormally low rate. In the case of abnormally low quoted rates i.e. less than 10%, additional security deposit (ASD) to be paid for the less percentage below 10% i.e., if the bidder quotes 20% below the total estimated cost then he has to pay ASD equivalent to 10% of the total estimated cost. This ASD amount will not be accepted by cheque, cash, BG or money order. It shall be paid by way of crossed demand draft on any scheduled/Nationalized bank drawn in favour of Superintending Engineer/OMC/Metro-Central/Hyderabad. The ASD amount shall be released after completion of the work in full shape.
- 3.6** If the percentage quoted by a tenderer is found to be either abnormally high or within the permissible ceiling limits prescribed if any but under collusion or due to unethical practices adopted at the time of tendering process, such tenders shall be rejected.

B) OTHER CONDITIONS:

Responsibility for correctness of the information submitted in online bid lies with bidder. If any information furnished in the bid is proved to be false at a later date, the bid will not only be rejected but the bidder will be BLACKLISTED.

The bids not complying with the stipulated completion period will be treated as non-responsive.

While being equal or compatible in other aspects preference will be given to those bidders who have experience in works similar to that given in the specification during the last five financial years.

If a bidder quoting for the bids is having more than one work on hand, at the time of bidding/ tendering and if the performance in these works is poor and not commensurate with the agreement, the bid of such bidder will not be considered for award of contract.

C) PERFORMANCE BASED EXPERIENCE:

In case of any bidders who are already having one or more works awarded to them by T.S.Transco which are under execution at the time of bidding and who fails to execute the works already awarded as per the stipulated time schedule of completion, bids of such bidders will not be considered.

4.0 One Tender per Tenderer:

- 4.1 Each Tenderer shall submit only one Tender for the work. A Tenderer who submits more than one Tender will cause dis-qualification of all the Tenders submitted by the Tenderer.

5.0 Cost of Tendering

- 5.1 The Tenderer shall bear all costs associated with the preparation and submission of his Tender and the tender inviting authority will in no case be responsible and liable for those costs.

6.0 Site Visit.

- 6.1 The Tenderer, at the Tenderer's own responsibility and risk is advised to visit and examine the Site of Work and its surroundings and obtain all information that may be necessary for preparing the Tender for entering into a contract, for construction of the work. The costs of visiting the site shall be at the Tenderer's own expense.

D) TENDER DOCUMENT

7.0 Contents of Tender document.

7.1 One set of Tender document, comprises of the following:

- 1) Notice Inviting Tenders (NIT)
- 2) Instruction to Tenderers
- 3) Forms of Tender and qualification information
- 4) Conditions of Contract.
- 5) Specifications.
- 6) Forms of Securities. i.e., EMD, Additional Security etc.
- 7) Bill of Quantities and Price bid (Schedule)

8.0 Clarification on Tender Documents

8.1 A prospective Tenderer requiring any clarification on Tender documents may contact the Tender Inviting Officer at the e-mail indicated in the NIT. The Tender Inviting Officer will also respond to any request for clarification, received through mail.

9.0 Amendment to Tender Documents

9.1 Before the last date for submission of Tenders, the Tender Inviting Officer may modify any of the Contents of the Tender Notice, Tender documents by issuing amendment / Addendum.

9.2 Any addendum/amendments issued by the Tender Inviting Officer shall be part of the Tender Document and it shall either be communicated in writing to all the prospective tenderers or notified in the News Papers in which NIT was published.

9.3 To give prospective Tenderers reasonable time to take an addendum / amendment into account in preparing their bids, the Tender Inviting Officer may extend if necessary, the last date for submission of tenders.

E) SUBMISSION OF TENDERS

10. Submission of Tenders:

The Tenderers who are desirous of participating in 'e'- procurement shall submit their Technical bids/price bids etc., in the Standard formats prescribed in the Tender documents, displayed at 'e'- market place. The tenderers should upload the scanned copies in support of their bids. The bidders shall sign on all the statements, documents, certificates, uploaded by him, owning responsibility for their correctness / authenticity.

10.6 COMPLETENESS OF BID:

- a) The bid shall be quoted for all the works & all the items as per the bid specification.
- b) Part bids or incomplete bids will not be accepted and will be rejected.

10.7 The Department will not hold any risk and responsibility for the loss in transit during uploading of the scanned document, for the invisibility of the scanned document online, and any other problem(s) encountered by the Tenderers while submitting his bids online.

10.8 The certificates, documents etc., as per clause (1) of eligibility criteria are to be scanned and uploaded on to the 'e'- procurement platform at www.tender.telangana.gov.in

Any other condition regarding receipt of tenders in conventional method appearing in Tender document may be treated as Non-applicable.

11. Last date / time for Submission of the Tenders.

- a. Tenders must be submitted online not later than the date and time specified in NIT.
- b. The tender inviting authority may extend the dates for issue and receipt of Tenders by issuing an amendment in which case all rights and obligations of the tender inviting authority and the Tenderers will remain same as previously.

11. Late Tenders:

Tenders will not be received after the last date / time prescribed in NIT.

12. Modification to the Tender.

- a. Tenderers can modify their Tender percentage online before the last date/time prescribed in NIT.
- b. No Tender shall be modified after the last date /time of submission of Tenders.

F. TENDER OPENING AND EVALUATION

13. Tender opening:

- a. The bids will be opened online by the Chief Engineer/ Metro Zone/ TSTRANSCO/Erragadda/ Hyderabad or his assignee at the time and date as specified in the tender documents. All the Statements, Documents, Certificates, Demand Draft/ Online payment ID etc., uploaded by the Tenders will be verified and downloaded, for bid evaluation. The clarifications, particulars, if any, required from the bidders, will be obtained either online or in the conventional method by addressing the bidders.

14. Clarification on the Bid:

- a. The tender opening authority may call upon any tenderer for clarification on the statements, documentary proof relating to the bid. The request for clarification and response thereto shall be in writing and it shall be only on the qualification information uploaded online by the tenderer. The clarification called for from the tenderers shall be furnished within the stipulated time, which shall not be more than a week.
- b. The tenderer if so desirous, shall agree in writing to furnish the clarification called for within the stipulated time and, for disqualification and rejection of his tender in the event of failure to do so.

15. Examination of Bids and Determination of Responsiveness:

- a. The Tender opening authority and/or his assignee will evaluate whether each Tenderer is satisfying the eligibility criteria prescribed in the tender document and declares them as an eligible Tenderer.
- b. If any alteration is made by the tenderer in the tender documents, the conditions of the contract, the drawings, specifications or statements / formats or quantities the tender will be rejected.

16. Bid Opening:

- a. At the specified date and time, the bids of all the bidders will be opened online by the Tender Opening authority and the result will be displayed on the 'e'-market place which can be seen by all the bidders who participated in the Tenders.
- b. Tenders shall be scrutinized in accordance with the conditions stipulated in the Tender document. In case of any discrepancy or non-adherence to the Conditions, the Tender accepting authority shall communicate the same to the tenderer, which will be binding on the Tenderer. In case of any ambiguity, the decision taken by the Competent Technically Authority on the tenders shall be final.

17. Evaluation and Comparison of Bids

- a. The Tender Opening authority and/or his assignee will evaluate and compare the price bids of all the qualified Tenderers.
- b. Negotiations at any level are strictly prohibited. However, good gesture rebate, if offered by the lowest tenderer prior to finalization of bids may be accepted by the tender accepting authority.
- c. Selection of Tenderer among the lowest & equally quoted tenderers will be in the following order:
 - (i) The tenderer whose bid capacity is higher will be selected.
 - (ii) In case the bid capacity is also same the tenderer whose annual turnover is more will be preferred.
 - (iii) Even if the criteria incidentally become the same, the turnover on similar works and thereafter machinery available for the work and then the clean track record will be considered for selection.

It is the sole discretion of TSTRANSCO to award the work to any bidder; mere becoming of L1 (Lowest quoted) bidder does not automatically entitle any rights on any bidder for award of contract. The TSTRANSCO reserves the right to reject any bid / bids on account of past performance in the earlier awarded works at any stage of evaluation of bids.

Process to be Confidential:

- a. Information relating to the examination, clarification, evaluation and comparison of Tenders and recommendations for the award of a contract shall not be disclosed

TENDERER

to Tenderers or any other persons not officially concerned with such process until the award to the successful Tenderer has been announced by the tender accepting authority. Any effort by a Tenderer to influence the processing of Tenders or award decisions may result in the rejection of his Tender.

- b. No Tenderer shall contact the officer inviting tenders or any authority concerned with finalization of tenders on any matter relating to this Tender from the time of the Tender opening to the time the Contract is awarded. If the Tenderer wishes to bring additional information to the notice of tender inviting authority, should do so in writing.
- c. Before recommending / accepting the tender, the tender recommending / accepting authority shall verify the correctness of certificates submitted to meet the eligibility criteria.
- d. Tenders will be finalized by the authority inviting tenders on the recommendation of the competent technical authority. The authority will scrutinize the tenders in accordance with the conditions stipulated in the tender document. In case of any discrepancy or non-adherence to the conditions, the same shall be communicated to the tenderer, which will be binding on the Tenderer. The decision taken by the concerned authority on the tender shall be final.

G. AWARD OF CONTRACT

18. Award Criteria:

- a. The Chief Engineer/ Metro Zone/TSTRANSCO/ Erragadda/ Hyderabad will award or recommend to the Competent tender accepting authority for award of the contract to the Tenderer who is found Technically qualified as per the Tender conditions and whose bid is lowest.
- b. The tender accepting authority reserves the right to accept or reject any Tender or all tenders and to cancel the Tendering process, at any time prior to the award of Contract, without thereby incurring any liability to the affected Tenderer or Tenderers or any obligation to inform the affected Tenderer or Tenderers of the reasons for such action.

19. Notification of Award and Signing of Agreement:

- a. The Tenderer whose Tender has been accepted will be notified of the award of the work by the **Chief Engineer/ Metro Zone/TSTRANSCO/ Erragadda/ Hyderabad**, prior to expiration of the Tender validity period by registered letter. This letter (hereinafter and in the Conditions of Contract called "Letter of Acceptance") will indicate the sum that the Corporation (TS TRANSCO) will pay the Contractor in consideration of the execution, completion, and maintenance of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Contract called the "Contract Amount").
- b. When a tender is to be accepted, the concerned tenderer shall attend the office of the Chief Engineer/ Metro Zone/TSTRANSCO/ Erragadda/ Hyderabad on the date fixed in the Letter of acceptance. Upon intimation being given by the Chief Engineer/ Metro Zone/TSTRANSCO/ Erragadda/ Hyderabad, of acceptance of his tender, the tenderers shall make payment of the balance Security Deposit and additional security deposit wherever needed by way of Demand Draft from a Nationalized Bank with required validity period and sign an agreement in the form prescribed by the department for the due fulfillment of the contract. Failure to attend the office of the **Superintending Engineer/Civil/Metro/Hyderabad** on the date fixed, in the written intimation, to enter into the required agreement shall entail forfeiture of the Earnest Money deposited.
- c. The written agreement to be entered into between the Contractor and the Superintending Engineer/ Civil/Metro/TS TRANSCO/Erragadda/Hyderabad as may be authorized, shall be the foundation of the rights and obligations of both the parties and the contract shall not be deemed to be complete until the agreement has first been signed by the contractor and then by the proper officer authorized to enter into contract on behalf of the Transmission Corporation of Telangana Limited (or 'TS TRANSCO' or 'Corporation').
- d. The successful tenderer has to sign an agreement within a period of 30 days from the date of receipt of communication of acceptance of his tender. On failure to do so his tender will be cancelled duly forfeiting the E.M.D., paid by

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him without issuing any further notice and action will be initiated for black listing the tenderer.

20. Corrupt or Fraudulent Practices:

- (a) The TS TRANSCO requires that the bidders / suppliers / contractors under Government financed contracts; observe the highest standard of ethics during the procurement and execution of such contracts.
- (b) Define for the purposes of the provision, the terms set forth below as follows:
 - (i) “Corrupt practices” means the offering, giving, receiving or soliciting of anything of value to influence the action of a Government official in 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 Government and includes collusive practice among Tenderers (prior to or after Tender submission) designed to establish in Tender prices at artificial non-competitive levels and to deprive the Government of the benefits of free and open competition.
- (c) Will reject a proposal for award if it determines that the Tenderer recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.
- (d) Will blacklist / or debar a firm, either indefinitely or for a stated period of time, if at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing a Government Contract.
- (e) Further, more Tenderers shall be aware of the provisions stated in the General Conditions of Contract.

21. The decision of Chief Engineer/ Metro Zone/TSTRANSCO/ Erragadda/ Hyderabad to accept any tender and to reject any or all tenders is final:

- a. Not with standing that contained in clause 22, the Superintending Engineer/ Civil/Metro/TS TRANSCO/Erragadda/Hyderabad reserves the right to accept or reject any tender and to annul tendering process and reject any or all tenders at any time prior to the award of contract without thereby incurring any liability to the affected tenderer or tenderers on the grounds of its Authority.

I. FINANCIAL

23 PRICES:

23.1 The rates duly loaded with quoted tender percentage for all the items of work covered in Schedule shall be firm on all accounts such as increase in quantum of work over that provided in the contract, execution of contract beyond the scheduled completion period for whatever reasons. The prices shall include all the taxes and duties like Goods Service Tax & any other Taxes wherever applicable. Price variation is applicable only for the cement; reinforcement steel & earth flat items, and for the remaining items the prices are firm.

23.2 VARIATION IN TAXES AND STATUTORY VARIATIONS:

23.2.1 VARIATION IN TAXES:

The bidder will be entirely responsible for quoting the correct taxes, other local taxes or levies if any, license fee etc., he has to incur until completion of the contract.

If the rates of the statutory levies assumed by the bidder are less than the actual rates prevailing at the time of bidding, the TSTRANSCO will not be responsible for such errors. If the rates of the statutory levies assumed by the bidder are later proved to be higher than the actual rates prevailing at the time of bidding, the difference will be passed on to the credit of the TSTRANSCO.

23.2.2 STATUTORY VARIATIONS: Any variation up or down in statutory levy or new levies introduced after tender calling date under this contract award/specification will be to the account of TSTRANSCO.

