



भारत सरकार/ GOVERNMENT OF INDIA

कार्यपालक अभियंता का कार्यालय, / Office of the Executive Engineer,
केंद्रीय लोक निर्माण विभाग, / CENTRAL PUBLIC WORKS DEPARTMENT,

आईआईआईटीडीएम कर्नूलकैंपस, / IIIT-DM Kurnool Campus,
जगन्नाथ गट्ट, जी.पुल्ला रेड्डी पोस्ट, / Jagannatha Gattu, IIITDM Post ,
कर्नूल / Kurnool

NIT No: - 15 /EE/KURNOOL/e-Tender/2026-27

Name of work: - Construction of Rat proof specialized controlled storage structure for storing groundnut at ICAR IIGR-RRS. Anantapur, Andhra Pradesh. SH: Providing and Fixing of Doors, Windows, Rolling shutters and Other Miscellaneous works for Specialized seed godown at ICAR, Anantapur.

ECPT Amount: **Rs. 5,43,680/-**

NIT – INDEX

Name of Work: - Construction of Rat proof specialized controlled storage structure for storing groundnut at ICAR IIGR-RRS. Anantapur, Andhra Pradesh. SH:Providing and Fixing of Doors, Windows, Rolling shutters and Other Miscellaneous works for Specialized seed godown at ICAR, Anantapur..

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Certified that this N.I.T contains **1 to 100 pages** only.

**Assistant Engineer-1,
KCSD, CPWD, Kurnool.**

PART – A

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INFORMATION AND INSTRUCTIONS FOR BIDDERS FOR e-TENDERING

FORMING PART OF BID DOCUMENT AND TO BE POSTED ON WEBSITE

(Applicable for inviting open bids)

The **Executive Engineer, CPWD, Kurnool** on behalf of President of India invites online percentage rate bids from approved and eligible contractors of **CPWD (Buildings & Roads category)** for the following work:-

Sl. No.	Description	Details
1	NIT No.	15/EE/KURNOOL/E-Tender/2026-27
2	Name of Work	Construction of Rat proof specialized controlled storage structure for storing groundnut at ICAR IIGR-RRS. Anantapur, Andhra Pradesh. SH:Providing and Fixing of Doors, Windows, Rolling shutters and Other Miscellaneous works for Specialized seed godown at ICAR, Anantapur..
3	Estimated Cost Put to Tender (Composite)	Rs.5,43,680/-
4	Earnest Money (EMD)	Rs. 10,874/-
5	Period of Completion	30 days
6	Date of Pre bid meeting (Will be held in the O/o The Executive Engineer, CPWD, IIIT-DM Kurnool Campus, Jagannathagattu, G.Pulla Reddy Post, Kurnool, AP – 518007.	NA
7	Last time & date of online submission of bid, original EMD, copy of receipt for deposition of original EMD , and other documents as specified in the press notice.	Up to 15.00 Hours on 31.10.2026
8	Time & date of online opening of documents. (Mandatory documents)	At 15.30 Hours on 31.10.2026
9	Time & date of online opening of financial bids.	At 16.00 Hours on 31.10.2026
10	Last date & time of submission of hard copies of Experience Certificates if any, Registration Certificates, Affidavit if any, Undertaking and other Documents as specified in the press notice to Division Office by the Lowest Tenderer Only .	To be submitted during office hours within a week from the date of opening of Financial Bid. In case the last day happens to be closed holiday, these documents shall be submitted on the next working day.

1. The intending bidder must read the terms and conditions of CPWD-6 carefully. **He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.**
2. Information and Instructions for bidders posted on website shall form part of bid document.
3. The contractor can deposit original EMD either in the office of Executive Engineer inviting bids or division office of any Executive Engineer, CPWD within the period of bid submission. The contractor shall obtain the receipt of EMD from the concerned

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Executive Engineer (including NIT issuing EE) in the prescribed format uploaded by NIT issuing Executive Engineer. The bid document as uploaded can be viewed and downloaded free of cost by anyone including intending bidder. But the bid can only be submitted after uploading the mandatory scanned documents such as Account Payee Demand Draft/Banker's Cheque /FDR/Insurance Security Bond/ Bank Guarantee of any **Commercial Bank towards EMD in favour of respective Executive Engineer, copy of receipt of original EMD and other documents specified in the press notice.**

Note: EMD Shall be made issued only from the account of the bidder tenderer submitting the bid / tender. EMD made issued from the account other than that of the bidder / tenderer submitting the bid shall not be accepted

4. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen in the office of **The Executive Engineer, CPWD, Kurnool** and also can be downloaded from website <https://etender.cpwd.gov.in> or www.cpwd.gov.in free of cost.

Applicants are advised to keep visiting the above mentioned web-sites from time to time (till the deadline for bid submission) for any updates in respect of the tender documents, if any. Failure to do so shall not absolve the applicant of his liabilities to submit the applications complete in all respects including updates thereof, if any. An incomplete application may be liable for rejection.

5. But the bid can only be submitted after deposition of original EMD either in the office of Executive Engineer inviting bids or division office of any Executive Engineer, CPWD within the period of bid submission and uploading the mandatory scanned documents such as Insurance Surety Bonds, Account Payee Demand draft or Bankers Cheque or Fixed Deposit Receipts or/ and Bank Guarantee (for balance amount as prescribed) from any of the Commercial Bank towards EMD in favour of Executive Engineer, Tirupati Central Division, CPWD, Tirupati, receipt for deposition of original EMD to division office of any Executive Engineer including ***NIT issuing EE/AAO or with Authorization letter from EE (AAO/ AE (P) Only)),CPWD and other documents as specified.***
6. Those contractors, who are not registered **or have not updated their profile** on the website mentioned above, are required to get registered / **update their profile** beforehand. **The necessary training materials including the videos with step to step process available on download section of <https://etender.cpwd.gov.in>**
7. The intending bidder must have valid **class-III digital signature certificate with encryption key (Combo type) to perform any operations / transactions on the e-tendering portal / Website and the bidder should download and install the eMSigner on their system as per instructions available on download section of <https://etender.cpwd.gov.in>**
8. On opening date, the contractor can login and see the bid opening process. After opening of bids he will receive the competitor bid sheets.
9. Contractor can upload documents in the form of **JPG** format and **PDF** format.
10. **a) The contractor must ensure to quote rate in the prescribed column(s) meant for quoting rate in figures appears in Yellow colour and the moment rate is entered, it turns sky blue.**

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- b) Tenderer shall quote the percentage rate above or below two places of decimals only.**
- c) The tenderer shall quote only one overall percentage rate above or below on the designated place, which shall be applicable on both Civil and E&M components.**
11. In addition to this, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as “o” (ZERO). However, if a bidder quotes nil rate, the bid shall be treated as invalid and he will not be considered as lowest bidder
- a) If a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section/sub-head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.**
- b) It is mandatory to upload scanned copies of all the documents including GST registration. If documents are not uploaded, then bid will become invalid and shall summarily be rejected.**
- c) Please read para – 9 of CPWD-6 for further details.**
12. Tenders with any condition including that of conditional rebates shall be rejected forthwith.
13. The Subject work is targeted for compliance with 3 Star GRIHA rating. In order to achieve these ratings, a high degree of responsibility and cooperation is necessary from the contractors. All materials and systems used in the project are intended to maximize energy efficiency for operation of Project throughout service life (substantial completion to ultimate disposition – reuse, recycling, or demolition) with an emphasis on top **quality Materials** and systems are to maximize environmentally-benign construction techniques, including construction waste recycle, reusable delivery packaging, and reusability of selected materials. All vendors / contractors must adhere to best practices related to Green Buildings. Other than the general guidelines outlined here, all vendors/contractors will be furnished with a supplementary set of guidelines more specific to their nature of service/product. Nothing extra shall be paid for the same, unless specifically provided in any item.
14. This work requires engaging more than 20 nos. of labours / workers and therefore all necessary licenses such as labour license, EPFO and ESI, BOCW welfare registration etc., shall be taken by contractor within the time limits as prescribed under clause 1 of schedule ‘F’
15. The Department reserves the right to reject any prospective application without assigning any reason and to restrict the list of qualified contractors to any number deemed suitable by it, if too many bids are received satisfying the laid down criteria.
16. Contractor shall not divert any advance payments or part thereof for any other purpose other than needed for completion of the contracted work. All advance payments received as per terms of the contract (i.e. mobilization, secured against materials brought at site, secured against plant & machinery and / or for work done during interim stages, etc.) are required to be re-invested in the contracted work to ensure advance availability resources in terms of materials, labour, plant & machinery needed for required pace of progress for timely completion of work.
17. **Any dispute arising out of this tender including dispute related to encashment of any Bank Guarantee/ FDR etc., shall be subject to the jurisdiction of courts of Andhra Pradesh State only**

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18. **List of Mandatory Documents to be scanned and uploaded within the period of bid submission:**

1.	Account Payee Demand Draft/ Banker`s Cheque /FDR/Insurance Security Bond/ Bank Guarantee of any Commercial Bank against EMD, as specified in Para 7 of CPWD – 6 for e - Tendering. (Note: EMD Shall be made / issued only from the account of the bidder / tenderer submitting the bid / tender. EMD made / issued from the account other than that of the bidder / tenderer submitting the bid, shall not be accepted).
2.	Enlistment order of the Contractor
3.	GST registration certificate of the State in which the works is to be taken up, if already obtained by the bidder. If the bidder has not obtained GST registration as applicable, then he shall scan and upload following undertaking along with bid documents. "If work is awarded to me, I/we shall obtain GST registration certificate, as applicable, within one month from the date of receipt of award letter or before release of any Payment by CPWD, whichever is earlier, failing which I/we shall be responsible for any delay in payments which will be due towards me/us on account of the work executed and/or for any action taken by CPWD or GST department in this regard".
4	Receipt for deposition of original EMD issued from division office of any Executive Engineer (including NIT issuing EE/AAO or with Authorization letter from EE (AAO/ AE (P) Only)), (Form-C).
5	Certificate secured through LMS portal of ERP for attending “Train the Trainers Programme” conducted by NCA, Ghaziabad or through any other special training arranged by ERP Unit of CPWD.
6	An undertaking of site inspection, as per ‘Form-A’, duly signed by the authorized signatory of the agency as well as the witnesses, shall be scanned and uploaded.