In cases where delivery schedule is not adhered to by the contractor and there are upward variation/revision after the agreed delivered date the contractor will bear the impact of such levies and if there is downward variation/revision the TSTRANSCO will be given credit to that

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effect. For the variations beyond the scheduled completion period the payment of taxes shall be limited to the tax rates applicable within the scheduled completion period.

In case of the bought out items statutory variation shall not be applicable on that taxes and duties. For this purpose bought out item means the material/equipment not manufactured by the bidder i.e., statutory variation will be applicable for the taxes and duties involving direct transaction between the bidder and TSTRANSCO only and not for the taxes and duties between bidder and his sub-vendors.

23.3 PRICES AND OTHER VARIATIONS:

The rate quoted by the bidder less by more than 10% of the TSTRANSCO's total estimated cost will be considered as abnormally low rate. In the case of abnormally low quoted rates i.e. less than 10% additional security deposit (ASD) to be paid for the less percentage below 10% i.e., if the bidder quotes 20% below the total estimated cost then he has to pay ASD equivalent to 10% of the total estimated cost. This ASD amount will not be accepted by cheque, cash or money order. It shall be paid by way of crossed demand draft on any scheduled / Nationalised bank drawn in favour of **Superintending Engineer/ OMC/Metro-Central /Hyderabad**. The Demand Draft furnished by the tenderer towards Additional security deposit amount shall be released after the work is completed in all respects.

24 TAXES AND DUTIES:

GST @ 18% is applicable on subtotal on schedule

25 INCOME TAX:

Income tax at applicable rates as on the date of release of payment will be deducted from the gross bills as per the income tax Act.

26 SEIGNORAGE CHARGES:

Seignorage charges have to be paid by you to the Assistant Director Mines & Geology Department and shall be produced along with your work bills or otherwise it will be deducted from your as per rules in vogue.

27 Labour Cess:

Labour Cess @ 1% shall be deducted from work bills as applicable and as per rules in vogue.

28 PRICE VARIATION (PV) Clause

28.1 PRICE VARIATION CLAUSE for Reinforcement Steel & Cement:

Price Variation is applicable in respect of the items cement, reinforcement steel only as per the A.P. Government G.O.Ms.No. 94,Dt:16.04.2008, T.O.O.CE(Civil) Ms.No.24 Dt: 25.04.2008 and G.O.Ms.No.1, Dt:25-02-2012, T.O.O.CE(Civil) Ms.No.84 Dt: 12.06.2012.

- The price adjustment shall be applicable with in original contract period or period extended on grounds of the departmental delays and valid reasons and shall not be applicable to the extension granted on account of the contractor's fault.
 - Price adjustment shall be applicable for actual components of items of works actually carried out during the period of the bill and allow adopting price adjustment for steel and cement by the absolute variation between the estimated rate and the rate approved by the Govt based on the recommendation of board of Chief Engineers for the month.
 - The adjustment scheme will be applied in all cases where the variation between the estimated rates and board of Chief Engineers approved rates (increase or decrease) is more than 5% for the month.
- 1) Henceforth for all price adjustments of works, the concerned officers of TSTransco should operate variation in rates only to the extent where it is above 5% over the estimated rates. Thus if the price excess is 10%, payment will be made only to the extent of 5% (10%-5%). Further, the same procedure should be also followed for Negative price variation.
 - 2) For the Time extension period due to Department fault-Price variation (Both +ve and -ve) is applicable.
 - 3) For the Time extension period due to Contractors fault-Only -Ve Price variation is applicable.
- Necessary supplemental proposal regarding differential rate payable or differential rate recoverable on agreement rates of steel and cement due to price adjustment is to be submitted to the agreement concluding authority for approval.

- After approval of monthly steel & cement price adjustments by the concerned agreement concluded authority after scrutiny by SAO/A.O of the zone, the consolidated monthly or bimonthly or quarterly supplemental slip (as supplemental slip to original agreement) has to be submitted to the LOI issuing authority along with all relevant approved price adjustments for authorization for payment.
- The basic rate of the Reinforcement steel and cement vide sanction No. **46/2021-2022** of Chief Engineer/Metro Zone as follows:

Sl. No.	Description	Unit	Basic Rate for the month March-2021 in Rs. Ps.
1	Cement	MT	5600.00
2	HYSD/TMT Reinforce Steel bars	MT	55,000.00

Further as per the TS standard revised data, 11.765 % extra on estimate value of each item was added towards contractor profit and overhead charges contractor.

The overhead charges include the following elements:

- Site accommodation, setting up plant, access road, water supply, electricity and general site arrangements.
- Office furniture, equipment and communications Expenditure on:
- Corporate office of contractor
- Site supervision
- Documentation and “as built” drawings
- Mobilization/ de-mobilization of resources
- Labour camps with minimum amenities and transportation to work sites.
- Light vehicles for site supervision including administrative and managerial requirements.
- Laboratory equipment and quality control including field and laboratory testing.
- Minor T & P and survey instruments and setting outworks, including verification of line, dimensions, trial pits and bore holes, where required. Watch and ward.
- Traffic management during construction.

**** TS revised standard data Special Condition**

Photographs shall be taken by the contractor at all important stages of work like excavation, leveling, foundations, laying of columns, beams, slab etc;

The photographs should be clear and hard copy or soft copy (2Nos) shall be submitted to the Engineer in charge immediately.

29. TERMS OF PAYMENTS:

All payments will be made to you in the following proportion.

- i) Payments for the works will be made by cheques by way of TSTRANSCO funds upto 90% of the running bills at the rates approved in the schedules for the items of work done. For this purpose the contractor shall submit monthly bills to the Executive Engineer regularly to ensure payments in time. The contractor shall give full details of items of works done against each location in support of the bill. Bills submitted without supporting details will not be taken into cognizance.
- ii) Out of the balance 10% amount, 5% payments will be released after completion of all the works and submission of material accounts and handing over all the materials leftover with the contractor to TSTRANSCO. The final 5% payments will be released after the completion of the 12 months guarantee period (i.e., Retention amount).
- iii) The bidder has to furnish Income Tax Pan number and GST registration

Paying Officer is Superintending Engineer/OMC/Metro –Central/Hyderabad or Senior Accounts Officer O/o. of the Superintending Engineer/OMC/Metro –Central/Hyderabad

30. ROYALTIES FOR PATENTS ETC.,:

All royalties for patents or charges for the use of infringement thereof that may be involved in the construction or use of any equipment shall be included in the bid prices. The bidder shall protect the TSTRANSCO against any and all such claims arising out on account of the use thereof.

31. PERFORMANCE SECURITY:

The successful bidder shall furnish within 15 days from the date of issue of preliminary acceptance letter or the Letter of Intent, performance security equal to **FIVE PERCENT (5%)** of the total accepted bid value for the proper execution and fulfillment of contract which will include

the guarantee period of 12 months over and above the specified completion period with **Six months** claim period thereafter.

If the bidder fails to furnish the performance security as specified within 15 days from the date of issue of preliminary acceptance letter or the Letter of Intent, the contract is liable for cancellation and forfeiture of the bid security. The performance security shall also be forfeited if the successful tenderer fails to fulfill the terms of the contract.

Performance security may be made by Demand Draft from any Nationalized Bank/Scheduled Bank in the Headquarters in favour of Superintending Engineer/ OMC/Metro-Central/Hyderabad Performance Guarantee period covers a period of 12 months guarantee for satisfactory performance and also for the workmanship against faulty erection/civil works for a period of 12 month from the date of handing over and the formal acceptance of completed work by TSTRANSCO.

32. PERFORMANCE GUARANTEE:

- i) The contractor shall warrant for satisfactory performance of material/equipment supplied and works executed by him, for minimum of the period of 12 months from date of commissioning of the project for proper fulfillment of performance obligations. Where the supplier /manufactures provide longer period of warranty than mentioned above, the purchaser shall be entitled for such longer warranty.
- ii) Equipment, sub-assemblies or spare, or parts replaced / repaired under warranty shall have further warrantee of 12 months from the date of replacement repair.
- iii) If during the period of guarantee, the Engineer decide and inform in writing to the contractor that any equipment, part of equipment, material or works is defective, the contractor on receiving details of such defects or deficiencies shall at his own expense, irrespective of reimbursement of insurance company, rectify/ replace the defective material or work within seven(7) days of his receiving the notice or within such reasonable times as TSTRANSCO may deem proper for making it good. The decision whether correction of the defects should be through repair or by replacement shall be the sole discretion of the TSRANSCO.
- iv) In the event of contractor not responding to the intimation of Engineer as mentioned above, the Engineer may arrange for a third party to correct the defects after duly giving the contractor at least seven (7) days' notice of its intention to use a third party to correct a defect. If the contractor does not correct the defect himself within this notice period. The engineer may have the defect corrected by the third party. The cost of such rectification will be deducted / collected from the balance pending bills, retention amounts or performance / additional /retention securities or amounts of the contractor either in this contract or other contracts or any other securities.

33. EXTENSION OF TIME FOR COMPLETION:

When a work cannot be completed within the completion period indicated for reasons beyond the control of the contractor, the contractor shall represent for the same and extension of time shall be granted only on the issue of an undertaking by the contractor that he will not put forth at a later date, claims for extra payments towards increased overheads, labour costs etc.

34. EXECUTION OF WORKS NOT COVERED BY THE CONTRACT:

In the course of the execution of works against the contract, if it becomes necessary to execute items of work which are not covered either by the tender specification or your offer or this detailed acceptance letter, such works shall be carried out by you at the rates arrived as per clauses given below. All such items of works shall, however, be executed only on the written directions of the concerned Executive Engineer.

(a) Variation in quantity:

The quantity indicated in schedule are only provisional and are likely to change during actual execution. When quantities of any item are likely to exceed beyond 25% over and above the schedule quantity or any new items/ supplemental item arises, the Contractor shall bring the fact to the notice of Chief Engineer/Construction well in advance and take prior order for going ahead with the work. Without approval of this office, the Contractor shall not go ahead with the work whenever the increase in quantity exceeds beyond the 25% over and above the schedule quantities or any new items / supplemental items arise.

For work item covered in schedule:

For quantities increased over and above the schedule quantities :

The rates awarded in the contract are applicable for any increase in quantities of work.

(b) For Supplemental / new items:

- i) For quantities relating to the schedule where the rate can be deducted from the estimate or TSTRANSCO/DISCOM /Common SSR, the rate applicable will be the estimated/SSR rate plus or minus (+/-) tender percentage accepted by the bidder for schedule. The

schedule of rates adopted for supplemental items/ new items shall be from the current SSR applicable during the execution period.

- ii) For items where the rates of new items cannot be deducted from estimate /SSR, the rate payable will be arrived based on prevailing market rates duly enquiring / collecting quotations and observing the reasonableness of the rates by purchaser.

35. RESPONSIBILITY OF THE CONTRACTOR:

The successful bidder is responsible for the safe delivery of the goods in good condition at destination and execution of the works ensuring quality. He should acquaint himself of the conditions obtaining in regard to supply of the materials. Team of Quality Assurance from Head Quarters will visit time to time to verify the quality of works.

36. (i) PENALTY FOR LATE COMPLETION:

The completion period of the works mentioned in Schedule (Programme of works of specification is the essence of contract).

In case of delay in erection of the scheduled works, whatever be the reasons, the TSTRANSCO can levy and collect the penalty @ 0.5% per week or part thereof for the portion of works not completed, subject to a maximum of 5% of the total value of works. Once the maximum is reached, TSTRANSCO may consider termination of the contract. The right of the TSTRANSCO to levy penalty shall be without prejudice to its rights under the law including the right to get the balance works executed by other agencies at the risk and cost of the successful bidder. This is in addition to the right of the TSTRANSCO to recover any damages from the contractor and also blacklisting.

SPECIFIC ACCEPTANCE OF THIS CLAUSE SHOULD BE IN BLACK & WHITE IN THE BID. IF SUCH ACCEPTANCE IS NOT INDICATED, THE BID IS LIABLE TO BE OVERLOOKED.

In case the successful bidder fails to execute the works as per the programme, TSTRANSCO reserves its right to get the balance works executed by other agencies at the risk and cost of the successful bidder, this is in addition to the right of the TSTRANSCO to recover any damage from the contractor and also blacklisting.

- (i) Scaffolding and gangways will have to be arranged by the contractor at his own cost, whenever they are considered desirable or necessary by the Executive Engineer in-charge of the work to facilitate the work.

37. PENALTIES IMPOSED FOR DEFICIENCIES IN QUALITY OF WORKS:

During execution of works, if any deficiencies in quality of works is found in deviation to the specification / agreement, a minimum penalty of Rs 5,000/- to Rs 30,000/- shall be levied for deficiencies as per each category as mentioned below.

Category I : Not using (i) prescribed shoring, shuttering and dewatering equipment, (ii) measurement boxes, (iii) Form boxes for different types of foundations and steel measuring boxes, (iv) not providing adequate number of chairs to the steel reinforcements, (v) not carrying out back filling and compaction of the foundation pits in layers and leveling the tower footings properly, (vi) not ensuring that the excavated earth is dumped at least 2 meters away from the pit etc., and (vii) not providing copings to the tower legs / stubs,(viii) not providing water tanker, Earth rammers/Earth vibrators.

Category II : Use of reinforcement steel without ISI marking, not using vibrators for effective consolidation of the concrete during foundation works, not using proper templates for firmly keeping the stubs in position when templates are supplied by the contractor & improper fixing of stubs, non ensuring of tower verticality, use of rusted stubs and tower parts if supply is by the contractor, non painting of butt joints and rusted stubs with zinc rich paint immediately after erection of the towers & stringing, non fixing of earth flat to the stub, non deployment of technical personnel for supervision of works by the contractor. Also not fixing of vibration dampers firmly, repair sleeves wherever necessary, not properly fixing of arcing horns both tower side and line side and bird guards etc., as per specification.

Category III : Use of improper grade / quality of raw material like H.B.G. metal, water and sand for concreting, using clogged and / or lump / clotted cement for concreting, not ensuring proper curing for foundation concrete, not ensuring that all the members of the tower are placed in position and firmly fixed with bolts and nuts immediately after erection of tower, not ensuring that half round seam welding of the nuts before stringing of the line. For the deficiencies in the quality of works noticed by the Engineer, penalties shall be levied as given below:

Type of category	First instance (Rs)	Second instance (Rs)	Third instance (Rs)
Category I	5,000 /-	10,000/-	15,000 /-
Category II	7,500 /-	15,000/-	22,500 /-
Category III	10,000 /-	20,000/-	30,000 /-

In the event of fourth instance of noticing the deficiency of quality of works in any of the above categories, the bidder shall be debarred from participating **in future tenders for a minimum period of one year.**

The bidder shall give a specific undertaking accepting this clause.

(ii) DELAYS BEYOND CONTRACTOR'S CONTROL:

The contractor shall not be entitled to claim compensation on account of delays or hindrances to the works for any cause whatsoever. Should the cause of delay or hindrance not be the responsibility of the contractor, the Chief Engineer will consider whether it is possible or not to grant extension of time to compensate for this delay or hindrance. The contractor will not, however, be eligible for any compensation by way of increase in the rates for the works executed beyond the contract period.

38. PROGRESS OF WORK:

If it is found that the progress of work is not commensurate with the programme of completion, TSTRANSCO will be entitled to terminate the contract in part or full giving 15 days notice and get the balance works completed through other agencies at the contractor's cost and risk. You shall also furnish the quantity of material consumed, the details of work and the balance materials held by you every month. Every report submitted by you shall be verified and countersigned by the concerned Executive Engineer and by you or your authorized representative. The contractor should complete all the works in all aspects as stipulated in the schedules and handover to Executive Engineer concerned unless otherwise final bill will not be processed.

39. RECOVERY OF MONEY FROM CONTRACTOR IN CERTAIN CASES:

In every case in which provision is made for recovery of money from the contractor, the TSTRANSCO shall be entitled to retain or deduct the amount thereof from any moneys that may be due or may become due to the contractor under these presents and/or under any other contract or contracts or any other account whatsoever, Bid Security/Performance Security etc., held up by the TSTRANSCO.

40. Payment Certificates:

- 1.1 The Contractor shall submit to the Engineer-in-charge monthly statements of the estimated value of the work completed less the cumulative amount certified previously.
- 1.2 The Engineer-in-charge shall check the Contractor's monthly statement within 14 days.
- 1.3 The value of work executed shall be determined by the Engineer-in-charge.
- 1.4 The value of work executed shall comprise the value of the quantities of the items in the Bill of Quantities completed.
- 1.5 The Engineer-in-charge may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.

1. Certificate of Completion of works:

When the whole of the work has been completed and has satisfactory passed any final test that may be prescribed by the Contract, the Contractor may give a notice to that effect to the Engineer-in-Charge accompanied by an undertaking to carryout any rectification work during the period of maintenance, such notice and undertaking shall be in writing and shall be deemed to be request by the Contractor for the Engineer-in-Charge to issue a Certificate of completion in respect of the Works. The Engineer-in-Charge shall, within twenty one days of the date of delivery of such notice either issue to the Contractor, a certificate of completion stating the date on which, in his opinion, the works were completed in accordance with the Contract or give instructions in writing to the Contractor specifying all the Works which, in the Engineer-in-Charge" opinion, required to be done by the Contractor before the issue of such Certificate. The Engineer-in-Charge shall also notify the Contractor of any defects in the Works affecting completion that may appear after such instructions and before completion of the Works specified there in. The Contractor shall be entitled to receive such Certificate of the

Completion within twenty-one days of completion to the satisfaction of the Engineer-in-Charge of the Works so specified and making good of any defects so notified.

42. SIGNING OF THE CONTRACT:

Within 15 days of award of the contract the duplicate copy of the award letter shall be returned by the contractor duly signed and dated.

A formal agreement will be entered into with the contractor within 30 days of acceptance of the performance security. If the contractor does not sign the agreement within 30 days of acceptance, the contract awarded may be cancelled and the next lowest responsive bidder will be called for negotiations.

DESCRIPTION OF WORK:

Construction of 15 Nos. Platforms (20X10 m) 8” height with a ramp at TLC Stores, shapurnagar Hyderabad.

**Sd/-
CHIEF ENGINEER (I/C),
METRO ZONE/HYDERABAD.**

FORMS OF TENDER QUALIFICATION INFORMATION**Annexure –I****CHECKLIST TO ACOMPANY THE TENDER**

Sl. No	Description	Submitted	Page No. (see Note below)
1	2	3	4
1	The bidder should be a valid registered Contractor with TSTRANSCO/ TSGENCO/TS DISCOMs/Government or Govt. undertaking departments in Telangana state.	Yes / No	
2	Bidder should have achieved annual turnover equal to 100% of the value of the works proposed in the bid specification in any financial year during the last five financial years including current financial year duly certified by competent authority and enclose documentary evidence of works compulsorily.	Yes / No	
3	The bidder in his name should have executed civil works previously in TSTransco/TSGenco/TSDiscoms or Government or Government under taking departments OR any substation/line/bay works in any EHT substation or EHT lines within the last Ten(10) years and should enclose work completion certificate, performance certificate etc., issued by not less than Divisional Engineer/Executive Engineer Rank Officer.		
4	Copy of Goods and Service Tax Registration certificate.	Yes / No	
5	Copy of GST Registration Certificate.	Yes / No	
6	Copy of Firm Registration & Partnership deed in case of firms.	Yes / No	
7	Transaction fee as prescribed through On line	Yes / No	
8	EMD (2% of ECV) in favour Superintending Engineer/ OMC/Metro-Central/Hyd or through online payment in e-procurement platform.	Yes / No	
9	A self declaration by the tenderer in proof of going through carefully all the tender conditions mentioned in the bid document.	Yes / No	

Notes:-

1. All the statements, copies of the certificates, documents etc., enclosed to the bid shall be given page numbers on the right corner of each certificate, which will be indicated in column (4) against each item. The statements furnished shall be in the formats appended to the tender document.
2. The information shall be filled-in by the Tenderer in the checklist and shall be enclosed to the bid for the purposes of verification as well as evaluation of the tenderer's Compliance to the qualification criteria as provided in the Tender document. All the Certificates, documents, statements as per check-list shall be submitted by the tenderer.

DECLARATION

I / WE have gone through carefully all the Tender conditions and solemnly declare that I / we will abide by any penal action such as disqualification or black listing or determination of contract or any other action deemed fit, taken by, the Department against me / us, if it is found that the statements, documents, certificates produced by me / us are false / fabricated.

I / WE hereby declare that, I / WE have not been blacklisted / debarred / Suspended / demoted in any department in Telangana or in any State due to any reasons.

Signature of the Tenderer

TENDERER

STATEMENT– I

Availability of Key Personnel:

Qualification and experience of Key Personnel proposed to be deployed for execution of the Contract.

Sl. No.	Name	Designation	Qualification	Total Experience	Working with the Tenderer since
(1)	(2)	(3)	(4)	(5)	(6)

Signature of the Tenderer

STATEMENT – II

Information on litigation history in which Tenderer is the Petitioner.

S. No	Case No. / Year	Court where filed.	Subject Matter / Prayer in the case.	Respondents i.e., SE / CE	Present Stage.
1	2	3	4	5	6

STATEMENT – III

Physical quantities executed by the Tenderer in the last five financial years. [work wise / year wise].

Sl. No.	Financial Year	Name of work	Agt. No	Quantities executed / Year wise.					Any other items.
				PCC	RR Masonry	Brick work	plastering	RCC	
1	2	3	4	5	6	7	8	9	10
1	2017-18								
2	2018-19								
3	2019-20								
4	2020-21								
5	Current Year								

Attach certificates in support of the above quantities issued by the Executive Engineer concerned and countersigned by the Superintending Engineer duly showing the quantities executed year wise.

Signature of the Tenderer

STATEMENT – IV

Details of Existing Commitments.

Details of works on hand and, yet to be completed as on the date of submission of the Tender and works for which Tender s have been submitted are to be furnished.

A) Existing Commitments on ongoing works:

Sl.No	Name of work	Address of Agt. Concluding authority	Agt. No. & Date	Value of contract	Stipulated period of completion	Value of work done so far	Balance Value of works to be completed	Anticipated date of completion	Updated value of balance work
1	2	3	4	5	6	7	8	9	10

Attach certificates issued by the Executive Engineer concerned and countersigned by Superintending Engineer, indicating the balance work to be done, and likely period of completion.

Signature of the Tenderer

B) Details of works for which Tenders are submitted [awarded / likely to be awarded]

Sl. No.	Name of work	Address of Agt. Concluding authority	Estima- ted value of work	Stipulated period of completion	Date on which tender was submitted	Present stage of Tender.
1	2	3	4	5	6	7

Signature of the Tenderer

STATEMENT – V

C) Availability of Critical Equipment:

The tenderer should furnish the information required below, regarding the availability of the equipment, required for construction / quality control.

Sl. No.	Details of Equipment	Number required	Number		
			Owned	Leased	To be procured
1	2	3	4	5	6

Signature of the Tenderer

A declaration regarding the equipment owned shall be produced by the Tenderer on a non-judicial stamp paper of Rs..... as below;

TENDERER

DECLARATION

“I do hereby solemnly affirm and declare that I /we own the following equipment for using on the subject work and also declare that I / We will abide by any action such as disqualification or determination of Contract or blacklisting or any action deemed fit, if the department detects at any stage that I/we do not possess the equipment listed below.

Sl. No.	Details of each Equipment	Year of purchase	Regn. Number	Capacity	Any other data.	Is it in working condition
1	2	3	4	5	6	7

STATEMENT – VI.

Availability of Key Personnel

Qualification and experience of Key Personnel proposed to be deployed for execution of the Contract.

Sl. No	Name	Designation	Qualification	Total Experience	Working with the Tenderer since.
1	2	3	4	5	6

Signature of the Tenderer

STATEMENT –VII
Details regarding Financial Standing of the Tenderer:

(Here the balance sheet for the last financial year, annual turnover, debt equity ratio and other relevant financial parameters and the proof of their credits standing may be furnished)

The following particulars may be filled in:

Sl. No.	Name of the Bank	Actual Balance at the credit of the Contractor	Permissible over draft	Total	Remarks
(1)	(2)	(3)	(4)	(5)	(6)

Signature of the Tenderer

CONDITIONS OF CONTRACT

TENDER FORM

[To be submitted along with the Hard copies of work done certificates]

To
The Chief Engineer/Metro Zone,
Erragadda, TS TRANSCO,
Hyderabad.

TENDERER

Sir,

I / We hereby tender, if this tender be accepted to undertake to execute the work of "Construction of 15 Nos. Platforms (20X10 m) 8" height with a ramp at TLC Stores, Shapurnagar Hyderabad." as shown in the drawings and as described in the specifications deposited in the office of the Chief Engineer/ Metro Zone/TSTRANSCO/ Erragadda/ Hyderabad with such variations by way of alterations or additions to and omissions from the said works and method of payment as provided for in the conditions of contract for the sum of Rs. /- (Rupees Only) or such other sum as may be arrived at under the clause of the standard preliminary specification relating to Payment on lump sum basis or final measurement at unit prices.

I / We have quoted percentage excess/at par with/less on E.C.V., in Schedule annexed (in words and figures) for which I / We agree to execute the work when the lump sum payment under the terms of agreement is varied by payment on measured quantities.

I/WE have quoted Percentage excess or less on E.C.V., in Schedule both in words & figures.

I / We agree to keep the offer in this tender valid for a **period of 90 days** from the date of opening of Price bid as specified in NIT and not to modify the whole or any part of it for any reason within the above period. If the tender is withdrawn by me / us for any reason whatsoever within the validity period, the Earnest money deposited by me / us will be forfeited to T.S.TRANSCO.

I / We hereby distinctly and expressly declare and acknowledge that before the submission of my / our tender, I / We have carefully followed the instructions in the tender notice and have read the APSS and the Preliminary specifications and quantities and of the location wherever the said work is to be done and such investigation of the work required to be done and in regard to the materials required to be furnished and inspected the quarries so as to enable me / us to thoroughly understand the intention of the same and the requirements covenants, agreements stipulations and restrictions contained in the contract and in the said plans and specifications and distinctly agree that I / We will not hereafter make any claim or demand upon the T.S.TRANSCO based upon or arising out of any alleged misunderstanding or misconception or mistake on my/ our part of the said requirements covenants, agreements, stipulations restrictions and conditions.

I / We enclose herewith a demand draft drawn in favour of Superintending Engineer/OMC/Metro-Central/Hyderabad, on the Nationalized / Scheduled Bank payable at Hyderabad for an amount of Rs. /- (Rupees only) towards Earnest Money which does not bear interest. If my / our tender is not accepted, this sum shall be returned to me / us on my / our application when intimation is sent to me / us of rejection or at the expiration of 90 days or extended period from the date of this tender whichever is earlier.

I / We fully understand that on acceptance of my / our tender, the EMD paid by me / us at the time of tendering shall be retained by the TS TRANSCO as part of security deposit for the due fulfillment of this contract. If upon written intimation to me / us by the Chief Engineer/ Metro Zone/TSTRANSCO/ Erragadda/ Hyderabad, I / We fail to attend the office before the end of the period specified on such intimation the tender will not be considered and if, upon intimation being given to me / us by the Chief Engineer/ Metro Zone/TSTRANSCO/ Erragadda/ Hyderabad of acceptance of my/our tender and if I / we fail to make the performance security deposit or to enter into the required agreement, then I / We agree to the forfeiture of the Earnest money. Any notice required to be served on me / us hereunder shall be sufficiently served on me / us personally or forwarded to me / us by post (registered or ordinary) or left at my / our address given herein. Such notice shall if sent by post be deemed to have been served on me / us at the time when in due course of post, it would be delivered at the address to which it is sent.

The T.S.TRANSCO direct that in the case of both Lump sum and K2 contract of Rs. 50,000/- and above in value, the contractor irrespective of his clause shall be required to employ the personnel as follows on the concerned works at his own cost whether technical skill is required or not.

TENDERER

Qualified personnel at site

Cost of Work	Scale of Technical Staff
Between Rs. 5.00 lakh & Rs. 15.00 lakh	One Diploma holder.
Between Rs. 15.00 lakh to Rs. 50.00 lakh	One Graduate Engineer and one Diploma holder
Above 50.00 lakh	One Graduate Engineers and two Diploma holders

The appointment of staff shall be on full time basis and they shall be available at the work site whenever required by the Engineer-in-Charge to take instructions.