Assiatant Engineer-1
CPWD,KCSD, Kurnool.

CPWD-6 for e-Tendering

Online percentage rate bids are invited on behalf of President of India from approved and eligible contractors of CPWD (Building Category) for the work of – **Construction of Rat proof specialized controlled storage structure for storing groundnut at ICAR IIGR-RRS. Anantapur, Andhra Pradesh. SH:Providing and Fixing of Doors,**

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Windows, Rolling shutters and Other Miscellaneous works for Specialized seed godown at ICAR, Anantapur. The enlistment of the contractors should be valid on the last date of submission of bids. In case the last date of submission of bid is extended, the enlistment of contractor should be valid on the original date of submission of bids.

- 1.1 The work is Estimated to Cost **Rs.5,43,680/-**-This estimate, however, is given merely as a rough guide.

Note:

- i) The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum calculated from the date of completion to the previous day of last date of submission of tender. For other conditions, refer special conditions specified in NIT.
 - ii) The applicant shall either himself meet the eligibility conditions for the respective SPECIALIZED Civil and / E&M components or otherwise, he will have to associate an agency meeting the eligibility requirements as given in this tender document and submit the details as per **Form “G”** given in this tender document within 15 days of award of work OR before start of specialized Civil and / E&M work whichever is earlier.
 - iii) The applicant/ main contractor has to submit consent letters as per **Form “H”**, given in this tender document from at least one eligible associate agency of the respective component of Specialized Civil and / E&M work for each of the component of work by clearly indicating the component of work within 15 days of award of work OR before start of specialized/minor component of work whichever is earlier.
 - iv) Verifiable completion certificates of the work, registration/approval documents as the case may be, duly attested by the applicant shall be submitted within 30 days of award of work OR before start of specialized/minor component of work whichever is earlier. Valid Electrical license, as the case may be, duly attested by the applicant shall also be submitted within 15 days of award of work OR before start of specialized/minor component of work whichever is earlier
 - v) Self-attested GST registration documents in respect of the associated agencies shall be submitted within 15 days of award of work OR before start of specialized/minor component of work whichever is earlier.
2. Agreement shall be drawn with the successful bidder on prescribed Form No. **CPWD 7** (or other Standard Form as mentioned) which is available at Govt. of India Publication and also available on website www.cpwd.gov.in. Bidders shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
3. **The time allowed for carrying out the work** will be **30 Days from** the date of start as defined in **schedule ‘F’** or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the bid documents.
- i) The site for the work is available.
 - ii) The main architectural and Structural Drawings shall be made available in a phased manner, as per details given in Schedule – ‘F’.
4. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents except Standard General Conditions of

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Contract Form can be seen on website <https://etender.cpwd.gov.in> or www.cpwd.gov.in at free of cost.

The standard publications like General Conditions of Contract 2023 for Construction Works, Delhi schedule of rates 2023 (for Civil), Specifications 2019 for Civil, Delhi analysis of rates 2023 (for Civil) with amendments / correction slips up to the last date of submission of tender can be seen free of cost from the website www.cpwd.gov.in or www.eprocure.gov.in

5. After submission of the bid the contractor can re-submit revised bid any number of times but before last time and date of submission of bid as notified.
6. While submitting the revised bid, contractor can revise the **consolidated percentage rate** any number of times (he need not re-enter **percentage rate** of all the **schedules or sub heads**) but before last time and date of submission of bid as notified.
7. **Earnest Money Rs.10,874/-** in the form of Insurance Surety Bonds, Account Payee Demand draft, Fixed Deposit Receipts, Bankers Cheque or Bank Guarantee (for balance amount as prescribed) from any of the Commercial Bank (**Drawn in favour of Executive Engineer, Tirupati Central Division, CPWD, Tirupati**) shall be scanned and uploaded to the e-Tendering website within the period of bid submission.

The original EMD should be deposited either in the office of Executive Engineer inviting bids or division office of any Executive Engineer, CPWD within the period of bid submission. The EMD receiving Executive Engineer (**including NIT issuing EE/AO or with Authorization letter from EE (AAO/ AE (P) Only**)), (Form-C).

This receipt shall also be uploaded to the e-tendering website by the intending bidder upto the specified bid submission date and time.

The bank guarantee as part EMD should only be issued from the place in which the office of receiving division office is situated. If no Division office is located at the same station of the Bank Branch issuing the Bank Guarantee, then it can be deposited in the nearest place having the Division office. However, the bidder shall be fully responsible for applicability, validity and genuineness of such Bank guarantee.

The receipt of deposition of bank guarantee shall also be uploaded to the e-tendering website by the intending bidder upto the specified bid submission date and time.

But the bid can only be submitted after deposition of EMD in favour of Executive Engineer in the form prescribed in NIT and uploading the mandatory scanned documents such as receipt for deposition of EMD and other documents as specified.

The intending bidder has to fill all the details of Banker's cheque of a Commercial Bank/ Account payee Demand Draft of a Commercial Bank/ Fixed Deposit Receipt (FDR) of a Commercial Bank/ Insurance Surety Bonds/ Bank Guarantee (for balance amount as prescribed) from a Commercial Bank against EMD (bankers name, amount, number and date) against cost of EMD etc.

The amount of EMD can be paid by multiple Banker's cheque of a Commercial Bank/ Account payee Demand Draft of a Commercial Bank/ Fixed Deposit Receipt (FDR) of a Commercial Bank/ Insurance Surety Bonds/ Bank Guarantee (for balance amount as prescribed) from a Commercial Bank against EMD, if EMD is also acceptable in the form of Bank Guarantee.

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Copy of Enlistment Order, certificate of work experience and other documents as specified in the press notice shall be scanned and uploaded to the e-Tendering website within the period of bid submission. However, certified copy of all the scanned and uploaded documents as specified in press notice shall have to be submitted by the lowest bidder only within a week physically in the office of The Executive Engineer, CPWD, Kurnool.

Online bid documents submitted by intending bidders shall be opened only of those bidders, whose original EMD deposited with any division of CPWD and other documents scanned and uploaded are found in order.

The earnest money given by all the tenders except the lowest tenderer shall be refunded immediately after the expiry of stipulated bid validity period or immediately after acceptance of the successful bidder, whichever is earlier. However, in case of two / three bid system, earnest money deposit of bidders unsuccessful during technical bid evaluation etc. should be returned within 30 days of declaration of result of technical bid evaluation.

8. The bid submitted shall become invalid if:

- i) The bidder is found ineligible.
- ii) **The bidder does not deposit original EMD with division office of any Executive Engineer, CPWD.**
- iii) The bidder does not upload all the documents (including GST registration) as stipulated in the bid document **including the copy of receipt of deposition of original EMD.**
- iv) If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted **physically by the lowest bidder** in the office of bid opening authority.

In case of any discrepancy is noticed between the documents as uploaded at the time of submission of the bid online and hard copies as submitted physically in the office of Executive Engineer, then the bid submitted shall become invalid and the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the tenderer shall not be allowed to participate in the re tendering process of the work.

- v) If a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section/sub-head in percentage rate tender, the tender shall be treated as invalid and will not be entertained as lowest tenderer.

9. The contractor whose bid is accepted will be required to furnish performance guarantee at specified percentage of the tendered amount as mentioned in schedule E and within the period specified in Schedule F. This guarantee shall be in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt or Bank Guarantee from any of the Commercial Banks in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F', including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor. **The earnest money deposited along with bid shall be returned after receiving the aforesaid performance guarantee.**

The contractor whose tender is accepted will also be required to furnish by way of Security deposit for the fulfilment of his contract, an amount equal to 2.5% of the tendered amount of the work. The security deposit will be collected by deductions from running bills as well

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as final bill of the contractor at the rates mentioned above. The Security amount will also be accepted in the shape of Insurance Surety Bonds,

Account Payee Demand Draft, Fixed Deposit Receipt or Bank Guarantee from any of the Commercial Banks, for this purpose provided confirmatory advice is enclosed.

The contractor whose bid is accepted will also be required to furnish either copy of applicable licenses/registrations or proof of applying for obtaining labour licenses, registration with EPFO, ESIC and BOCW Welfare Board including Provident Fund Code No. if applicable and also ensure the compliance of aforesaid provisions by the sub-contractors, if any engaged by the contractor for the said work and Programme Chart (Time and Progress) within the period specified in Schedule F.

Site for Construction of Rat proof specialized controlled storage structure for storing groundnut at ICAR IIGR-RRS. Anantapur, Andhra Pradesh. SH:Providing and Fixing of Doors, Windows, Rolling shutters and Other Miscellaneous works for Specialized seed godown at ICAR, Anantapur. will be made available" as is where is" basis.

- 10.** Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidders shall be responsible for arranging and maintaining, at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.
- 11.** The competent authority on behalf of the President of India does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidders shall be summarily rejected.
- 12.** Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable for rejection.
- 13.** The competent authority on behalf of President of India reserves to himself the right of accepting the whole or any part of the bid and the bidders shall be bound to perform the same at the rate quoted.
- 14.** The contractor shall not be permitted to bid for works in the CPWD Circle (Division in case of contractors of Horticulture/Nursery category) responsible for award and execution of contracts, in which his near relative is posted a Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Gazetted officer in the Central Public Works Department or in the Ministry of Urban Development.

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Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.

15. No Engineer of Gazetted Rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the prior permission of the Government of India in writing. This contract is liable to be canceled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the bid or engagement in the contractor's service.
16. The bid for the work shall remain open for acceptance for a period of **Thirty (30) days** from the date of opening of bid. Further,
 - i. If any tenderer withdraws his tender or makes any modifications in the terms and conditions of the tender which is not acceptable to the department within 7days after last date of submission of bids, then the Government shall without prejudice to any other right or remedy, be at liberty to forfeit **50%** of the earnest money absolutely irrespective of letter of acceptance for the work is issued or not.
 - ii. If any tenderer withdraws his tender or makes any modifications in the terms and conditions of the tender which is not acceptable to the department after expiry of 7days after last date of submission of bids, then the Government shall without prejudice to any other right or remedy be at liberty to forfeit **100%** of the earnest money absolutely irrespective of letter of acceptance for the work is issued or not.
 - iii. In case of forfeiture of earnest money as prescribed in para (i) and (ii) above, the bidder shall not be allowed to participate in the rebidding process of the same work.
17. This notice inviting Bid shall form a part of the contract document. The successful bidders/contractor, on acceptance of his bid by the Accepting Authority shall within 7 days from the stipulated date of start of the work, sign the contract consisting of:-
 - i) The Notice Inviting Bid, all the documents including additional conditions, specifications and drawings, if any, forming part of the bid as uploaded at the time of invitation of bid and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
 - ii) Standard C.P.W.D. Form 7 or other Standard C.P.W.D. Form as applicable.
18. The intending bidders are required to update their profile in CPWD e-tender portal and to upload their bids well in advance of last date of submission of tender. Any issue related to updating profile / uploading tender can be resolved through the concerned Executive Engineer / Assistant Engineer (E-mail id aekcsd1knl@gmail.com) or ERP help line no. 18001803286 or email ID cpwd.support@techmahindra.com The e-tendering bidders are also advised not to wait to raise any issues till the last date of submission of bid in their own interest.

Assistant Engineer-1
KCSD, CWD, Kurnool
 (For& on behalf of President of India)

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Brief Particulars of work**Design and Scope:**

- Providing and fixing UPVC Windows.
- Rain water pipers 100 mm Dia with necessary fittings.
- Providing and fixing rolling shutters with bearings.
- Providing and fixing Ms doors.
- Construction brick work for entrance stage and steps.
- Providing and laying 62.5 mm thick CC flooring with skirting.
- Plastering with 15mm plaster and painting with synthetic enamel paint.

(FORM-C)

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Receipt of deposition of original EMD

(Receipt No: _____ / Date: _____)

Name of Work: - Construction of Rat proof specialized controlled storage structure for storing groundnut at ICAR IIGR-RRS. Anantapur, Andhra Pradesh. SH:Providing and Fixing of Doors, Windows, Rolling shutters and Other Miscellaneous works for Specialized seed godown at ICAR, Anantapur.

1. NIT No. : **15/EE/KURNOOL/E-Tender/2026-27**
2. Estimated Cost : **Rs.5,43,680/-**
3. Amount of Earnest Money Deposit : **Rs.10,874/-**
4. Last date of submission of bid : **Up to 15.00 Hours on 31.10.2026**

1. Name of Contractor #
2. Form of EMD.....#
3. Amount of Earnest Money Deposit #
4. Date of submission of EMD #

Signature, Name and Designation of EMD
(Including NIT issuing EE /AAO or with Authorization letter from EE (AAO/ AE (P) Only))
Along with Office stamp

C.P.W.D – 7

**GOVERNMENT OF INDIA
CENTRAL PUBLIC WORKS DEPARTMENT**

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STATE : Andhra Pradesh
BRANCH : B & R

ZONE : CE, Vijayawada
Division: EE, Kurnool.

PERCENTAGE RATE TENDER & CONTRACT FOR WORKS

Name of Work: - Construction of Rat proof specialized controlled storage structure for storing groundnut at ICAR IIGR-RRS. Anantapur, Andhra Pradesh.
SH:Providing and Fixing of Doors, Windows, Rolling shutters and Other Miscellaneous works for Specialized seed godown at ICAR, Anantapur.

1. To be uploaded on line by 15.00 Hours on 31.10.2026 through website <https://etender.cpwd.gov.in> or <http://www.cpwd.gov.in>
2. To be opened in presence of tenderer who may be present at 15.30 Hours on 31.10.2026 in the office of O/o Executive Engineer, CPWD, Kurnool.

Cor NIL	Ins NIL
Omi NIL	Ovw NIL
AE(P)	AE

TENDER

I / We have read and examined the notice inviting tender, schedule, A, B, &C, Specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, clauses of contract, Special conditions, Schedule of Rate & other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I/ We hereby tender for the execution of the work specified for the President of India within the time specified in Schedule 'F', viz., schedule of quantities and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of contract and with such materials as are provided for, by, and in respects in accordance with, such conditions so far as applicable.

We agree to keep the tender open for Thirty (30) days from the date of opening of bid.

I/We have deposited EMD for the prescribed amount in the office of concerned Executive Engineer, CPWD, Tirupati as per the bid document.

A copy of earnest money **deposit receipt of prescribed amount deposited in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee (as prescribed) issued by a commercial Bank, is scanned and uploaded (strike out as the case may be).** If I/We fail to furnish the prescribed performance guarantee within prescribed period, I/We agree that the said President of India or his successors, in office shall without prejudice to any other right or remedy, I / We shall be suspended for one year and shall not be eligible to bid for CPWD tenders from date of issue of suspension order. If I/We fail to commence work as specified, I/ We agree that President of India or the successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said performance guarantee absolutely. The said Performance Guarantee shall be a guarantee to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the tender form.

Further, I/We agree that in case of forfeiture of Earnest Money or Performance Guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work.

I/We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/we shall be debarred for tendering in CPWD in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.

I/We hereby declare that I/We shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information/derived there from to any person other than a person to whom I/We am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Dated _____

Signatures of Contractor
Postal Address

Witness:

Address:

Occupation:

ACCEPTANCE

Cor NIL	Ins NIL
Omi NIL	Ovw NIL
AE(P)	AE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for and on behalf of the President of India for a sum of

Rs.....)

(Rupees.....

.....)

The letters referred to below shall form part of this contract Agreement:-

(a)

(b)

For & on behalf of President of India

Signatures:

Dated: **

Assiatant Engineer-1
KCSD, CPWD, Kurnool.

Cor NIL	Ins NIL
Omi NIL	Ovw NIL
AE(P)	AE

PROFORMA OF SCHEDULES A to F**SCHEDULE 'A'**

Schedule of Quantities

: **Enclosed**

Estimated Cost Put to Tender

: **Rs.5,43,680/-****SCHEDULE 'D'**

Extra schedule for specific requirements / documents for the work, if any-

- a. Special & Additional Conditions : PART –B (Enclosed)
 b. Particular specifications : PART –B (Enclosed)

SCHEDULE 'E'

Reference to General Conditions of contract:

GCC 2023 for Constructionr
k
sas amended/modified up to last
date of submission of tender.

Name of Work:- Construction of Rat proof specialized controlled storage structure for storing groundnut at ICAR IIGR-RRS. Anantapur, Andhra Pradesh. SH:Providing and Fixing of Doors, Windows, Rolling shutters and Other Miscellaneous works for Specialized seed godown at ICAR, Anantapur.

Estimated Cost Put to Tender : **Rs.5,43,680/-**(i) Earnest money : **Rs. 10,874 /-**

(To be returned after receiving Performance Guarantee).

- (ii) Performance Guarantee : a) 5% of tendered value or Estimated Cost Put to Tender (ECPT) (whichever is higher)
 : b) Where the tendered amount is less than eighty percent (80%) of the Estimated Cost Put to Tender (ECPT), the Performance Guarantee, in addition to the requirement under (a) above, shall be increased by an amount equal to the difference between eighty percent (80%) of the ECPT and the tendered amount

(iii) Security Deposits : 2.5% of tendered / accepted value.

SCHEDULE 'F'- General Rules & Directions:

Cor NIL	Ins NIL
Omi NIL	Ovw NIL
AE(P)	AE

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Officer inviting tender:

**Assistant Engineer-1,
KCSD, CPWD, Kurnool.**

Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with Clauses 12.2 & 12.3 :

**See below under
Clause 12.**

Definitions

2(v) Engineer-in-Charge

**Executive Engineer,
CPWD, Kurnool or
successor thereof.**

2(viii) Accepting Authority

**Executive Engineer,
CPWD, Kurnool or
successor thereof.**

2(x) Percentage on cost of materials and labour to cover all overheads and profits. :

15%

2(xi) Standard schedule of Rates

**: Delhi Schedule of Rates
2023 for Civil component
and DSR 2023 for E&M
component/ Market
Rates.**

2(xii) Department

**: Central Public Works
Department.**

9(ii) Standard CPWD contract Form GCC 2020, CPWD-7 as modified & corrected up to :

**GCC 2023 for
Constructions & CPWD - 7
as amended/ modified up
to last date of submission
of e-tender.**

Clause I

(i) Time allowed for submission of performance Guarantee, Programme Chart (Time and Progress) and applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board or proof of applying thereof from the date of issue of letter of acceptance. :

7 days.

(ii) Maximum allowable extension with late fee at 0.1% per day of performance Guarantee amount beyond the period as provided in (i) above :

5 days.