In case of failure of the contractor to employ Technical Staff as above the recovery shall be made from his bill at the rate **based on the prevailing SSR rates including allowances and taxes.**

Cost of Work	Rate of recovery per month
Between Rs. 5.00 lakh & Rs. 15.00 lakh	Rs.1,500/-
Between Rs. 15.00 lakh to Rs. 50.00 lakh	Rs.2,500/-
Above 50.00 lakh	Rs. 6,000/-

Yours faithfully,

TENDERER'S /CONTRACTOR'S CERTIFICATE:

I/WE hereby declare that I/We have perused in detail and examined closely the Telangana Standard Specifications, all clauses of the preliminary specifications with all amendments and have either examined all the standards specifications or will examine all the standard specifications for items for which I/We tender, before I/We submit such tender and agree to be bound and comply with all such specifications for this agreement which I/We execute in the Transmission Corporation of Telangana Limited (TS TRANSCO).

I/WE certify that I/We have inspected the site of the work before quoting my Percentage excess, at par or less on ECV. I/We have also inspected the quarries and network of roads and satisfied myself/ourselves about the quality, adequate availability and transport facilities for stone, metal, bricks, sand, cement and reinforcement steel etc., through the network of available roads and pathways, required for the work and verified the correctness of the leads statement.

I/WE am/are prepared to furnish detailed data in support of all my quoted rates, if and when called upon to do so without any reservations.

I/WE hereby declare that I/We will pay an additional security deposit in terms of conditions, the difference between 90% of ECV and my/out tender amount, in case if my / our offer is less by more than 10%.

I/WE hereby declare that I am/we are accepting to reject my tender in terms of condition, if my /our offer is more than 5% of ECV.

I/WE hereby declare that I/We will not claim any price escalation.

I/WE hereby declare that I am/We are accepting for the defect liability period as 12 months instead of 6 months under clause 28 of APSS.

I/WE declares that I/WE will procure the required construction materials including earth and use for the work after approval of the Engineer-in-Charge. The responsibility for arranging and obtaining the land for borrowing or exploitation in any other way shall rest with me/us for the materials for construction; I/WE shall ensure smooth and un-interrupted supply of materials.

I/WE declare that the responsibility for arranging and obtaining the land for disposal of spoil/soil not useful for construction purposes shall rest with me/us.

I/WE declare that I/WE shall not claim any compensation or any payment for the land so arranged for disposal of soil and the land for borrow area. My/our quoted percentage excess, at par or less on ECV., are inclusive of the land so arranged and I/We will hand over the land so arranged for disposal of soil to the AP Transco after completion of work.

I/WE declare that I/WE will not claim any extra amount towards any material used for the work other than the quoted works for respective schedule items.

I/We declare that I/WE will execute the work as per the 'Rate of Progress', and if I/WE fail to complete the work as per the above programme, I abide by the condition to recover liquidated damages as per the tender conditions.

I/We declare that I/WE will abide for settlement of disputes as per the tender conditions.

TENDERER

DECLARATION OF THE TENDERER.

I/WE have not been black listed in any department in Telangana due to any reasons.

I/WE have not been demoted to the next lower category for not filing the tenders after buying the tender schedules in a whole year and my/our registration has not been cancelled for a similar default in two consecutive years.

I/WE agree to disqualify me/us for any wrong declaration in respect of the above and to summarily reject my/our tender.

Address of the Tenderer:

Phone No.:

Fax No.:

TENDERER

TENDERER

I. OTHER CONDITIONS

1. Engineer-in-Charge's Decision:

It shall be accepted as in separable part of the contract that in matters regarding materials, workmanship, removal of improper work, interpretation of the contract drawings and contract specification, mode of the procedure and the carrying out the work, the decision of the Engineer-in-Charge, which shall be given in writing, shall be binding on the contractor.

2. Settlement of disputes:

If any dispute of difference of any kind whatsoever arises between the department and the Contractor in connection with, or arising out of the Contract, whether during the progress of the works or after their completion and whether before or after the termination, abandonment or breach of the Contract, it shall in the first place, be referred to and settled by the Engineer-in-charge who shall, within a period of thirty days after being requested by the Contractor to do so, give written notice of his decision to the Contractor. Upon receipt of the written notice of the decision of the Engineer-in-Charge the Contractor shall promptly proceed without delay to comply with such notice of decision.

If the Engineer-in-Charge fails to give notice of his decision in writing within a period of thirty days after being requested or if the Contractor is dissatisfied with the notice of the decision of the Engineer-in-Charge, the Contractor may within thirty days after receiving the notice of decision appeal to the Department who shall offer an opportunity to the contractor to be heard and to offer evidence in support of his appeal, the Department shall give notice of his decision within a period of thirty days after the Contractor has given the said evidence in support of his appeal, subject to arbitration, as hereinafter provided. Such decision of the Department in respect of every matter so referred shall be final and binding upon the Contractor and shall forthwith be given effect to by the Contractor, who shall proceed with the execution of the works with all due diligence whether he requires arbitration as hereinafter provided, or not. If the Department has given written notice of his decision to the Contractor and no claim to arbitration, has been communicated to him by the Contractor within a period of thirty days from receipt of such notice the said decision shall remain final and binding upon the Contractor. If the Department fail to give notice of his decision, as aforesaid within a period of thirty days after being requested as aforesaid, or if the Contractor be dissatisfied with any such decision, then and in any such case the contractor within thirty days after the expiration of the first named period of thirty days as the case may be, require that the matter or matters in dispute be referred to arbitration as detailed below:

All and any disputes or differences arising out of or touching the order based on this specification shall be decided by a panel of arbitrators as detailed below in the case of Indian Nationals tendered for the work.

<u>Value of claim</u>	<u>Panel of arbitrators</u>
i) Disputes involving amounts up to Rs. 10,000/- and below	Superintending Engineer of the T.S.TRANSCO., Other than the circle to which the disputes relate.
ii) Disputes involving amount from Rs. 10,000/- to Rs. 50,000/- .	Any Chief Engineer of the T.S.TRANSCO.

There shall not be any reference of disputes, the value of which is above Rs. 50,000/- to arbitration. The parties shall approach the competent Civil Courts having jurisdiction, if any such disputes shall arise within Hyderabad and Secunderabad only.

3. TIME FOR COMPLETION

Program of work:

- The total period of completion is (as specified in the NIT) **6 (Six) months** from the date of handing over of site or premises to proceed including rainy season. Keeping in view, the schedule for handing over of site, the work should be programmed such as to achieve the milestones as in "Rate of progress statement" enclosed.
- The program of work to be done from time to time is indicated below. However, the Executive Engineer in-charge of the work will decide the priority of various items of work and their location and direct the successful tenderer for execution so as to complete the entire work as required. The date of commencement of this program will be the date on which the site (premises) is handed over to the contractor. The agreement shall be concluded before the site is handed to the contractor and the work is commenced by him.
- After signing the agreement, the contractor shall forthwith begin the work, shall regularly and continuously proceed with them.

d. **Rate of progress:**

Work programmed for the above work is as follows:

At the end of Month	Cumulative Progress of work
6 months	100%

- e. Further, it shall also be noted by the tenderer, if on any account, work gets dislocated due to the site being not available for work on any day or due to any other reason it is not binding on the T.S.TRANSOCO to pay any compensation to the contractor but the corresponding extension of time will be granted to the contractor.

NOTE: The periods entered above for the purpose of defining the rate of progress may be altered by the Engineer in-charge or appropriate authority authorized by T.S.TRANSOCO to suit the plant requirement of project completion. Early completion of work before schedule time will be appreciated.

If due to any other reasons beyond the control, of the contractor, the progress is slow during any period above, the same shall be made up in subsequent periods and the program shall be complied within minimum possible time. The Executive Engineer in-charge shall direct the sequence and pace of the parts of the work and the contractor shall comply with them. Payment will be effected as per actual work completed and billed for.

4. QUALITY CONTROL

a. **Identifying Defects:**

The Engineer-in-Charge shall check the Contractor's work and notify the Contractor for any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Engineer-in-Charge may instruct the Contractor to verify the Defect and to uncover and test any work that the Engineer considers may be a Defect.

b. **Tests:**

If the Engineer-in-Charge instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the Contractor shall pay for the test and any samples.

c. **Correction of Defects:**

The Engineer-in-Charge shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins on Completion. The defects liability period shall be extended for as long as defects remain to be corrected by the Contractor.

- d. 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's notice.

e. **Uncorrected Defects:**

If the contractor has not corrected the defect within the time specified in the Engineer-in-Charge's notice, the Engineer-in-Charge will assess the cost of having the defect corrected and the contractor will pay this amount.

- f. The Engineer-in-Charge may also introduce checklists, which shall be kept in Bound registers by the construction supervision staff. The contractor may be required to fill up these lists in the first instance and shall be subsequently checked by the Construction / Quality Control engineers.

g. **Quality Control:**

In addition to the normal inspection by the regular staff in charge of the Construction of work, the work will also be inspected by the Executive Engineer /Superintending Engineer Quality control Circle or by the Vigilance Cell Unit and any other authorized external Agency if any sub-standard work or excess payments are noticed with reference to measurement books etc., during inspection, action will be taken based on their observations and these will be effected by the Engineer-in-Charge of the execution of the work.

5. PENALTY:

- a) **Penalty for late completion: As per Clause no. 36 (i) mentioned in Award of Contract in the document.**

6. Taxes included in the bid:

- a. The percentage quoted by the contractor shall be deemed to be inclusive of taxes on all materials that the contractor will have to purchase for performance of this contract. All taxes, duties etc., payable to the Government / Quasi Government bodies, including sales tax on works contract / turnover at the rates as on date of opening of tender are deemed to be included in the quoted value. Statutory variations in the applicable rates or newly taxes / duties after opening of tenders will to be T.S. Transco's account. The contractor shall first pay the same and claim reimbursement from T.S. TRANSCO, to the extent admissible as above. However, the T.S. TRANSCO., will not be responsible for payments / excess payments made under misapprehension of law.

7. GOODS AND SERVICE TAX:

Goods and Service Tax at the prevailing rate given as per schedule of labour portion and Material Portion shall be given from work bills i.e., to be reimbursed to contractor on proof of payment of Goods and Service tax by contractor.

8. Recoveries :

Recoveries due from contractor shall be made from bills approved for payment every month or at other periods, when the bills are prepared for the various items in the following order of priorities and extents.

- a) penalty in full, if levied :
- b) expenditure, if any, incurred by the TSTRANSCO., on the contractor's behalf on labour or materials in full :
- c) hire charges for machinery, if any :
- d) other recoveries :
- e) Recovery of advance and secured payments or payments for
- f) Preliminary works in full or installment due if the same may have been allowed.
- g) Charges on account of supplies of materials actually supplied by the TS Transco. used upon various items of works billed for.
- h) Outstanding recoveries, if any, shall be made from the succeeding bills with the provision that outstanding payment for any item shall for purpose of recovery, be added to the same item for recovery in the aforesaid succeeding bills.

8. Cost of Repairs:

Loss or damage to the Works or materials to the Works between the Start Date and the end of the Defects Correction Periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

9. **SEIGNIORAGE CHARGES:** Seigniorage charges have to be paid by you to the Assistant Director Mines & Geology Department and shall be produced along with your work bills or otherwise it will be deducted from your as per rules in vogue.

The seigniorage charges for the materials covered under this works are as follows:

Sl. No.	Material	Seigniorage charges
a.	Sand	Rs.40.00 / Cum
b.	Metal	Rs.75.00 / Cum
c.	Gravel	Rs. 30.00 / Cum
d.	Stone Crusher Dust	Rs. 75.00 / Cum
e.	Bricks	Rs. 6000.00 / kiln / annum

The seigniorage charges are liable to be revised and amended from time to time by the State Government by notification in the "Telangana Gazette". If the revised seigniorage fee is more than the above mentioned, the recovery from the contractor's bills will be as per revised rates. Additional seigniorage charges over and above should be borne by the contractor.

11.1 Tolls & Seigniorage:

The contractor shall, unless otherwise specially stated in the tender notice and subsequently on this basis in the contract be responsible for the payment wherever payable of all import duties, tolls control duties, seigniorage, quarry fees etc., on all materials and articles that he may use. Seigniorage and local cess charges payable on the materials used by the tenderer in the work will be recovered at rates fixed by competent authority from the contractors bills and the same will be remitted to Mines & Minerals Department.

No sales tax will be collected from the contractor for the materials supplied by the T.S.TRANSCO.

2% SMET on Seigniorage charges will be recovered from the contractors bills in addition to the Seigniorage charges.

II. SUPPLEMENTAL CONDITIONS TO THE PRELIMINARY SPECIFICATIONS

The following conditions shall also be followed in addition to those mentioned in P.S. to the T.S.S.S.

1. DATA AND DRAWINGS TO BE FURNISHED BY THE CONTRACTOR:

The contractor shall furnish the following information to the Executive Engineer for approval within the time stipulated against each item from the date of handing over of site to the contractor for starting the work.

- i) Layout plan of construction plant and equipment for the execution of the work which the contractor proposes to adopt at site within 2 weeks from the date of receipt of Letter of Intent by the Contractor.
- ii) (a) Prior to the commencement of the work, the contractor shall submit to the Executive Engineer, for approval, drawing or prints in triplicate showing the location of stores, buildings, staff housing facilities if any, roadways, unloading facilities and storage yards etc., which he proposes to put up at the site.
(b) Any changes in the approved layout will be subject to further approval.
(c) Detailed schedule for each working season, showing the program proposed to be achieved month by month for each major item and get the same approved. The Executive Engineer is further empowered to ask for more detailed schedule or schedules, say week by week for any such item or items and the contractor shall supply the same as and when called for, without any reservation whatsoever.
(d) The contractor shall furnish every month or at any intervals as may be desired the progress schedules in the form of progress charts, statements and reports as may be approved by the Executive Engineer.
(e) The contractor shall maintain proper charts and details regarding machinery, equipment, labour personnel and other matters as may be specified by the Executive Engineer. He shall further submit returns in the proforma and details as may be specified by the Executive Engineer from time to time.

2. DEPARTMENTAL SUPPLY OF MATERIALS:

The contractor shall submit his requirements of materials well in advance and his indents must be commensurate with actual needs.