Clause 2

Authority for fixing compensation under clause-2. :

**Chief Engineer, CPWD,
Vijayawada or his
successor.**

Cor NIL	Ins NIL
Omi NIL	Ovw NIL
AE(P)	AE

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Clause 2A

Whether clause 2A shall be applicable : Not Applicable

Clause 5

Number of days from the date of issue of letter of acceptance for reckoning date of start : 7 days

MILESTONE(S) AS PER TABLE GIVEN BELOW

S.No	Description of Milestone	Time Allowed (from date of start)	Amount to be withheld in case of non-achievement of milestone
1	1/4 of tendered amount	7.5 Days	1.5 % of total tendered amount
2	1/2 of tendered amount	15 Days	1.5 % of total tendered amount
3	Full tendered amount	30 Days	2 % of total tendered amount
Time Period allowed for execution of Work: - 30 Days			

Authority to decide:

i)	Extension of Time	:	Executive Engineer, CPWD, Kurnool or successor thereof,
ii)	Shifting the date of start in case of delay in handing over of site	:	Executive Engineer, CPWD, Kurnool or successor thereof

Schedule of handing over of site:

Part	Portion of site	Description	Time Period for handing over reckoned from date of issue of letter of intent
Part A	Portion without any hindrance	Full site is hindrance free	7 Days
Part B	Portions with encumbrances	NIL	Not Applicable
Part C	Portions dependent on work of other agencies	NIL	Not Applicable

Clause 5.2

Documentation of Hindrances	<p>1. The contractor has to first register himself through a registration form, available on CPWD website under 'Contractors Login' tab. After registration, User ID and password will be automatically generated and sent on his registered mobile and email ID. Using this User ID and Password he can access the module and view all the works which are being carried out by him in CPWD and he can register the hindrance against any particular work. After recording the hindrance by the contractor, it will be visible to</p>
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Cor NIL	Ins NIL
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PART-A 19

Clause 7 Gross work to be done together with the payment/adjustment of advances for material collected, if any since the last such payment for being eligible to interim payment	all concerned officers (JE and above) of that work. An alert will be sent to EE. 7.00 Lakhs 2. Executive Engineer will first assign the work to the JEs/AEs who will give their comments on the hindrance within 2 days.	
Clause 7A Whether clause 7A shall be applicable?	After that Executive Engineer of the work will have to take appropriate action on the hindrance within 2 days. The comments of JEs/AEs will not be visible to contractor, only the decision of the Executive Engineer on the hindrance will be visible to contractor under "Decision of the Engineer-in-charge."	Yes
Clause 7B Whether clause 7B shall be applicable?		Yes
Clause 8A Authority to decide compensation on account if contractor fails to submit completion plans	:	Chief Engineer, CPWD, Vijayawada or Successor or thereof.
Clause 10A List of testing equipment to be provided by the contractor at site lab.	:	
Clause 10 B(ii) Whether clause 10-B (ii) shall be applicable	:	Not Applicable
Clause 10C Component of Labour expressed as percent of value of work.	:	Not Applicable
Clause 10CC	:	Not Applicable
Clause 11 Specifications to be followed for execution of work	:	CPWD Specifications 2019 Vol- I & II with up to date correction slips.
Clause 12 Authority to decide deviation up to 1.5 times of tendered amount.	:	Chief Engineer, CPWD, Vijayawada or Successor or thereof.
12.2& 12.3 Deviation limit beyond which clauses 12.2& 12.3 shall apply.	:	100%(Hundred percent)
12.5 i) Deviation limit beyond which clauses 12.2& 12.3 shall apply for all construction works	:	100%(Hundred percent)
Clause 16 Competent authority for deciding the reduced rates	:	Chief Engineer, CPWD, Vijayawada or Successor thereof
Clause 18 List of mandatory machinery, tools & plants to be deployed by the contractor at site	:	T&P and machinery required as directed by the Engineer-in-charge.

Clause -19C:-	Authority to decide penalty for each default	: Executive Engineer, CPWD, Kurnool
Clause -19D: -	Authority to decide penalty for each default	: Executive Engineer, CPWD, Kurnool
Clause -19G: -	Authority to decide penalty for each default	: Executive Engineer, CPWD, Kurnool

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Omi NIL	Ovw NIL
AE(P)	AE

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- Clause -19K: -** Authority to decide penalty for each default : i. Executive Engineer, CPWD, Kurnool
: ii. Rs.200/- per person per day

Clause 25

Conciliator for settlement of Disputes	Additional Director General, Region Hyderabad, CPWD, Hyderabad or his successor thereof.
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Place of Conciliation: Hyderabad

Clause 32: Requirement of Technical Representative(s) and recovery rates

S No	Requirement of Technical Staff		Minimum experience (Years)	Designation of Technical staff	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of clause 32
	Qualification	Number (of Major Component)			
1	Graduate Engineer or Diploma Engineer	1	2 or 5 respectively	Project Manager cum planning/quality /site/ billing Engineer	Rs. 25,000/- per month per person.

Assistant Engineers retired from Government services those are holding Diploma will be treated at par with Graduate Engineers.

Diploma holders with minimum 10 year relevant experience with a reputed construction co. can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% of requirement of degree engineers.

Clause 38

(i) (a) Schedule / statement for determining theoretical quantity of cement & bitumen on the basis of Delhi Schedule of Rates 2021 printed by C.P.W.D. with correction slips up to the last date of submission of bids.

(ii) Variations permissible on theoretical quantities.

- (a) Cement for works with estimated cost put to tender more than 25 lakhs : **2%** plus/minus
(b) Bitumen for all works : **2.5%** plus only & nil on minus Side
(c) Steel Reinforcement and structural steel sections for each diameter, Section and category : **2%** plus/minus
(d) All other materials : Nil

RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION

Sl. No.	Description of Item	Rates in figures and words at which recovery shall be made from the contractor
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Cor NIL	Ins NIL
Omi NIL	Ovw NIL
AE(P)	AE

PART-A 21

		Excess beyond permissible variation	Less use beyond the permissible variation
1.	Cement	Nil	10% extra rate over the basic rate of respective material as specified in the above Clause 10CA.
	Steel reinforcement		
2.	(a) Primary Manufacturer	Nil	
	(b) Secondary manufacturer	Nil	

**Assistant Engineer-1
KCSD, CPWD, Kurnool**

Cor NIL	Ins NIL
Omi NIL	Ovw NIL
AE(P)	AE

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Annexure I

On Non – Judicial stamp paper of minimum Rs. 100/-

Form for Bank Guarantee for Earnest Money Deposit/Performance Guarantee / Security Deposit / Mobilization Advance / for release of amount withheld for Milestones

1. Whereas the Executive Engineer (Name of Division), CPWD on behalf of the President of India (hereinafter called “The Government”) has invited bids under (NIT Number) dated for (Name of work) The Government has further agreed to accept irrevocable Bank Guarantee for Rs. (Rupees Only) valid upto (date) * As **Earnest Money Deposit** from (Name and Address of Contractor) (Hereinafter called “the contractor”) for compliance of his obligations in accordance with the terms and conditions of the said NIT.

**** or ****

Whereas the Executive Engineer (Name of Division), CPWD on behalf of the President of India (hereinafter called “The Government”) as entered into an agreement bearing number With (name and address of the contractor) (Hereinafter called “the Contractor”) for execution of work (Name of work) The Government has further agreed to accept an irrevocable Bank Guarantee for Rs. (Rupees only) valid upto (date) As **Performance Guarantee / Security Deposit / Mobilization Advance** from the said Contractor for compliance of his obligations in accordance with the terms and conditions of the agreement.

2. We, (Indicate the name of the bank) (hereinafter referred to as “the Bank”), hereby undertake to pay to the Government an amount not exceeding Rs. (Rupees Only) on demand by the Government within 10 days of the demand.
3. We, (Indicate the name of the Bank), do here by undertake to pay the amount due and payable under this guarantee without any demur, merely on a demand from the Government stating that the amount claimed is required to meet the recoveries due or likely to be due from the said

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Omi NIL	Ovw NIL
AE(P)	AE

PART-A 23

amount due from the said Contractor. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. (Rupees only).

4. We, (Indicate the name of the Bank), further undertake to pay the Government any money so demanded notwithstanding any dispute or dispute raised by the contractor in any suit or proceeding pending before any Court or Tribunal, our liability under this Bank Guarantee being absolute and unequivocal. The payment so made by us under this Bank Guarantee shall be valid discharge of our liability for payment there under and the Contractor shall have no claim against us for making such payment.
5. We, (indicate the name of the Bank), further agree that the Government shall have the fullest liberty without our consent and without affecting any manner our obligation here under to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said contractor and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said Contractor or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said Contractor or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
6. We, (Indicate the name of the Bank), further agree that the Government at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor at the first instance without proceeding against the Contractor and notwithstanding any security or other guarantee the Government may have in relation to the Contractor's liabilities.
7. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor.
8. We, (Indicate the name of the Bank), undertake not to revoke this guarantee except with the consent of the Government in writing.
9. This Bank Guarantee shall be valid up to Unless extended on demand by the Government. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs.(Rupees only) and unless a claim in writing is lodged with us within the date

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AE(P)	AE

PART-A 24

of expiry or extended date of expiry of this guarantee, all our liabilities under this guarantee shall stand discharged.

Date

Witness:

- | | |
|--------------------|----------------------|
| 1. Signature | Authorized signatory |
| Name and address | Name |
| | Designation |
| | Staff Code no. |
| 2. Signature | Bank Seal |
| Name and Address | |

Note:

1. *Date to be worked out on the basis of validity period of 90 days where only financial bids are invited and 180 days for two / three bid system from the date of submission of tender.
2. ** In paragraph 1, strike out the portion not applicable. Bank Guarantee will be made either for earnest money or performance guarantee / security deposit / mobilization advance, as the case may be.
3. The Bank Guarantee shall be drawn on non-judicial stamp paper of minimum Rs.100.

FORM A

Undertaking regarding site inspection done by the agency

It is hereby declared that as per CPWD-6 FOR e-BIDDING, I/ We the bidder inspected and examined the subject site and its surrounding and satisfy myself / ourselves as to the nature of the ground and sub-soil (so far as is practicable), the forms and nature of the site. I/ ourselves before submitting the bid, the accommodation which may require and all necessary information as to risks, contingencies and other circumstances which may influence or affect our bid have been obtained. I/We the bidder shall have full knowledge of the site and no extra charge consequent upon any misunderstanding or otherwise shall be claimed in later date.

I /We bidder shall be responsible for arranging and maintaining at own cost all

Cor NIL	Ins NIL
Omi NIL	Ovw NIL
AE(P)	AE

PART-A 25

materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by me/us implies that I / We have read this notice and all other contract documents and has made myself /ourselves aware of the scope and specifications of the work to be done and local conditions and other factors having a bearing on the execution of the work.

Name of work: - Construction of Rat proof specialized controlled storage structure for storing groundnut at ICAR IIGR-RRS. Anantapur, Andhra Pradesh. SH:Providing and Fixing of Doors, Windows, Rolling shutters and Other Miscellaneous works for Specialized seed godown at ICAR, Anantapur.

NIT. No:15/EE/KURNOOL/E-Tender/2026-27

Yours faithfully

(Duly authorized signatory of the bidder)

Dated: Witness: (CPWD Anantapur)

Address:

Occupation

FORM –G

PROPOSAL FOR ELIGIBLE ASSOCIATING AGENCIES FOR SPECIALIZED WORKS

I/we hereby propose the following agencies as per mentioned against each for executing corresponding minor components of work. Their consent letters are also attached.

S.No	Name of Associated Contractor	Category and Class of registration	Enlistment copy/completion Certificates attached	Monetary Limit of work	Validity of registration	Consent letter attached (Yes/No)

Cor NIL

Ins NIL

Omi NIL

Ovw NIL

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Note: Self Attested photocopies of enlistment order, valid electrical contractor license, work experience certificates of each agency for each component of E&M work shall be submitted.

Signature of contractor

FORM –H

CONSENT LETTER FROM ELIGIBLE ASSOCIATE AGENCY OF SPECIALIZED WORK

Name of Work: Construction of Rat proof specialized controlled storage structure for storing groundnut at ICAR IIGR-RRS. Anantapur, Andhra Pradesh. SH:Providing and Fixing of Doors, Windows, Rolling shutters and Other Miscellaneous works for Specialized seed godown at ICAR, Anantapur.

I / We hereby give my consent to associate with M/s, for executing the minor component of work of (Mention category).

1. I / We will execute the work as per specifications and conditions of the agreement and as per directions of the Engineer –in-Charge for the corresponding minor work till the completion of the work.
2. I / We will be responsible for necessary action to handover the installations and for rectification of defects and repair during the maintenance / warranty period.

Cor NIL	Ins NIL
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AE(P)	AE

PART-A 27

3. Also I / We will employ full time technically qualified Engineer / supervisor for the minor component of the work as required for the work. I / We will attend inspection of officers of the department as and when required.

Date:

Signature with date of Major component Contractor	Signature with date of Associate/ Minor Component Address
---	---

Witness with address (From major component contractor side)	Witness with address (From minor component contractor side)
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AE(P)	AE

PART – B

NIL		Ins	NIL
Omi	NIL	Ovw	NIL
AE (P)		AE	

SPECIAL CONDITIONS**1.0 General****1.1 Specifications & Order of preference:**

1.1.1 Except for the items, for which Particular Specifications are given or where it is specifically mentioned otherwise in the description of the items in the schedule of quantities, the work shall generally be carried out in accordance with the “CPWD Specifications 2019 Vol. I & II” with up to date correction slips, additional / Particular Specifications, Architectural / structural drawings and as per instructions of Engineer-in-Charge.

1.1.2 The several documents forming the tender are to be taken as mutually complementary to one another. Detailed drawings shall be followed in preference to small scale drawings and figured dimensions in preference to scaled dimensions.

1.1.3 If there is any difference or discrepancy between the description of items as given in the schedule of quantities, particular specifications for individual items of work (including special conditions) and I.S. Codes etc., the following order of preference shall be observed

- (i) **Description of items as given in Schedule of Quantities.**
- (ii) **Particular Specifications, Special Conditions and Additional conditions, if any.**
- (iii) **Drawings.**
- (iv) **CPWD Specifications.**
- (v) **General conditions of contract for CPWD works.**
- (vi) **Indian Standard Specifications of B.I.S.**
- (vii) **Manufacturers’ specifications & as decided by Engineer-in-charge.**
- (viii) **Sound Engineering practices.**

“In the event of any variation/ discrepancy in the drawings, specifications and tender documents etc. the decision of the Engineer-in-charge shall be final binding and conclusive on the contractor and in the case the contractor have any doubt and the same should be got clarified immediately from the Engineer-in-charge and no claim of the contractor shall be entertained thereafter. Moreover, the agency is not allowed to take benefit out of any clerical/ grammatical mistake in the standard clauses/Schedule of Quantities/Specifications etc. being used in the agreement”.

1.1.4 Any reference made to any Indian Standard Specifications, shall imply to the latest version of that standard, including such revisions / amendments as issued by the Bureau of Indian Standards up to last date of receipt of tenders. **The Contractor shall keep at his own cost all such publications including relevant Indian Standard Codes applicable to the work at site.**

1.2 Scope:

1.2.1 The works to be governed by this contract shall cover delivery and transportation up to destination, safe custody at site, insurance, erection, testing and commissioning of the entire works.

1.2.2 The works to be undertaken by the contractor shall inter alia include the following:

- i. Preparation of detailed SHOP drawings and AS BUILT drawings wherever applicable.
- ii. Obtaining of Statutory permissions wherever applicable and required.
- iii. Pre-commissioning tests as per relevant standard specifications, code of practice, Acts and Rules wherever required.
- iv. Warranty obligation for the equipment and/or fittings/fixtures supplied by the contractor.

1.2.3 Contractor shall provide all the shop drawings or layout drawings for all the co-ordinated services before starting any work or placing any order for any of the services etc. These shop drawings/layout drawings shall be got approved from Engineer-in-charge before implementation and this shall be binding on the contractor. The contractor shall submit

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AE (P)	AE	

material submittals along with material sample for approval of Engineer-in-charge prior to delivery of material at site.

- 1.2.4 All the hidden items such as water supply lines, drainage pipes, conduits, sewers etc. are to be properly tested as per the design conditions before covering and their measurements in computerized measurement book duly test checked shall be deposited with Engineer in charge or his authorized representative, prior to hiding these items.

1.3 Deployment of Technical staff & skilled labour:

- 1.3.1 The quality of work is of paramount importance. Contractor shall have to Engage well experienced skilled labour and deploy modern T&P and other equipments to execute the work to provide the desired quality.

The Contractor shall depute Site Engineer & skilled workers as required for the work. He shall submit organization chart along with details of Engineers and supervisory staff. It shall be ensured that all decision making powers shall be available to the representatives of the contractor at site itself to avoid any likely delays on this account. The contractor shall also furnish list of persons for specialized works to be executed for various items of work. The Contractor shall identify and deploy key persons having qualifications and experience in the similar and other major works, as per the field of their expertise. If during the course of execution of work, the Engineer-in-Charge is of the opinion that the deployed staff is not sufficient or not well experienced; the Contractor shall deploy more staff or better-experienced staff at site to complete the work with quality and in stipulated time limit. The Project Manager of the contractor having minimum Ten years of experience in similar nature of work along with all technical staff as mentioned in the clause 32 of the GCC, shall always be available at the site during execution of work.

1.4 Removal of Machinery, Tools & Equipment:

- 1.4.1 Removal of machinery, tools & equipment shall be allowed to be moved away from the site only when, in written opinion of Engineer-in-Charge, the same are no longer required at site of work.

1.5 Soil conditions of site:

- 1.5.1 Contractor(s) shall study the soil investigation report for the site, available in the office of the Engineer-in-Charge and satisfy him about complete characteristics of soil and other parameters at site. No claim whatsoever on account of any discrepancy between the sub-surface strata conditions that may be actually encountered at the time of execution of the work and those given in soil report, in-accuracy or interpretation thereof shall be entertained from the Contractor under any circumstances. The ground water table is in variable condition and the information given in the report is only indicative and it may vary from time to time.

1.6 Site condition:

- 1.6.1 The tenderer shall acquaint himself with the site of work and see the approaches to the site. In case any approach from main road is required at site or existing approach is to be improved and maintained for cartage of materials by the contractor, the same shall be provided, improved and maintained by the contractor at his own cost.

1.7 Precautionary measures:

- 1.7.1 Temporary barricading shall be provided at Site by the contractor at their own cost. The barricading physically define the boundaries of the plot for restricted entry to only those involved in the work and also to prevent any accident and also not causing any inconvenience to the traffic. The barricading panels shall be painted and "CPWD" mark should be made in suitable size, shapes and number as directed by Engineer-in-charge without any extra cost. It

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AE (P)	AE	

shall be dismantled and taken away by the contractor after completion of the work at his own cost with the permission of Engineer-in-charge.