The TS. TRANSCO will be responsible for the supply of only such materials and only to such an extent according to availability and such rates as may be specified. Delay in the supply of such stores, due to any reasons whatsoever shall not entitle the contractor to claim any compensation, but the Executive Engineer-in-charge will, on the written application of the contractor, give such extension of time as he deems reasonable. Any other materials or stores, required for bonafide use on works, available with the Department, may be issued by the Executive Engineer in-charge at the book rate or market rate on the date of issue whichever is higher. This specifically covers the issues of HSD Oil, Petrol and other lubricants, AC sheet and other materials to the extent department may be able to spare.

In case, materials issued to contractor departmentally are left over unused due to short use or excess or any other cause, the materials will be taken back if returned in good condition at the rates at which they were supplied by the TS. TRANSCO. If the materials are not returned or not in the opinion of the Executive Engineer-in-charge of the work in a fit condition for use, they will be treated as sold to the contractor.

3a. MATERIALS, TOOLS AND PLANT BROUGHT ON TO THE SITE OF WORK

All the materials, tools and plant of the contractor brought to and delivered upon the site for purpose of the work shall from the time of their being so brought, be deemed to be in the possession of T.S.TRANSCO., to be used for that purpose only and shall not, on any account, be removed or taken away by the contractor or any other person without the express permission in writing of the Executive Engineer but the contractor shall nevertheless be solely liable and responsible for any loss or destruction thereof or damage thereto.

3b. Possession of the Site.

The Department shall give possession of the site to the Contractor. If possession of a part site is given, the Department will ensure that the part site so handed over is amenable to carry out the work at site by the Contractor.

4. PROGRESS SCHEDULE :

The contractor shall furnish within two weeks of the order to start the works, a progress schedule in quadruplicate including the date of start, the monthly progress expected to be achieved and the anticipated completion, date of each major item of work to be done by him, also indicating the date of procurement and setting of materials, plant and machinery.

The schedules should be such as is practicable of achievement towards completion of the whole work in the time limit and in keeping with the rate of progress specified in the tender notice and shall have the approval of the Executive Engineer. Further, dates for the progress schedule shall be kept up to date. In case, it is found subsequently necessary to alter this schedule, the contractor shall submit in good time a revised schedule incorporating the necessary modifications proposed and get the same approved by the Executive Engineer. No revised schedule shall be operative without such acceptance in writing.

The Executive Engineer shall have at all time the right without any way vitiating this contract or forming grounds for any claim, to alter the order of the works or any part thereof and the contractor shall after receiving such directions, proceed in the order directed. The contractor shall also revise the progress schedule accordingly and submit four copies of the revised schedule to the Executive Engineer within 7 days of the Executive Engineer's direction to alter the order of work.

The contractor shall furnish sufficient plant equipment and labour and shall work such hours and shifts as may be necessary, to maintain the progress on the work as per the approved progress schedule. The working shift hours shall comply with all T.S.TRANSOCO, regulations in force.

5. SPEED OF WORKS:

The contractor shall, at all times maintain the speed of works to conform to the latest operative progress schedule, but the Executive Engineer may, at any time in writing, direct the contractor to slow down any part of the work for any reason (which shall not be questioned) whatsoever and the contractor shall comply with such orders of the Executive Engineer. The compliance of such order shall not entitle the contractor to any claim or compensation. Such order of the Executive Engineer for slowing down the work will, however, is duly taken into account while granting extension of time that may be requested by the contractor.

6 (i). SUPERVISION, SKILLED & UN SKILLED LABOUR :

The contractor shall provide supervising engineers, sufficiently technically qualified and experienced. The Chief Supervising Engineer of the contractor or his agent shall have full powers as the representative of the contractor to enter into negotiations at site in regard to the execution of the contract.

6 (ii) LABOUR CONDITIONS :

- (a) The contractor shall comply with the labour rules and regulations as may be specified from time to time.
- (b) The contractor shall, as far as possible, obtain his requirements of all workers through the nearest employment exchange. No person below the age of 15 years shall be employed as labourer.
- (c) The contractor shall pay fair and reasonable wages (whether or not such wages are controlled by any laws existing at the time) to the mazdoors employed by him for the work. In the even of any dispute arising between the contractor and his workers on the grounds that the wages paid are not fair or reasonable, the dispute shall, in the absence of legal or other relief to the workers, be referred to the Executive Engineer who shall decide the same. The decisions of the Executive Engineer shall be conclusive and binding on the contractor but such decision or any other decision in this behalf that the contractor's workman may obtain by recourse to law or other legal means available to them shall not in any way affect the conditions in the contract, regarding payments to be made by the T.S.TRANSOCO.
- (d) While employing skilled or unskilled labourers, the contractor shall give first preference to the persons certified to him by the Executive Engineer or his duly authorized representatives as persons who are adversely affected by the other projects, displaced persons of the submersible villages if any, due to this project and also retrenched labour of Upper Sileru, Lower Sileru and other projects and shall be bound to pay such persons wages not below the minimum which T.S.TRANSOCO., may have fixed in this behalf.

- (e) The contractor shall provide reasonable facilities to the satisfaction of the Executive Engineer for the labour employed by him where no such natural facilities exist. The usual facilities are weather proof shelters for rests and meals, supply of wholesome drinking water facilities for women workers, suitable residential accommodation, recreational and cultural activities general sanitation and health measures etc.
- (d) The implementation of any provisions of this clause shall in no way entitle the contractor to claim any compensation over and above the rates provided in the contract.
- (e) During continuance of the contract, the contractor and his sub contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notifications that may be issued under any labour law in future either by the State or the Central Government or the local authority and also applicable labour regulations, health and sanitary arrangements for workmen, insurance and other benefits.

7. Drawing to be kept at site:

One copy of the drawings furnished to the contractor shall be kept by the contractor on the site and the same shall at all reasonable time be available for inspection and use by the Engineer-in-Charge and the Engineer-in-Charge's representative and by any other persons authorized by the Engineer-in-Charge in writing.

B.I.S. [I.S.I.] books and APSS to be kept at site:

A complete set of Indian Standard specification referred to in "Technical Specifications" and A.P.S.S. shall be kept at site for reference.

8. Site Order Book:

An order book shall be kept at the site of the work. As far as possible, all orders regarding the work are to be entered in this book. All entries shall be signed and dated by the Department Officer in direct charge of the work and by the contractor or by his representative. In important cases, the Executive Engineer or the Superintending Engineer/Civil will countersign the entries, which have been made. The order book shall not be removed from the work, except with the written permission of the Executive Engineer.

9. Safety measures:

1. The contractor shall take necessary precautions for safety of the workers and preserving their health while working in such jobs, which require special protection and precautions. The following are some of the measures listed but they are not exhaustive and contractor shall add to and augment these precautions on his own initiative where necessary and shall comply with directions issued by the Executive Engineer or on his behalf from time to time and at all times.
2. Providing protective foot wear to workers situations like mixing and placing of mortar or concrete sand in quarries and places where the work is done under much wet conditions.
3. Providing protective head wear to workers at places like underground excavations to protect them against rock falls.
4. Providing masks to workers at granulates or at other locations where too much fine dust is floating about and sprinkling water at frequent intervals by water hoses on all stone crushing area and storage bins abate to dust.
5. Getting the workers in such jobs periodically examined for chest trouble due to too much breathing in to fine dust.
6. Taking such normal precautions like fencing and lightening in excavation of trenches, not allowing rolls and metal parts of useless timber spread around, making danger areas for blasting providing whistles etc.
7. Supply workmen with proper belts, ropes etc., when working in precarious slopes etc.
8. Avoiding named electrical wire etc., as they would electrocute the works.
9. Taking necessary steps towards training the workers concerned on the machinery before they are allowed to handle them independently and taking all necessary precautions in around the areas where machines hoists and similar units are working.

10. Indemnity bond:

Name of work "Construction of 15 Nos. Platforms (20X10 m) 8" height with a ramp at TLC Stores, Shapurnagar Hyderabad" I/We Resident of do hereby bind myself to pay all the claims may come (a) under Workmen's Compensation Act. 1933 with any statutory modification thereof and rules there under or otherwise for or in respect of any damage or compensation payable in connection with any accident or injury sustained (b) under Minimum wages Act 1948 (c) under payment of wages Act.1936 (d) under the Contractor labour (Regulation and Abolition) Act. 1970 by workmen engaged for the performance of the business relating to the above contract i.e., Failing such payment of claims of workmen engaged in the above work, I/We abide in accepting for the recovery of such claims, effected from any of my assets with the departments.

Signature of Tenderer

11. Liabilities of the contractor:**a. Accident Relief and workmen compensation:**

The contractor should make all necessary arrangements for the safety of workmen on the occurrence of the accident, which results in the injury or death of any of the workmen employed by the contractor, the contractor shall within 24 hours of the happenings of the accident and such accidents should intimate in writing to the concerned Asst. Engineer / Asst. Executive Engineer of the Department the act of such accident. The contractor shall indemnify Government against all loss or damage sustained by the Government resulting directly or indirectly from his failure to give intimation in the manner aforesaid including the penalties or fines if any payable by Govt. as a consequence of Govt. failure to give notice under workmen's compensation Act or otherwise conform to the provisions of the said Act. In regard to such accident.

b. In the event of an accident in respect of which compensation may become payable under the workmen's compensation Act VIII 23 whether by the contractor, by the Government it shall be lawful for the Executive Engineer to retain such sum of money which may in the opinion of the Executive Engineer be sufficient to meet such liability. The opinion of the Executive Engineer shall be final in regard to all matters arising under this clause.

c. The contractor shall at all times indemnify the Govt. of A.P. against all claims which may be made under the workmen's compensation act or any statutory modification thereafter or rules thereunder or otherwise consequent of any damage or compensation payable in consequent of any accident or injuries sustained or death of any workmen engaged in the performance of the business relating to the contractor.

12. Contractor's staff, representatives and Labour:

(a) The contractor shall, at all times, maintain on the works, staff of qualified Engineers, and Supervisors of sufficient experience of similar other jobs to assure that the quality of work turned out shall be as intended in the specifications. The contractor shall also maintain at the works, a Work Manager or sufficient status, experience and office and duly authorize him to deal with all aspects of the day-today work. All communications to any commitments by the Work Manager shall be considered as binding on the Contractor.

(b) The Contractor shall at all times submit details of skilled and unskilled labour and equipment employed to the Engineer-in-Charge in prescribed proforma as he may require to assess and ensure the proper progress of work.

(c) If the contractor does not employ the technical person agreed to on the work a fine of Rs. 25,000/- will be imposed. If he does not employ for 30 days, thereafter it becomes a fundamental breach of contract.

13 A. SITE CONDITIONS

This work is proposed to be carried out at - at TLC stores Shapurnagar The tenderer's special attention is drawn to the aspect of the restricted site conditions. The tenderer has to plan and execute various storage and working areas and work in such a way that then in least disturbance to the working of the offices. Any damages to the structures, vehicles or personnel shall be made good at tenderers expense. The tenderer will be required to adjust the working hours who suitably, as required and as directed by the Engineer-in-charge.

Before submitting the tender, the tenderer shall familiarize him with the site conditions and quote accordingly. No claim towards any restriction on storage space, movements, working hours or methods shall be entertained for any reason whatsoever.

TENDERER

13 B. USE OF SITE:

The contractor will be permitted to use the site without any charge and all lands required for the permanent occupation of the works. He will also be allowed during the period of his contract the use of any other lands in the vicinity of the works as and when the Executive Engineer may consider such use to be necessary for the bonafide purpose of the works subject to availability. The contractor shall not commence any operation on such lands except with prior approval of the Executive Engineer.

13 C. CONSTRUCTION OF THE CONTRACT:

The contract shall in all respects be constructed and operated as contract as defined in the Indian Contract Act, 1872 and all payments to be made there under shall be made in ` Rupees ` unless otherwise specified.

13 D. SUSPENSION OF WORKS BY THE CONTRACTOR:

If the Contractor shall suspend the works, or sublet the work without sanction of the Engineer in-Charge, or in the opinion of the Engineer-in-Charge shall neglect or fail to proceed with due diligence in the performance of his part of the Contract as laid down in the Schedule rate of progress, or if he shall continue to default or repeat such default in the respects mentioned in clause.27 of the APSS Engineer-in-Charge shall take action in accordance with Clause 61 of APSS.

If the Contractor stops work for 28 days and the Stoppage has not been authorised by the Engineer-in-Charge the Contract will be terminated under Clause 61 of APSS.

If the Contractor has delayed the completion of works the Contract will be terminated under Clause.61 of APSS.

14. FIRST AID:

At the work site, there shall be maintained in readily accessible place first aid appliances and medicine including an adequate supply of sterilized dressing and sterilized cotton wool. The appliances shall be kept in good order. They shall be placed under the charge of a responsible person who shall be readily available during the working hours.

15. Safety:

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

III. GENERAL CONDITIONS

1. G E N E R A L:-

The work to be performed under this contract consists of providing labour, materials, plant, equipment supplies including POL transportation and all incidental items not shown or specified but reasonably implied or necessary for the proper completion of work (except items specified to be furnished by the Engineer-in-charge) all in strict accordance with the drawings, schedules and specifications, including revisions and amendments thereto and such detailed drawings as may be provided by the Engineer-in-charge during the execution of contract.

2. SCOPE:

The scope of work covered by this technical specification is for the civil works for the **“Construction of 15Nos. Platforms (20X10 m) 8” height with a ramp at TLC Stores, Shapurnagar Hyderabad.”** The work involves earth work excavation , RR masonry , flush pointing and other related works required for the completion of the work as per APDS specifications and as specified by the Engineer –In - Charge.

3. WORKING CONDITIONS:

The contractor shall take special note of the following aspects of restricted working conditions while executing the work and should quote his rates accordingly. The contractor shall ensure the following strictly at no extra cost under all conditions.

- a) The work shall be carried out with least disturbance and inconvenience to the office staff and visitors.
- b) Necessary precautions and safety arrangements shall be taken for carrying out the work safely and effectively without causing damage to the existing structure and to prevent accidents as directed by Engineer-in-charge.
- c) Minimum area to the extent possible shall be used for stacking of construction materials and machinery, duly leaving parking space for TSTRANSCO vehicles and employees vehicles, as per the approval of Engineer-in-charge.

- d) The contractor shall make his own arrangements for erection of barricades around the area earmarked for stacking the construction materials, construction Tools & tackles and equipment as directed by Engineer-in-charge.
- e) The working hours for certain works may have to be adjusted in such a way that cause least disturbance to the working of the office in strict compliance to the instructions of the Executive Engineer-in-charge, whose decision shall be final.
- f) The contractor shall make good all losses/damages suffered by structures or persons connected or not connected with work or TSTRANSCO as a result of the activity of the contractor. The contractor shall take necessary insurance covering the same.

4. SUBSTANDARD WORK/MATERIAL:

The contractor shall promptly remove from the premises all materials/work condemned by the Executive Engineer/Civil or his authorized representative, as failing to conform to the contract, whether incorporated in the work or not, and the contractor shall promptly replace and re-execute such work in accordance with the contract and without expense to the TSTRANSCO. If the contractor does not remove such condemned work and materials within three days of written notice to him the owner may remove and the expenses of such removal within ten days time thereafter will be debited to contractors account. The owner may upon ten days written notice sell such materials at auction or private sale and shall account for the net proceeds thereof after deducting all the costs and expenses that should have been borne by the contractor.

5 Testing of works and materials

All materials used and works done shall be subject to approval of the Engineer.

The contractor shall arrange sufficiently in advance to test materials and portions of works in order to prove their soundness and efficiency if required, including samples and supporting test results from the approved laboratory and other documentary evidence from the manufacturer, wherever applicable, and indicate the types of materials and their respective sources. The delivery of materials at site shall commence only after the approval of the quality, grading and sources of the materials by the Engineer.

The quality of all materials approved shall be maintained throughout the period of construction and periodical tests shall be carried out to ensure that it is maintained. The contractor shall conduct tests at work site/approved laboratories and shall maintain test reports at site for cement, coarse aggregates, fine aggregates, water, steel, bricks and concrete at the following frequency :-

Sl. No.	Description of material	Frequency of test	Allowable limits
1.	CEMENT : (IS : 8112-1989)	One for each source of supply in a month	Shall not be less than 3500 sqcm / gm
	a) Fineness	-do-	Initial setting time shall not be less than 30 minutes and final setting time shall not be more than 600 minutes.
	b) Setting time	-do-	Expansion (unaerated) shall be not more than 10mm by "Le Chatelier" method; if it fails, expansion of aerated sample shall be not more than 5 mm.
	c) Soundness	-do-	Compressive strength for 7 days shall not be less than 330 kg/cm ² and compressive strength for 28 days shall not be less than 430 kg/cm ²
	d) Compressive strength of cement mortar cubes 1:3 (1 cement :3 standard sand) by mass	-do-	
2.	Coarse aggregate : (IS383-1970)	One test for 15 Cum or atleast on the day of concrete if concrete quantity is less than 15 cum.	40mm Metal : a)Seive analysis : -63mm – 100% 40mm- 85 to 100% 20mm-0-2-%; 10mm-0.5%
	a) Gradation	Once for each source of supply or when ever change in texture is noticed.	b) Flakiness Index : shall be less than 30% by weight 20mm Metal : a)Sieve analysis : -Limits : 40mm – 100%; 20mm-95 to 100%; 10mm-25 to 55%; 4.75-0 to 10%
	b) Aggregate impact value		

Sl. No.	Description of material	Frequency of test	Allowable limits
			b) Flakiness Index : less than 25%
			c) Aggregate impact value: 20-40(IS 2386-1963)
3.	FINE AGGREGATE (IS383 –m1970)		
	a) Gradation for concrete	One test for every 15 cum.	Fineness modules : Fine sand limit 2.2 to 2.6
	b) Gradation for masonry	Atleast once on the day of work	Medium sand limit 2.6 to 2.9
	c) Gradation for finishing	-do-	Coarse sand limit 2.9 to 3.2
	d) Bulkage	Three for each day of work i.e. morning noon and evening	b) Silt Content : shall be less than 4% by weight
	e) Silt content	Atleast once on the day of work	
4.	WATER : Chemical test	One test for each source	The water quantity shall be as per clause 5.4 of ISI 456-2000. The PH value of water shall not be less than 6.
5.	STEEL : (Fe 415 (IS1786-1985))		
	a) 0.2% proof stress	One for each source of supply and once in six months for fresh supply	4150 kg/cm ² (Minimum)
	b) Elongation	-do-	Percentage of elongation 14.5% minimum
	c) Tensile strength	-do-	Ultimate tensile strength 4900 kg/cm ² (Minimum)
6.	CONCRETE : (IS456:2000)		
	a) Cube strength	Frequency of testing as per clause 15.2 of IS 456-2000 for example 6 cube specimens, 3 each for 7 days & 28 days strength for every 15 cum. Cube shall be prepared, cured and tested in accordance with the requirement of IS 516.	a) Compressive strength (7 days) M15-100 Kg/cm ² (Minimum) M20-135 KG.cm ² (Minimum) Compressive strength (7 days) M25-170 Kg/cm ² (Minimum) M30-200 KG.cm ² (Minimum) b) Compressive strength (28 days) M15-150 Kg/cm ² (Minimum) M20-200 Kg/cm ² (Minimum), Compressive strength (28 days) M25-250 Kg/cm ² (Minimum) M30-300 Kg/cm ² (Minimum)
	b) Slump	Thrice in a day of concrete in morning, noon and evening	a) Foundation footing – 10mm to 25mm b) Column beams and slabs – 25mm to

Sl. No.	Description of material	Frequency of test	Allowable limits
			40mm (with normal reinforcement) c) Beams, slabs – 40mm to 50mm (with congested reinforcement)

A Register of record of material testing and Register of daily events showing materials received, labour engaged, outturn of work etc. shall be maintained at site and shall be signed by the contractor or his authorized representative and the Engineer

6. Rejection of Materials/works

Any material brought to site which in the opinion of the Engineer is defective, sub-standard, damaged, contaminated, deteriorated or does not comply with the requirement of the specification shall be rejected. The contractor shall remove from site such materials within 4 hours of notice from site.

If the work or portion of the work which in the opinion of the Engineer is found to be defective or unsound, the contractor shall pull it down and re-execute the same work at his own cost.

7. Measurement Materials

Materials requiring mixing should be measured separately in boxes of appropriate size before being mixed in the specified proportions.

8. Storage of Materials: Adequate safe, dry storage shall be provided for all materials particularly cement.

9. Codes

- a. Unless mentioned otherwise, current versions of all codes, specifications and standards issued by the Indian Standards Institution and Indian Roads Congress shall be fully applicable to these specifications. In the absence of appropriate publications by ISI or IRC, adoptable specification of the International Organization for Standardization shall apply.
- b. In case of any conflict in meaning between the specifications mentioned here in and those of ISI or IRC, the provisions of these specifications shall prevail.
- c. The following codes shall be applicable for the purpose. However the latest revision of these codes shall only be used.
 - i) **IS:383-1970** - Specification for coarse and fine aggregates from natural sources for concrete. (Second revision)
 - ii) **IS:2386-1963 (Part I to Part III)** - Methods of Tests for aggregates of concrete.
 - iii) **IS: 9103-1979** - Specification for admixtures for concrete.
 - iv) **IS:8112-1989** - Specification for 43 grade ordinary portland cement (first revision with amendment No.3.)
 - v) **IS:516-1959** - Methods of test for strength of concrete.
 - vi) **IS:1121-1974 (Part I to Part IV)** - Method of test for determination of strength properties of natural building stones.
 - vii) **IS: 7779-1975 (Part I to Part III)** - Schedule of properties and availability of stones for construction purposes.
 - viii) **IS:1077-1976** - Specification for common burnt clay building bricks (Third revision)
 - ix) **IS:3495-1976 (Parts I to IV)** - Methods of test for burnt clay building bricks (Second revision)
 - x) **IS:1003-1977 (Parts I & II)**- Specification for timber paneled and glazed door, window and ventilator shutters.
 - xi) **IS:432-1982 (Parts I & II)** - Specification of mild steel and medium tensile steel bars and hard drawn steel wires for concrete reinforcement.
 - xii) **IS:1786-1985** - Specification of Cold - worked steel, high strength deformed bars for concrete reinforcement (revised).
 - xiii) **IS:226-1975** - Specification for structural steel (Standard quality) (Fifth revision).
 - xiv) **IS:14687-1999** - Guidelines for false work for concrete structures.
 - xv) **IS:1597-1967 (Parts 1 & 2)** - Code of practice for construction of stone masonry.
 - xvi) **IS:2212-1962** - Code of practice for brick work.
 - xvii) **IS:2572-1963** - Code of practice for construction of hollow concrete block masonry.
 - xviii) **IS:4326-1993** - Code of practice for earthquake resistant design and construction of buildings (Second revision).

- xix) **IS:456-2000** - Code of practice for plain and reinforced concrete (Fourth revision).
- xx) **IS:800-1984** - Code of practice for general construction in steel (Second revision).
- xxi) **IS:3370-1967** (Parts I to IV) - Code of practice for concrete structures for the storage of liquids.
- xxii) **IS:1893-1984** - Criteria for earthquake resistant design of structures.
- xxiii) **IS:4082-1996** - Recommendations on stacking and storage of construction materials at site (Second revision).
- xxiv) **IS:1642-1960** - Code of practice for general engineering drawings (Second revision).
- xxv) **IS:696-1972** - Code of practice for general engineering drawings (Second revision).
- xxvi) **IS:962-1967** - Code of practice for architectural and building drawings (First revision).
- xxvii) **IS:1161-1979** - Specification for steel tubes for structural purposes (Third revision).
- xxviii) **IS:816-1969** - Code of practice for use of metal arc welding for general construction in mild steel.
- xxix) **IS:3414-1968** - Code of practice for design and insulation of joints in buildings.
- xxx) **IS:1331-1992 (Part I & II)** - Methods of non-destructive testing of concrete soils : general requirement (third revision)
- xxxi) **IS:1904-1986** - Code of practice for design and construction of foundations in soils : general requirement (Third revision)
- xxxii) **IS:2502-1963** - Code of practice for bending and fixing of bars for concrete reinforcement.

10. Execution of Works

- a. All the works shall be executed in strict conformity with the provisions of the contract documents, explanatory detailed drawings and specifications.
- b. The site should be cleared of all obstructions, vegetation, loose stones and materials before start of work.
- c. The Engineer in charge, Supervisor will inspect the work on a Day-to-Day basis.

11. Work in Monsoon

- a. The construction may entail working in monsoon also. The contractor must maintain a minimum labour force and execute the construction according to the prescribed schedule.
- b. Contractor is responsible for keeping the construction work site free from water.
- c. Damages due to rain or flood either in cutting or in banks shall have to be made good by the contractor till the work is handed over to the Department. The responsibility of de-silting and making good for the damages due to rain or flood rests with the contractor. No extra payment is payable for such operations and the contractor shall therefore, have to take all necessary precautions to protect the work done during the construction period.

12. Plinth Levels

A proper level should be maintained, in terms of horizontal and vertical alignment. A minimum acceptable plinth level above road level shall be maintained. The plinth level shall be agreed with the Engineer's representative.

13. Ramps:

Ramps required during execution may be formed wherever necessary and same are to be removed after completion of the work. No separate payment will be made for this purpose.

14. DETAILED SPECIFICATIONS OF MATERIALS

a. Water (APSS No. 129)

Water should be clean, fresh and free from all chemicals, salts and deleterious materials and vegetable growth. Water has to meet the requirements mentioned in Cl. 5.4 of IS:456-2000. Storage for water should be sufficient and adequate for the regular consumption of works and for the use of labour on site.

b. Earth (APSS No. 309 & 310)

For filling, the soil shall be free from all rubbish, organic or vegetable growth including roots, weeds etc. Black cotton soil should not be used for basement filling.

c. Sand (APSS No. 110)

Sand shall be clean river or pit sand of approved quality and free from salt, earth, dust or other impurities. Sand for plain and reinforced concrete shall confirm to IS : 383-1970. Sand for various purposes shall confirm grading as below.

Sand for Masonry --- table 110-A of APSS No.110

Sand for Plastering --- table 110-B & 110-C of APSS No. 110

Sand for Plain and Zone I to III of table 110-D of APSS No.110

Reinforced concrete

d. Stone for Masonry (APSS No. 107)

Stones used shall be strong, durable, dense, compact, close grained, homogeneous, fire resistant and shall be obtained from sources approved by Engineer. Stones shall additionally be hard, sound, free from cracks, decay and other flaws or weathering and shall be easily workable. Stones with round surfaces shall not be made use of.

Stones shall have a crushing strength of not less than 1000 Kg/cm². Stones with lesser crushing strength may be used in works with prior approval of the Engineer. Stones shall be non-porous and when tested in accordance with IS:1124-“Method of Test for Determination of Water Absorption” etc., shall show water absorption of less than 5% of its dry weight when soaked in water for 24 hours. Tests for durability and weathering shall be done in accordance with IS:1126 and IS:1125 respectively. The working of stones to required sizes and their dressing shall be as per IS:1127 “Recommendations for dimensions and workmanship of natural building stones for Masonry work” and IS:1129 “Dressing of Natural Building Stones”. Stones especially limestones and sand stones, shall be well seasoned by exposure to air before use in construction works.

e. Cement (APSS No. 112)

Cement should comply with the requirements of IS:8112-1989 and should be 43 grade ordinary Portland Cement, for making plain and reinforced concrete, mortar etc. The quality of cement shall be in conformity to the performance characteristics given in IS : 8112 - 1989. The contractor shall procure bulk cement required for the works only from reputed cement factories (main producers) acceptable to the Engineer and should obtain, furnish from suppliers of cement a test certificate for every consignment of cement. The cement bag shall bear the manufacturer's name or their registered trade mark. Cement shall be tested in accordance with IS : 4031-1988 and IS : 4032-1988.

When storing the bags, the floor should be raised 30 cms., above the ground and stacked in rows not exceeding 10 bags high, 60 cms clear from the walls in a closed water proof building protected from flood, rain and moisture and deterioration in such a manner that easy access and proper inspection and counting is possible.