- 1.7.2 Contractor shall take all precautionary measures to avoid any damage to adjoining property. All necessary arrangement shall be made at his own cost. The contractor shall take all precautions to prevent his workmen and employees from removing and damaging any Flora (plant/vegetation) from the campus/site.
- 1.7.3 The contractor shall take all precautions to avoid accidents by exhibiting necessary caution boards day and night, speed limit boards, red flags, red lights and providing barriers. He shall be responsible for all damages and accidents caused to work due to negligence on his part. No hindrances shall be caused to traffic, during the execution of the work. In case of any accident of the labourers/ contractual staff, the entire responsibility will rest on the contractor and any compensation under such circumstances, if becomes payable, shall be entirely borne by the contractor.
- 1.7.4 The contractor, his authorized representative, workmen etc. shall strictly observe orders pertaining to fire precautions prevailing in the area.
- 1.7.5 The Contractor shall take all necessary precautions to prevent any nuisance or inconvenience to the owners, tenants or occupants of the adjacent properties and to the public in general .The Contractor shall take all care, as not to damage any other adjacent property or other services running adjacent to the plot. If any damage is done, the same shall be made good by the Contractor at his own cost and to the entire satisfaction of the Engineer-in-Charge. The Contractor shall use such methodology and equipments for execution of the work, so as to cause minimum environmental pollution of any kind during construction, to have minimum construction time and minimum inconvenience to road users and to the occupants of the buildings on the adjacent plot and public in general, etc. He shall make good at his own cost and to the entire satisfaction of the Engineer in Charge any damage to roads, paths, cross drainage works or public or private property whatsoever caused, due to the execution of the work or by traffic brought thereon, by the Contractor. Further, the Contractor shall take all precautions to prevent any pollution of streams and waterways. All waste or superfluous materials shall be carted away by the Contractor, entirely to the satisfaction of the Engineer-in-Charge. Utmost care shall be taken to keep the noise level to the barest minimum so that no disturbance as far as possible is caused to the occupants / users of adjoining buildings. No claim what so ever on account of site constraints mentioned above or any other site constraints not specifically stated here, shall be entertained from the Contractor. Therefore, the Contractors are advised to visit site and get firsthand information of site constraints. Accordingly, they should quote their tenders. Nothing extra shall be payable on this account.

1.8. General cleanliness of the site and Stacking & Storage of Materials:

- 1.8.1 The site of work shall be always kept clean in general strictly adhering to approved job layout and green building parameters. The Contractor shall take all care to prevent any water- logging at site. The waste water shall not be allowed to be collected at site. It may be directly pumped into the public drainage system with prior approval of the concerned authorities. For discharge into public drainage system, necessary permission shall be obtained from concerned authorities after paying the necessary charges, if any, directly to the authorities. The work shall be carried out in such a way that the area is kept clean and tidy. All the fees/charges in this regard shall be borne by the Contractor. Nothing extra shall be payable on this account.
- 1.8.2 The contractor shall take instructions from the Engineer-in-Charge regarding collection and stacking of materials at any place. No excavated earth or building rubbish shall be stacked on areas where other buildings, roads, compound wall, services etc are to be constructed.

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1.8.3 For construction works which are likely to generate malba / rubbish, contractor shall dispose of malba, rubbish & other unserviceable materials and wastes at his own cost to the notified/specified dumping ground and under no circumstances these shall be stacked / dumped even temporarily, outside the construction premises.

1.8.4 The contractor shall construct suitable godowns, yard at the site of work for storing all other materials so as to be safe against damage by sun, rain, damages, fire, theft etc. at his own cost and also employ necessary watch and ward establishment for the purpose at his cost.

1.9 Lab Equipment:

The contractor shall provide at his own cost suitable weighing, surveying and levelling and measuring arrangements as may be necessary at site for checking. All such equipment shall be got calibrated in advance from laboratory, approved by the Engineer-in-Charge. Nothing extra shall be payable on this account. A site laboratory with the minimum equipment as specified in NIT shall be established, made functional and maintained within 21 days from the award of the work without any extra cost to the department.

1.10 Setting Out

1.10.1 The contractor shall establish, maintain and assume responsibility for grades, lines, levels and bench marks. He shall report any errors or inconsistencies regarding grades, lines, levels, dimensions to the Engineer-in-Charge before commencing work. Commencement of work shall be regarded as the contractor's acceptance of such grades, lines, levels and dimensions and no claim shall be entertained at a later date for any errors found.

1.10.2 In order to set the alignment of buildings / foundations and to mark the same on the ground, the agency is to adopt "total station" surveying method. The agency is to engage a well versed and well experienced surveyor in "total station" survey. Nothing extra for this total station survey is payable.

If at any time, any error in the respect of setting out appears during the progress of the work, the contractor shall, at his own expense rectify such error if so required, to the satisfaction of the Engineer-in-Charge.

a) Though the site levels are indicated in the drawings, the contractor shall ascertain himself and confirm the site levels with respect to GTS bench mark from the concerned authorities. The contractor shall protect and maintain temporary/ permanent benchmarks at the site of work throughout the execution of the work. These bench marks shall be got checked by the Engineer-in-Charge or his authorized representatives. The work at different stages shall be checked with reference to bench marks maintained for the said purpose. Nothing extra shall be payable on this account.

b) The approval by the Engineer-in-Charge, of the setting out by the contractor, shall not relieve the contractor of any of his responsibilities and obligation to rectify the errors/defects, if any, which may be found at any stage during the progress of the work or after the completion of the work.

1.10.3 The contractor shall be entirely and exclusively responsible for the horizontal, vertical and other alignments, the level and correctness of every part of the work and shall rectify effectively any errors or imperfections therein. Such rectifications shall be carried out by the contractor at his own cost to the instructions and satisfaction of the Engineer-in-Charge.

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- 1.10.4 The Contractor shall carry out survey of the work area, at his own cost, setting out the layout of building in consultation with the Engineer-in-Charge & proceed further. Any discrepancy between the architectural drawings and actual layout at site shall be brought to the notice of the Engineer-in-charge. It shall be responsibility of the Contractor to ensure correct setting out of alignment. Total station survey instruments only shall be used for layout, fixing boundaries, and centre lines, etc., along with the theodolites. Nothing extra shall be payable on this account.
- 1.10.5 Contractor shall provide permanent bench marks, flag tops and other reference points for the proper execution of work and these shall be preserved till the end of work. All such reference points shall be in relation to the levels and locations, given in the Architectural and plumbing drawings.

1.11 Temporary Water Connections:

- 1.11.1 The contractor shall make his own arrangements for water including boring of tube wells etc. if necessary and for Electricity by obtaining electric connections and by providing diesel generators of adequate capacity if required and make necessary payments directly to the State Govt. departments concerned. Necessary approval shall be taken by the contractor from the ground water department for boring of tube wells. Nothing extra shall be paid on these accounts. Contractor shall get the water tested from laboratory approved by the Engineer-in-charge at regular interval as per the CPWD Specifications 2019. All expenses towards collection of samples, packing, transportation and testing charges etc. shall be borne by the contractor. The contractor shall obtain environmental and pollution clearance for the diesel generators. Nothing extra shall be paid on this account

1.12 Scaffolding & Staging:

- 1.12.1 Wherever required for the execution of work, all the scaffolding shall be provided and suitably fixed, by the contractor. The scaffolding shall be provided strictly with steel double scaffolding system, suitably braced for stability, with all the accessories, gangways, etc. with adjustable suitable working platforms to access the areas with ease for working and inspection. Single scaffolding system is strictly prohibited and shall invite necessary action. It shall be designed to take all incidental loads. It should cater to the safety features for workmen. Nothing extra shall be payable on this account. It shall be ensured that no damage is caused to any structure due to the scaffolding.
- 1.12.2 The contractor should submit the shop drawings of staging and shuttering for approval of Engineer-in-Charge before actually commencing the execution of work under the item. Nothing extra shall be payable on this account.
- 1.12.3 Contractor shall make necessary arrangements required for staging/scaffolding for execution of OHT with independent staging of about 30m to 35m height including designing of staging where ever required and getting it proof checked by Govt. institute to ensure safety during construction. Nothing extra shall be payable for staging or its design / proof checking other than those provisions taken in B.O.Q.

1.13 Rates and other conditions for payment:

The rates quoted by the Contractor are deemed to be inclusive of the following-

- 1.13.1 Site clearance, setting out work, profile, establishment of reference bench mark(s), taking spot levels, construction of all safety and protection devices, barriers, barricading, signage, labour safety, welfare & training measures, preparatory works, working during monsoon, working at all depths, height, lead, lift and location etc. until / unless specified otherwise, implementation of

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green building norms to achieve desired GRIHA (3 star) Rating etc. and any other incidental works required to complete this work. Nothing extra shall be payable on this account. Payment for centering & shuttering, however, if required to be done for floor heights greater than 3.50m shall be admissible at rates arrived in accordance with clause 12 of the agreement if not already specified.

- 1.13.2 For works below ground level the contractor shall keep that area free from water. If dewatering or bailing out of water is required the contractor shall do it and nothing extra shall be paid except otherwise provided in the items of schedule of quantities.
- 1.13.3 Any legal or financial implications resulting out of disposal of earth shall be sole responsibility of the contractor. Nothing extra over the schedule shall be paid on this account.
- 1.13.4 All labour, material, tools and plants and other inputs involved in the execution of the item.
- 1.13.5 Providing sunk flooring in bath-rooms, kitchen, etc.
- 1.13.6 Performance test of the entire installation(s) before the work is finally accepted.
- 1.13.7 Any cement slurry added over base surface (or) for continuation of concreting for better bond is deemed to have been built in the items.
- 1.13.8 The rates quoted by the tenderer, shall be inclusive of all taxes including GST and levies applicable in respect of this contract shall be payable by the contractor and Government will not entertain any claim whatsoever in respect of the same.
- 1.13.9 For completing the work in time, the Contractor might be required to work in two or more shifts (including night shifts). No claim whatsoever shall be entertained on this account, not withstanding the fact that the Contractor may have to pay extra amounts for any reason, to the labourers and other staff engaged directly or indirectly on the work according to the provisions of the labour and other statutory bodies regulations and the agreement entered upon by the Contractor with them.
- 1.13.10 The Contractor shall keep himself fully informed of all acts and laws of the Central & State Governments, all orders, decrees of statutory bodies, tribunals having any jurisdiction or authority, which in any manner may affect those engaged or employed and anything related to carrying out the work. All the rules & regulations and bye-laws laid down by Collector / MC etc. and any other statutory bodies shall be adhered to, by the contractor, during the execution of work. The Contractor shall also adhere to all traffic restrictions notified by the local authorities. It is clarified that the extra sewerage charges (one time charges for commencement of work) required to be paid to the Municipal Corporation / other statutory bodies shall be paid by the department and need not be considered by the contractor. The water charges (for municipal water connection as well as tanker water) shall be borne by the contractor. Also, if the contractor obtains water connection for the drinking purposes from the municipal authorities or any other statutory body, the consequent sewerage charges shall be borne by the contractor. All statutory taxes, levies, charges (including GST, water and sewerage charges, charges for temporary service connections and / or any other charges) payable to such authorities for carrying out the work, shall be borne by the Contractor. The Contractor shall arrange to give all notices as required by any statutory / regulatory authority and obtain all requisite licenses wherever required and shall pay to such authority all the fees that are required to be paid for the execution of work. He shall protect and indemnify the Department and its officials & employees against any claim and /or liability arising out of violations of any such laws, ordinances, orders, decrees, by himself or by his employees or his authorized representatives. Nothing extra shall be payable on these accounts. The fee payable to statutory authorities for obtaining the various permanent service connections and Occupancy Certificate for the building shall be borne by the Department.

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- 1.13.11 **Royalty** at the prevalent rates including contribution towards Mineral Exploration Research and Innovation Trust (MERIT) @ 2% on Seigniorage fee and District Mineral Foundation (DMF) @ 30% of Royalty / Seigniorage fee shall have to be paid by the contractor (Rates of Seigniorage fee enclosed in the document is for guidance only and no claims shall be entertained on account of this) on all the boulders, stone aggregate, brick aggregate, shingle, coarse or fine sand, earth, gravel, bajri etc. collected by him for the execution of the work, directly to the Revenue Authority or authorized agent of the State Government concerned or Central Government.

Royalty at the prevalent rates including contribution towards Mineral Exploration Research and Innovation Trust (MERIT) @ 2% on Seigniorage fee and District Mineral Foundation (DMF) @ 30% of royalty / Seigniorage fee shall be paid by the contractor or the RMC supplier as per the terms of supply between them, on all materials such as stone aggregate, coarse or fine sand etc. collected by him for the execution of the work, directly to the revenue authority of the State Government concerned. Further, contractor needs to submit proof of submission of full royalty to the State Government or local authority. Nothing extra shall be payable on this account.

- 1.13.12. All ancillary and incidental facilities required for execution of work like labour camp, stores, fabrication yard, offices for Contractor, watch and ward, temporary ramp required to be made for working at the basement level, temporary structure for plants and machineries, water storage tanks, installation and consumption charges of temporary electricity, telephone, water etc. required for execution of the work, liaison and pursuing for obtaining various No Objection Certificates, completion certificates from local bodies etc., protection works, barricading, testing facilities / laboratory at site of work, facilities for all field tests and for taking samples etc. during execution or any other activity which is necessary (for execution of work and as directed by Engineer-in-Charge), shall be deemed to be included in rates quoted by the Contractor, for various items in the schedule of quantities. Nothing extra shall be payable on these accounts. Before start of the work, the Contractor shall submit to the Engineer-in-Charge, a site / construction yard layout, specifying areas for construction, site office, positioning of machinery, material yard, cement and other storage, steel fabrication yard, site laboratory, water tank, etc.

1.14 Tools & Plant:

- 1.14.1 No tools and plants including any special T&P etc. shall be supplied by the Department and the Contractor shall have to make his own arrangements at his own cost. No claim of hindrance (or any other claim) shall be entertained on this account.

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ADDITIONAL CONDITIONS (Civil Component)

2.0 CEMENT & STEEL REINFORCEMENT

2.1 Contractor has to procure Cement and Steel and has to produce manufacturers test certificate and challan for each lot of Cement & Steel Reinforcement procured at site.

2.2 CEMENT:-

2.2.1 The contractor shall procure 43 grade ordinary Portland Cement (OPC) conforming to IS: 8112 / Portland Pozzolona Cement (PPC) conforming to IS: 1489 (Part-1) as required in the work as per specifications/particular specifications of buildings from reputed manufacturers of cement as mentioned in **“List showing preferred brands / Manufacturers / Makes** “or from any other reputed cement manufacture having a production capacity not less than 1 million Ton per annum as approved by **Chief Engineer, CPWD, Vijayawada**. The cement of approved make as aforesaid in 50 kg. Bags bearing manufacturer's name and ISI marking, along with manufacturers test certificate for each lot shall be procured by the contractor. Portland Pozzolona Cement is to be used for RCC works only subject to fulfillment of conditions of circular No. CDO/SE(RR)/Fly ash (MAN) 02 dated 09.04.09. However, if the contractor uses higher grade of cement or uses OPC only nothing extra shall be paid. The use of PPC shall be regulated as per the following conditions stipulated in the circular dated 09.04.2009:-

- a. IS:456-2000 Code of Practice for Plain and Reinforced Concrete (as amended upto date) shall be followed in regard to Concrete Mix Portion and its production as under:
 - i) The concrete mix design shall be done as “Design Mix Concrete” as prescribed in clause-9 of IS 456 mentioned above.
 - ii Concrete shall be manufactured in accordance with clause 10 of above mentioned IS:456 covering quality assurance measures both technical and organizational, which shall also necessarily require a qualified Concrete Technologist to be available during manufacture of concrete for certification of quality of concrete.
- b Minimum M-30 grade of concrete shall be used in all structural elements of RCC, both in load bearing and framed structure.
- c. The mechanical properties such as modulus of elasticity, tensile strength, creep and shrinkage of fly ash mixed concrete or concrete using fly ash blended cements (PPCs) are not likely to be significantly different and their values are to be taken same as those used for concrete made with OPC.
- d. To control higher rate of carbonation in early ages of concrete both in fly ash admixed as well as PPC based concrete, water/binder ratio shall be kept as low as possible, which shall be closely monitored during concrete manufacture.
If necessitated due to low water / binder ratio, required workability shall be achieved by use of Chloride free chemical admixtures conforming to IS : 9103. The compatibility of chemical admixtures and super plasticizers with each set of OPC, fly ash and / or PPC received from different sources shall be ensured by trials.
- e. In environment subjected to aggressive chloride or sulphate attack in particular, use of fly ash admixed or PPC based concrete is recommended. In case, where structural concrete is exposed to excessive magnesium sulphate, fly ash substitution/content shall be limited to 18% by weight. Special type of cement with low C₃A content may also be alternatively used. Durability criteria like minimum binder content and maximum water/binder ratio also need to be given due consideration in such

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environment.

- f. Wet curing period shall be enhanced to a minimum of 10 days or its equivalent. In hot & arid regions, the minimum curing period shall be 14 days or its equivalent.
- g. Subject to General Guidelines detailed out as above, PPC manufactured conforming to IS:1489 (Part-I) shall be treated at par with OPC for manufacture of Design Mix Concrete for structural use in RCC.
- h. Till the time, BIS makes it mandatory to print the %age of fly ash on each bag of cement, the certificate from the PPC manufacturer indicating the same shall be insisted upon before allowing use of such cements in works.
- i. While using PPC for structural concrete work, no further admixing of fly ash shall be permitted.

- j. **The Agreement items for Design Mix Concrete (DMC) for PCC as well RCC is with combination of OPC and GGBS. If the Contractor desires to use OPC in place of GGBS for any reason like non availability of GGBS, he may be permitted to use OPC in place of GGBS without any additional payment. The Contractor requires to obtain prior approval from the Engineer-in-charge for the same.**

- 2.2.2 Samples of cement arranged by the contractor shall be taken by the Engineer-in-Charge and got tested in accordance with provisions of relevant BIS Codes. The cement for such testing purpose shall be supplied by the contractor free of charge. In case test results indicate that the cement arranged by the contractor does not conform to the relevant BIS Codes, the same shall stand rejected and shall be removed from the site by the contractor at his own cost within a week's time of written order from the Engineer-in-Charge or his authorized representative to do so. The cost of tests shall be borne by the contractor.
- 2.2.3 Cement shall be brought at site in bulk supply of approximately 200 tonnes or as decided by the Engineer-in-Charge.
- 2.2.4 OPC & PPC bags shall be stored in separate godowns. Separate godowns for tested cement and fresh cement (under testing) to be constructed by the contractor at his own cost as per sketches given in C.P.W.D Specifications having weather-proof roofs and walls. The size of the cement godown is indicated in the sketches for guidance. The actual size of godown shall be as per site requirements and nothing extra shall be paid for the same. Each godown shall be provided with a single door with two locks. The keys of one lock shall remain with Engineer-in-Charge or his authorized representative of the work and that of other lock with the authorized agent of the contractor at the site of work so that the cement is issued from godown according to the daily requirement with the knowledge of both parties. The account of daily receipt and issue of cement shall be maintained in a register in the prescribed proforma and signed daily by the contractor or his authorized agent and Engineer-in-Charge or his authorized representative in token of its correctness. The day to day receipt and issue accounts of different grade/brand of cement shall be maintained separately in the standard proforma by the contractor or his authorized representative which shall be duly signed by the authorized representative of the Engineer-in-Charge before issue to the work on day to day basis.