The cement should be delivered to the site in sound dry bags and shall be stored properly. Cement packed in LDPE Bags may be preferred to ensure protection from moisture and dampness.

f. Coarse Aggregate (APSS No. 108)

The coarse aggregate shall be from hard granite crushed stone conforming to IS : 383-1970. The pieces of aggregate shall be non porous, hard, strong durable clean and free from clay, rounded in shape and shall have granular or crystalline non powdery surfaces. The aggregate shall be well graded. Tests where required shall be carried out in accordance with IS : 2386 - 1963.

g. Steel Reinforcement (APSS No. 126)

Reinforcement shall be free from pitting due to corrosion and free from loose rust, mill scale, paint, oil, grease, adhering earth etc. The over laps in the reinforcement shall be as per IS : 456-2000 wastage in steel will be at the cost of contractor.

The contractor shall procure MS and HYSD rods 415/500/550 Grade required for the works, only from the main manufacturing steel units (TISCO/ SAIL/ VSP /JINDAL make) to the prescribed specification of Bureau of Indian Standards or equivalent and licensed to affix to ISI or other equivalent certifications, marks and acceptable to the Engineer-in-charge. The contractor should obtain and furnish from suppliers of steel, necessary ISI test certificate for every consignment of steel, before use on work.

Mild steel bars shall conform to Grade I of IS:432.

High yield steel strength deformed bars shall conform to IS:1786. Binding wire shall conform to IS:280.

Erected and secured reinforcement after fabrication shall be inspected and approved by the Engineer prior to placement of concrete.

h. Handing over of work site

On completion of work, the Contractor shall remove all rubbish, debris, surplus materials, temporary work etc., from the site. The site shall be handed over in a tidy.

i. CRS Masonry in CM (1:6) in 1st sort (APSS 107 & APSS 611)

The work shall consist of a facing of selected stones hammer dressed at faces and joints with only a small proportion of smaller stones in the hearting.

The face stones shall be set in regular courses of uniform thickness from bottom to the top throughout. The height of the course should be uniform throughout by using stones of same height. The face stones shall be laid in headers and stretchers alternately so as to break joint by atleast 75mm and headers shall project atleast 100mm beyond stretchers. The stones shall be solidly bedded, set full in mortar with joints not exceeding 12mm in thickness and shall extend well back into the hearting.

Bond stones shall be placed in the wall @ interval of 2m in length and 600mm in height and shall run through the wall if the wall is not more than 600mm thick. If the wall is more than 600mm thick line of headers shall be laid from face to back each header overlapping the other by atleast 150mm.

The heart portion shall be filled with good flat bedded stones set as close as possible, well set in mortar.

The work on interior face shall be precisely the same as on the exterior face unless the work is to be plastered in which case the side joints need not be vertical.

j. Coursed Rubble Masonry in CM (1:6) 2nd sort: (APSS NO. 612)

This work shall be executed similar to the specifications for C.R.S. masonry 1st sort with the exception that the hearting and backing shall conform to the standard specification for random rubble masonry and bond with the face stones being carried up continuously with the face work.

k. RR Masonry in CM (1:6) (APSS 107 & APSS 615)

The face stone be hammered dressed on the face, side and the beds to enable to come into close proximity with the neighboring stone. Face stone shall be of not less width in plan than 150mm for walls of 400mm thick, 200mm for walls of 450mm thick. The face stone shall be laid in headers and stretchers alternatively so as to break joints by at least 75mm. Care is to be taken to break joints vertically.

Bond stones should built in the wall at intervals of 2m in length and 600mm in height and shall run through the wall if the wall is not more than 600mm thick. The heart portion shall be filled with good flat bedded stone set as close as possible, well set in mortar.

l. Cement Plastering in two coats CM 1:6 & CM 1:4 (APSS 901 & 904)

The surface of the wall shall be kept wet for 2 hours before plastering.

The Mortar in 1:6 proportions shall be dashed and pressed over the surface and then brought to smooth and uniform surface by means of float and trowel. The plaster shall be well pressed into the joints. Plaster shall be started from the top and worked down towards plinth. The work shall be tested frequently with a plumb bob and straight edge.

After the first coat the surface is left rough to receive the second coat. The final coat shall be applied a day or two after the first coat put on has set, but the first coat shall not be allowed to dry. The final coat shall consist of 1 part of cement to 4 parts of fine sieved sand and shall be applied as in the first coat and brought to a uniform surface and then finished with a sponge to give granular appearance.

The finished surface shall be watered for a period of at least 10 days.

Construction: The block board core shall confirm to the requirements specified in clause 7.1.1. of IS 2202 (Part I) : 1991. The frame constructed of stiles and rails shall be provided for holding the core.

m. Reinforced cement concrete (A.P.S.S. 402 & 403)

- i. Reinforced cement concrete shall correspond to **M20** grade as per **IS 456** - 2000 Nominal mix / Design MIX (400 Kg/1 cum)
- ii. All R.C.C. work shall be carried out in strict accordance with latest IS specification. No concrete work shall be cast in the absence of the works-in-charge/Engineer. All the materials used should be of good quality as mentioned in **Sec. 4.0** above.

- iii. Reinforcement shall be steel and shall be free from corrosion, oil, grease or paint. Bars shall be hooked or bent accurately and placed in position as per design and drawing, and bound together tight using M.S. binding wire properly annexed tying wire.
- iv. Binders, stirrups, links should be securely wired to the main ring. Reinforcement shall be lap jointed or spliced only if unavoidable. Not more than 33% of the bars as specified in drawing shall be lapped at one section.
- v. Proper cover shall be maintained between the reinforcement and the shuttering.
- vi. All cement concrete shall be machine mixed and machine vibrated.
- vii. The proportions of cement concrete specified in the above schedule are nominal and are indication of approximate proportion of cement, fine aggregate and coarse aggregate which may have to be altered suitably at site to obtain desired strength and workability. However, the quantity of cement shall not be less than specified below.

M20 Nominal mix /Design mix

400 kg of cement/1 cum of CC

Nominal Mix

**Cement in bags of 50 Kgs per
one Cubic metre (net) of cement concrete**

1:1.5 :3

8.84 bags of 50 kg

a. 1:2:4

6.6 bags of 50 Kg.

b. 1:3:6

4 42 bags of 50 Kg.

c. 1:4:8

3.24 bags of 50 Kg.

- viii. The quantity of water shall be varied to suit the moisture content of the aggregate and shall be just sufficient in produce a dense concrete with workability. Workability should be checked at frequent intervals as per **IS:1199**.
- ix. The Cement and aggregates shall be mixed thoroughly in the specified proportion in a mechanical mixer until the mixture is of uniform colour. Where machine mixing is done the concrete shall be mixed, until the mixture is of uniform colour and, in no case, for less than two minutes.
- x. Transportation, placing, compaction and curing of concrete.
- xi. After mixing, the concrete shall be transported from the mixer to the position of placing as rapidly as possible by appropriate mean without causing separation or segregation of concrete, maintaining the required workability.
- xii. Concrete shall only be placed after the Engineer has inspected the shuttering and reinforcement. The concrete shall be placed and compacted before initial setting of concrete commences and should not be subsequently disturbed.
- xiii. Concrete after depositing should be compacted thoroughly by means of a mechanical vibration. Over vibration and under vibration of concrete are harmful and should be avoided. Use of polythene sheet is recommended above the shuttering to arrest the slurry loss through the shuttering joints while placing and compacting the concrete.
- xiv. Concreting shall be carried out continuously upto construction joints already planned. Joint shall be kept where shear force is minimum.
- xv. Rigid supervision shall be maintained for curing the concrete after laying. All exposed faces of concrete shall be kept moist for a minimum period of 21 days by spraying water or using gunny bags.

n. PROGRESS REPORTS:-

Weekly progress reports showing the actual progress made in the receipt of the materials by the contractor and in completion of various works shall be regularly submitted in duplicate by the contractor to the Engineer. The performance monitoring shall be carried out with the help of computer aided system on MS project and Excel etc.

O. RESPONSIBILITY OF THE CONTRACTOR:-

The contractor shall guarantee and be entirely responsible for the execution of the contract in accordance with the general conditions of contract, specifications, schedules and appendices. He shall further guarantee and be responsible for proper erection within the guaranteed completion and performance periods. The contractor should give binding certificate necessarily stating that he has considered supply of all items excluding specified items to be provided by the

TENDERER

TSTRANSCO listed in the Appendix-II for completion of Substation /Bay's works. The contractor should also specify in the binding certificate that he has furnished the additional items with unit rates & approximate quantities required to complete the work and not covered in the schedules of bill of quantities. The lumpsum amount shall be quoted for finished item of work as per Specification of APSS. No extra payment over and above the quoted amount will be entertained. In case any work is not executed based on site condition suitable amount will be deducted and mutually agreed rates.

PART- B

1. INDIAN STANDARDS:

The aggregates both fine and coarse shall comply with the requirements of I.S.456 for concrete and I.S.383 for sand for use in rendering, plastering and mortar except as hereinafter stated and shall be delivered to and maintained at the site, clean, washed and free from dirt.

2. SAMPLES:

Samples shall be submitted to the Engineer and all aggregates used in the work shall be at least equal to the approved sample.

The aggregates such as sand, metal shall be obtained from the source as approved by the engineer-in – charge.

3. FINE AGGREGATE:

The fine aggregate for concrete, shall consist of naturally occurring and graded in accordance with the requirements of IS.383 for grading Zone-2 or grading Zone-3 except that no particle shall exceed 3/16 inch. It shall be free from excessive sharpness. Fine aggregate for cement mortar and rendering plastering shall comply with IS 383.

4. COARSE AGGREGATE:

Coarse aggregate shall be graded to produce sound concrete and for reinforced concrete shall be such that at least 5% by weight will pass a mesh of a size 1/4 per inch less than the minimum lateral distance between the reinforcing bars or 1/4 inch less than the minimum cover, whichever is smaller.

5. WATER FOR CONCRETE:

Clean fresh water shall be used for mixing concrete grout and mortar and curing. The water used for mixing and curing shall be free from deleterious matter and acids and alkaline substances in a solution or suspension. Potable water shall generally be used for mixing and curing concrete.

6. CEMENT

Ordinary Portland cement of Grade 43 manufactured as per IS 8112 of 1989 shall only be used.

Storage, certification, delivery and testing of the cement shall conform to IS:269, IS:8112 or the latest issue.

IS certification mark is obligatory.

Cement procured from major cement manufacturing plants such as

- 1) ACC Limited 2) Kesoram Cements 3) Orient Cements 4) Zuari Cements 5) CCI Limited 6) Andhra Cements 7) Coramandel Cements 8) Raasi Cements 9) Sri Vishnu Cements 10) Madras Cements 11) Ultra Tech Cement Limited – APCW 12) KCP Limited 13) Penna Cements 14) Panayam Cements 15) Grasim 16) Rajashree Cements 17) Mysore Cements 18) Century Cements 19) Ambhuja Cements 20) Priya Cements 21) Duncan cements 22) Parashakthi cements 23) Maha cements. 24) Dalmia Cements. 25) Deccan Cements 26) JSW cements. 27) Bharathi Cements. 28) Sagar Cements and 29) Nagarjuna Cements.

will only be accepted for which prior approval shall be obtained from the Er-In _ charge. Copies of invoices and test certificates from the cement manufacturers shall be submitted by the contractor to the Engineer and his clearance obtained before actual use. Such clearance will be provided within a maximum period of one week.

7. REINFORCEMENT

Steel required for reinforcement will be procured by the contractor The contractor shall workout the requirement immediately after taking over the site and receipt of working drawings and take the approval of the site Engineer and arrange for procurement.

Approved brands for Reinforced steel TMT TISCO/ SAIL/ VSP/ JINDAL

8. SCAFFOLDING:

The rates quoted by the tenderers for all civil works shall be inclusive of scaffolding charges required if any. Materials and labour required for scaffolding shall be arranged by the contractor himself.

9. Materials, Workmanship, period and certificate of maintenance and defect liability Quality

All the materials and workmanship shall be of the respective kinds described in the contract and in accordance with Executive Engineer instruction and shall be subjected from time to time to such tests as the Executive Engineer may direct at the place of manufacture or fabrication or on the site or at such other place or places as may be specified in the contract or at all or any of such places. The contractor shall provide such assistance, Instruments, Machines, Labour and materials as are normally required for examining, measuring and testing the work and the quality weight or quantity of any materials used and shall supply samples of materials before in corporation in the works for testing as may be selected and required by the Executive Engineer.

10. Tests, Inspection of defective materials

The contractor shall without extra cost provide samples and co-operate in the testing of materials. The Executive Engineer /ASST Executive Engineer shall have access at all times to the places of storage and where materials are being manufactured and proceeded for use in the works under contract to determine whether their manufacture and process are proceeding in accordance with the drawings and specifications. The Executive Engineer / Deputy Executive Engineer shall during the progress of the works have power to orders in writing form time to time in respect of the following.

- a) The removal from the site, within such time or times as may be specified in the order, of any materials which in opinion of the Deputy Executive Engineer are not in accordance with contract.
- b) The subscription of proper and suitable materials and
- c) The removal and proper re-execution, not with standing of any work which in respect materials or workmanship is not in the opinion of the Executive Engineer, in accordance with contract.

The Contractor shall carry out such order at no extra cost to the Executive Engineer. In case of default on the part of the contractor in carrying out such order, the Executive Engineer shall be entitled to employ and pay other persons to carry out the same and all expenses consequent thereon or incidental there to shall be recoverable from the contractor by Executive Engineer or may be deducted by the Executive Engineer from any monies due to or which may become due to the contractor.

In lieu of removing the work or materials not in accordance with the contract, the Executive Engineer / Deputy Executive Engineer may order such work of materials to remain and in that case such may be paid at the reduced rates as may be decided by Executive Engineer. However any action by the Executive Engineer /Asst Executive Engineer under this para shall not in any way absolve the contractor from his responsibility and liabilities as per conditions of contract.

11. Steel

The contractors shall procure mild steel (MS) bars and HYSD, Fe-415 reinforcement bars, High yield strength deformed bars (HYSD bars), rods and structural steel etc., required for the works, only from the main producers manufacturing steel (Tata, Vizag steel, SAIL) to the prescribed specifications of Bureau of Indian Standard . Necessary test certificated are to be produced to the Engineer - in – Charge before use on works.

The Diameter and Weight of Steel should be as follows:

<u>S.No</u>	<u>Diameter of rod</u>	<u>Sectional weight in KG / RM both for Plain and HYSD steel</u>
1	6 MM	0.22
2	8 MM	0.39
3	10 MM	0.62

4	12 MM	0.89
5	14 MM	1.21
6	16 MM	1.58
7	18 MM	2.00
8	20 MM	2.47
9	22 MM	2.98
10	25 MM	3.85
11	28 MM	4.83
12	32 MM	6.31
13	33 MM	6.71
14	36 MM	7.99
15	34 MM	9.86
16	36 MM	10.88

- a) **Note:** If any rods other than those diameters specified above are procured the weights shall be as per Standard Steel tables.

12. The work to be carried out as per following specification materials to be procured

Sl No.	Short Title	I.S.Number
I	CEMENT:	
1.	43 Grade ordinary port land cement	8112-1989
2.	Methods of physical tests for hydraulic cement	4031 (part 1 to 15)1988
II	AGGREGATES:	
1.	Aggregates (coarse and fine) from natural source for concrete.	383-1970
2.	Specification for sand for masonry:	2116- 1980
3.	Method of tests for aggregates for concrete:	2386 (part 1 to partIv)1963
III	BUILDING STONES:	
1.	Method of Tests for determination of strength Properties of natural building stones Part-1 : Compressive strength Part-II:Transverse strength Part-III:Tensile strength Part-IV:Shear strength	1121 (part1 to IV) 1974
2.	Quarrying stones for construction purpose Recommended practice	83831-1977
3.	Measurement of buildings and civil Engineering works	1200-(part-IV)1976
4.	Stone Masonry: specifications for dressing Natural building stones	1129-1972(part-IV)
5.	Drilling and permeability tests	5529(partiii)-1973
6.	Code of practice for permeability tests (during and after construction)	11216-1985.
IV	STEEL:	
1.	Code of practice for bending and fixing of bars Concrete reinforcement	2502-1963
2.	Specifications for High Strength Deformed steel bars and wires for concrete reinforcement	1781-1985
3	Recommendation for detailing of reinforcement In reinforced cement concrete works	5525-1969
4.	Mild steel and medium tensile steel bars for concrete reinforcement	432 (part-VIII)-1982

5.	Measurement of building and Civil Engineering Works(part-VII steel works and iron work)	1200(part-VIII)1993.
V MASONRY:		
1.	Code of practice for construction of stone masonry 1597(part-1)-1992 Rubble stone masonry	
2.	Measurement of building and Civil Engineering works plastering and pointing	1200(part-XII)-1976
VI CONCRETE:		
1.	Measurement of building and civil Engineering works method of concrete works	1200(part-ii)-1974
2.	Concrete works: code of practice for plain and reinforced concrete	456-2000
3.	Precast concrete coping blocks	5751-1984
4.	Method of Testing for strength of concrete	516-1959
5.	Specification for –Admixtures for concrete	9103-1979
6.	Method of sampling and analysis of concrete	1791-1963
7.	Concrete mixer – batch type	1791-1963
8.	Concrete vibrators- immersible type	2505-1980
VII EARTH WORK:		
1.	Measurement of building and Civil Engineers works method for earth work	1200(part-1)-1974
2.	Safety code for filling and other deep foundations	5121-1969
3.	Safety code for excavation works	3701-1966
4.	Code of practice for earth work on canals	4701-1982
5.	Method of testing for soils determinations of water content	2720(part11)1973
6.	Determination of water content dry density relation using light compaction	2720(part-VIII)-1980
7.	Determination of dry density of soils in place by sand replacement method (first revision)	2720(partXXvii)-1974
8.	Determination of Dry density of soils in – situ by the core cutting method (first revision)	270(part-xx1x)-1975
VIII. OTHER SUBJECTS:		
1.	Safety code for scaffolds	3698(part-1)-1968
2.	Safety code for ladders	3696(part-ii)-1966
3.	Recommendation of stacking and storage of construction materials at site	4082-1977

IV. I.S. 383 / 1970 TABLE -1

14.

COARSE AGGREGATE

I.s.Sieve Designation	Percent passing for Single – Sized Aggregate of Metal Size							Percent passing for graded - Aggregate of Nominal Size		
	63 mm	40 mm	20 mm	16 mm	12.50 mm	10 mm	40 mm	20 mm	16 mm	12.50 mm
80 mm	100	--	--	--	--	--	100	--	--	--
63 mm	85-100	100	--	--	--	--	--	--	--	--
40 mm	0-30	85-100	100	--	--	--	95-100	100	--	--
20 mm	0-5	0-20	85-100	100	--	--	30-70	95-100	100	100
16 mm	--	--	--	85-100	100	--	--	--	90-100	--
12.5 mm	--	--	--	--	85-100	100	--	--	--	90-100
10 mm	0-5	0-5	0-20	0-30	0-45	85-100	10-35	25-55	30-70	40-85
4.75 mm	--	--	0-5	0-50	0-10	0-20	0-5	0-10	0-10	0-10
2.36 mm	--	--	--	--	--	0-5	--	--	--	--

TABLE - II
X. FINE AGGREGATE

I.S sieve Designation	Grading Zone - I	Grading Zone - II	Grading Zone - III	Grading Zone - IV
10 mm	100	100	100	100
4.75 mm	99-100	90-100	90-100	95-100
2.36 mm	60-95	75-100	85-100	95-100
1.18 mm	30-70	55-90	75-100	90-100
600.00 microns	15-34	35-59	60-79	80-100
300.00 microns	5-20	8-30	12-40	15-50
150.00 microns	0-10	0-10	0-10	0-15

TABLE – III
XI ALL - IN AGGREGATE GRADING

I.S sieve Designation	40 mm Nominal	20 mm Nominal
80 mm	100	--
40.00 mm	95-100	95-100
20.00 mm	45-75	30-50
4.75 mm	24-75	10-35
600.00 microns	8-30	0-6
150.00 microns	0-60	--

XII For Vibrated Reinforced Concrete items (V.R.C.C.)

TABLE – IV
CHARACTERISTIC STRENGTH OF CUBE AT THE AGE OF 28 DAYS OF CURING

M-30	30 N/ mm ²	= 300 kgs/cm2
M-25	25 N/ mm ²	= 250 kgs/cm2
M-20	20 N/ mm ²	= 200 kgs/cm2
M-15	15 N/ mm ²	= 150 Kgs/cm2

Coarse Aggregate: Sieve Analysis / Bulk Density / Flakiness and Elongation
For every 10 cum of R.C.C. work – or part there of 1 No.

Fine Aggregate Sieve Analysis / Bulking of sand / silt content
For every 10 cum of R.C.C. work – or part thereof - 1 No.

13. TESTS TO BE CONDUCTED

S.No	Material	Tests conducted	
1	Cement	Normal consistency & Compressive strength (6 cubes will be cast and tested for 3 days & 7 days strength)	
2	Steel	Diameter & Weight	
3	Concrete	Compressive Strength	
4	Bricks/ Stone blocks / Flyash G Blocks/ Aerated	Dimensions, Compressive strength, Water Absorption	

	(Cellular) Autoclaved Concrete Blocks		
5	Concrete	Mix Design	
6	Coarse Aggregate	Sieve Analysis	
		Bulk Density	
		Flakiness & Elongation	
7	Fine Aggregate	Sieve Analysis	
		Bulking of sand	
		Silt Content	
8	Wood	Water Absorption	
		Compressive Strength	

Note: The Charges towards tests conducted have to be borne by the contractor

a) Sub-contracting:

If the prime contractor desires to sub-let a part of the work, he should submit the same at the time of filing tenders itself or during execution, giving the name of the proposed Sub-contractor, along with details of his qualification and experience. The Tender Accepting Authority should verify the experience of the Sub-contractor and if the Sub-contractor satisfies the qualification criteria in proportion to the value of work proposed to be sub-let, he may permit the same. The total value of works to be awarded on sub-letting shall not exceed 50% of contract value. The extent of subletting shall be added to the experience of the sub-contractor and to that extent deducted from that of the main contractor.

b) Other Contractors:

The Contractor shall cooperate and share the Site with other contractors, Public authorities, utilities, and the Department. The Contractor shall also provide facilities and services for them as directed by the Engineer-in-charge.

14. Special Note:

The quoted tender percentage shall also include the work of any kind necessary for the due and satisfactory construction, completion and maintenance of the works according to the drawings and these specifications and further drawings and orders that may be issued by the Engineer-in-Charge from time to time. The quoted tender percentage shall include compliance by the Contractor with all the general conditions of contract, whether specifically mentioned or not in the various clauses of these specifications, all materials, machinery, plant, equipment, tools, fuel, water, strutting, timbering, transport, offices, stores, workshop staff, labour and the provision of proper and sufficient protective works, diversions, temporary fencing and lighting. It shall also include safety of workers, first aid equipments suitable accommodation for the staff and workmen, with adequate sanitary arrangements, the effecting and maintenance of all insurances, the payment of all wages, salaries, fees, royalties / Taxes, duties or other charges arising out of the execution of works and the regular clearance of rubbish, reinstatement and clearing-up of the site as may be required on completion of works safety of the public and protection of the works and adjoining land. The work of Building in quality control / assurance shall be deemed to be covered in the quoted percentage.

The Contractor shall ensure that, the quoted tender percentage shall cover all stages of work such as setting out, selection of materials, selection of construction methods, selection of equipment and plant, deployment of personnel and supervisory staff, quality control testing etc. The work quality assurance shall be deemed to be covered in the tender percentage.

- a) The special attention of the tenderer is drawn to the conditions in the tender notices wherein reference has been made to the Telangana Standard Specifications [APSS] and the Standard preliminary specifications containing therein. These preliminary specifications shall apply to the agreement to be entered into between the contractor and the Government of Telangana and shall form an in-separable condition of the contract along with the estimate. All these documents taken together shall be deemed to form one contract and shall be complimentary to another.

- b) The tenderer shall examine, closely the A.P.S.S. / MORTH and also the standard preliminary specifications contained therein and sign the Superintending Engineer's office copy of the APSS / MORTH and its addenda volume in token of such study before submitting his overall tender percentage which shall be for finished work in-situ. He shall also carefully study the drawings and additional specifications and all the documents, which form part of the agreement to be entered into by the successful tenderer. The APSS / MORTH and other documents connected with contract such as estimate plans, specifications, can be seen on all working days in the office of the **Superintending Engineer/Civil.**

The tenderers attention is directed to requirements for materials under the clause 'materials and workmanship' in the preliminary specifications of APSS. Materials conforming to the Bureau of Indian Standards specifications, APSS etc., shall be used on the work and the tenderers shall quote his overall tender percentage accordingly.

The tenderer has to do his own testing of materials and satisfy himself that they conform to the specifications of respective I.S.I. Codes before tendering.

The contractor shall himself procure the required construction materials of approved quality including the earth for formation of embankment and water from quarries / sources of his choice. All such quarries / sources of materials required for the work shall be got approved by the Engineer-in-Charge in writing well before their use of the work.

The contractor shall himself procure the steel, cement, Bitumen, Blasting materials, sand, metal, soils, etc., and such other materials required for the work well in advance. The contractor has to bear the cost of materials for conveyance. The department will not take any responsibility for fluctuations in market in cost of the materials, transportation, extra leads for materials and for loss of materials etc.

Inspection of site and quarries by the tenderer: Every tenderer is expected before quoting his overall tender percentage, to inspect the site of proposed work. He should also inspect the quarries and satisfy himself about the quality, and availability of materials. The best class of materials to be obtained from quarries, or other sources shall be used on the work. In every case the materials must comply with the relevant standard specifications. Samples of materials as called for in the standard specifications or in this tender notice, or as required by the Executive Engineer, in any case, shall be submitted for the Executive Engineer's approval before the supply to site of work is begun.

The tenderer's particular attention is drawn to the sections and clauses in the A.P. standard specification dealing with

- a) Test, inspection and rejection of defective materials and work.
- b) Carriage
- c) Construction plant
- d) Water and lighting
- e) Cleaning up during the progress and for delivery.
- f) Accidents
- g) Delays
- h) Particulars of payments.

The contractor should closely peruse all the specification clauses, which govern the overall tender percentage he is tendering.

The defect liability period of contract is twelve months.

The estimate rates for items shown in the Schedule "A" include all construction materials. No escalation in rates will be paid unless specified in the tender document. The tenderer has to quote an overall tender percentage considering all the aspects of the tender to complete the finished item of work as per the APSS / MORTH / B.I.S. specifications, the special specifications appended, Drawings etc.

If there is any contradiction between APSS / MORTH and B.I.S. specifications, listed and detailed technical specifications, work shall be carried out in accordance with the written instructions of the Engineer-in-charge. In case of a job for which specifications are not

mentioned in the Schedule or in tender document, the job is to be executed as per the APSS / MORTH / B.I.S. specifications

In case of a job for which specifications are not available with the Schedule or in APSS / MORTH or B.I.S. code and are required to be prescribed, such work shall be carried out in accordance with the written instructions of the Engineer-in-charge.

The contractor should use the excavated useful soils and stone for construction purpose. Soils used for construction either for homogeneous section in hearting or in casing zone based on the suitability will be at free of cost and the cost of stone used for construction purpose will be recovered from the contractor's bill.

The contractor should quote his tender percentage keeping in view of the above aspects.

Additions and alternations by the Tenderer in the Schedule of quantities will disqualify the tender.

“The purchase Manual of TSTRANSCO shall govern where ever the Specification clauses are silent”.

BILL OF QUANTITIES

1. The quantities here given are those upon which the lump sum tender cost of the work is based but they are subject to alterations, +, -, deductions or additions as provided for in the conditions of this contract and not necessarily show the actual quantities of work to be done. The unit rates noted below are those governing payment of extras or deductions or omissions according to the conditions of the contract as set forth in the preliminary specifications of the Telangana Standard Specification and other conditions and specifications of this contract.
2. The rates given in the tender will be binding on the contractor till the work is completed and increase in quantities for the individual item of work up to plus 10% (Ten percent) over the corresponding quantities given in the Bill of Quantities.
3. For all items of work which are more than 10% in excess of the quantities shown in the Bill of quantities the rate payable for excess quantities beyond 10% shall be at awarded rate.
4. The items of work in the Bill of Quantities are based upon the estimates done by the department. If in the opinion of the contractor, any more items or work beyond those provided in the Bill of Quantities are necessary to complete the work as specified under “ Scope of the Works “ he should furnish details of such item of work and quote his rates for the same.

**Sd/-
CHIEF ENGINEER (I/C),
METRO ZONE/HYDERABAD.**