Required number of cement godowns each having capacity as decided by the Engineer-in-Charge shall be constructed by the contractor at site of work for which no extra payment shall be made.

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The contractor shall be responsible for the watch and ward and safety of the cement go-downs. The contractor shall facilitate the inspection of the cement go-downs by the Engineer-in-Charge at any time.

The pages of the register should be machined numbered and each page initialed by the EE. The cement godown and the register are required to be checked by the AE/EE in-charge of the work as mentioned below:-

- a) At least weekly or fortnightly, respectively in case of works at the headquarters of AE/EE and.
 - b) Whenever they visit the site of work in case of works located outside the Sub- Divisional/Divisional Head Quarters.
 - c) In the case of large concentrated projects like major bridges etc., the EE should check the cement register at least fortnightly.
- 2.2.5 The actual issue and consumption of cement on work shall be regulated and proper accounts maintained as provided in the contract. The theoretical consumption of cement shall be worked out as per procedure prescribed in Clause-38 of the contract and shall be governed by the conditions laid therein.
- 2.2.6 If the quantity of cement actually used in the work is found to be more than the theoretical quantity of cement including authorized variation, nothing extra shall be payable to the contractor on this account. In the event of it being discovered that after the completion of the work, the quantity of cement used is less than the quantity ascertained as herein before provided (allowing variation on the minus side as stipulated in Clause - 38), the cost of quantity of cement not so used shall be recovered from the contractor as specified in schedule. Decision of the Engineer-in-Charge in regard to theoretical quantity of cement which should have been actually used as per the schedule and recovered at the rate specified, shall be final and binding on the contractor.
- For non-scheduled items, the decision of the Chief Engineer regarding theoretical quantity of the cement, which should have been actually used, shall be final and binding on the contractor.
- 2.2.7 Cement brought to site and cement remaining unused after completion of work shall not be removed from site without written permission of the Engineer-in-Charge.
- 2.2.8 Damaged cement shall be removed from site immediately by the contractor on receipt of notice in writing from the Engineer-in-charge. If he does not do so within three days of receipt of such notice, the Engineer-in-charge shall get it removed at the cost of the contractor.
- 2.2.9 In case the contractor brings surplus quantity of cement the same shall be removed from the site after completion of work by the contractor at his own cost after approval of the Engineer-in-Charge.
- 2.2.10 Cement, which is not used within 90 days from its date of manufacture, shall be retested at approved laboratory. Until the results of such tests are found satisfactory, it shall not be used on the work.

2.2.11 Compressive Strength of Cement

The average compressive strength of at least three mortar cubes (area of face 50 cm²) composed of one part of cement, three parts of standard sand (conforming to IS 650:1996) by mass and P/4+3.0 percent (of combined mass of cement plus sand) water, and prepared, stored and tested in the manner described in IS 4031 (Part 6): 1988, shall be as follows:

- a) 72±1 hour not less than 23 MPa
- b) 162±2 hour not less than 33 MPa
- c) 672±4 hour not less than 43 MPa

NOTE: - P is the percentage of water required to produce a paste of standard consistency (see as below)

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Consistency of Standard Paste:-

The quantity of water required to produce a paste of standard consistency, to be used for the determination of the water content mortar for the compressive strength tests and for the determination of soundness and setting time, shall be obtained by the method described in IS 4031 (part 4) : 1988.

2.3 STEEL REINFORCEMENT: -

2.3.1 (a) The Contractor shall procure IS marked TMT bars of various grades from the approved steel manufacturers as per list of approved makes forming part of this document or their authorized dealers having valid BIS license for IS: 1786-2008 and further confirming to the OM No.DG/MAN/382, dated 06.02.2019.

The procured steel should have following qualities:

- i. Excellent ductility, bend ability and elongation of finished product due to possible refining technology.
- ii. Consumption of steel should be accurate as per design
- iii. Steel should have no brittleness problem in finished product.
- iv. Steel should carry the quality of corrosion and earthquake resistance.
- v. Quality steel with achievement of proper level of sulphur and phosphorus as per IS: 1786-2008.

2.3.2 The contractor shall have to obtain and furnish test certificates to the Engineer-in-charge in respect of all supplies of steel brought by him to the site of work.

2.3.3 Samples shall also be taken and got tested by the Engineer-in-charge as per the provisions in this regard in relevant BIS codes. In case the test results indicate that the steel arranged by the contractor does not conform to the specifications, the same shall stand rejected, and it shall be removed from the site of work by the contractor at his cost within a week time on written orders from the Engineer-in-charge to do so. Else the department shall remove it and recover double the cost of removal from the contractor.

2.3.4 The steel reinforcement bars shall be brought to the site in bulk supply of 10 tons or more, or as decided by the Engineer-in-charge.

2.3.5 The steel reinforcement bars shall be stored by the contractor at site of work in such a way as to prevent their distortion and corrosion, and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.

2.3.6 For checking nominal mass, tensile strength, bend test, re-bend test etc. specimens of sufficient length shall be cut from each size of the bar at random, and at frequency not less than that specified below:

Size of bar	For consignment below 100 tones	For consignment above 100 tones
Under 10mm dia bars	One sample for each 25 tones or par thereof.	One sample for each 40 tones or part thereof.
10mm to 16mm dia bars	One sample for each 35 tones or part thereof.	One sample for each 45 tones or part thereof.
Over 16mm dia bars	One sample for each 45 tones or part thereof.	One sample for each 50tonnes or part thereof.

2.3.7 The contractor shall supply free of charge the steel required for testing including its transportation to testing laboratories. The cost of tests shall be borne by the contractor.

2.3.8 The actual issue and consumption of steel on work shall be regulated and proper accounts shall be maintained as provided in clause 10 of the contract. The theoretical consumption of steel

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shall be worked out as per procedure prescribed in **clause 38** of the contract and shall be governed by conditions laid therein. In case the consumption is less than theoretical consumption including permissible variations leading to under designing of the structure, the work shall be summarily rejected, otherwise recovery at the rate so prescribed shall be made after ensuring structural soundness and stability.. In case of excess consumption, no adjustment needs to be made.

- 2.3.9 The steel brought to site and the steel remaining unused shall not be removed from site without the written permission of the Engineer-in-charge.
- 2.3.10 The contractor shall submit original vouchers from the manufacturer for the total quantity of steel supplied under each consignment to be incorporated in the work. All consignment received at the work site shall be inspected by the Site staff along with the relevant documents before acceptance. The contractor shall obtain Original Vouchers and Test Certificates and furnish the same to the Engineer-in-Charge in respect of all the lots of steel brought by him from approved supplier to the site of work. The original vouchers and test certificates shall be defaced by the Site staff and kept on record in the site office.
- 2.3.11 Reinforcement including authorized spacer bars and laps shall be measured in length of different diameters as actually (not more than as specified in the drawings) used in the work nearest to a centimeter. Wastage and unauthorized overlaps shall not be measured.
- 2.3.12 The standard sectional weights referred to as in Table 5.4 in para 5.3.4 in CPWD Specifications will be considered for conversion of length of various sizes of M.S. Bars, Steel Bars and T.M.T. bars into Standard Weight.
- 2.3.13 Records of actual Sectional weights shall also be kept dia-wise and lot-wise. The average sectional weight for each diameter shall be arrived at from samples from each lot of steel received at site. The decision of the Engineer-in-Charge shall be final for the procedure to be followed for determining the average sectional weight of each lot. Quantity of each diameter of steel received at site of work each day will constitute one single lot for the purpose. The weight of steel by conversion of length of various sizes of bars based on the actual weighted average sectional weight shall be termed as Derived Actual Weight. However for the stipulated issue of steel reinforcement up to and including 10mm diameter bars, the actual weight of steel issued shall be modified to take into account the variation between the actual and the standard coefficients and the contractors' accounts will be debited by the cost of modified quantity.
- 2.3.14 (a) If the Derived Weight as in sub-para (2.3.13) above is less than the Standard Weight as in Sub-para (2.3.12) above then the Derived Actual Weight shall be taken for payment provided, if it is within the following tolerances specified in IS1786-2008, otherwise whole lot will be rejected.

Tolerances on Nominal Mass

Nominal Size in mm	Tolerance on Nominal mass Percent		
	Batch	Individual Sample*	Individual sample for coil**
a) Upto and including 10	±7	-8	±8
b) Over 10 upto and Including 16	±5	-6	±6
c) Over 16	±3	-4	±4

* For individual sample plus tolerance is not specified.

**For coils batch tolerance is not specified.

b) If the Derived Actual Weight is found more than the Standard Weight, the Standard Weight as per in sub-para (2.3.12) above shall be taken for payment. In such case nothing extra shall be paid for the difference between the Derived Actual Weight and the Standard Weight.

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2.4 SAFETY IN CONSTRUCTION

- 2.4.1 The contractor shall employ only such methods of construction, tools and plants as are appropriate.
- 2.4.2 The contractor shall take all precautions and measures to ensure safety of works and work man and shall be fully responsible for the same.
- 2.4.3 Safety pertaining to construction such as centering & shuttering, scaffolds, ladders, working platforms, gangway etc. shall be governed by CPWD safety code, relevant safety codes and the directions of Engineer in charge.
- 2.4.4 All the staging to be either of tubular steel structure with adequate bracings as approved or made of built up structural sections made from rolled structural steel sections.
- 2.4.5 Form work shall be properly designed for self-weight, weight of reinforcement, weight of fresh concrete and in addition the various live loads likely to be imposed during construction process.
- 2.4.6 The form work shall be designed & constructed so as to remain sufficiently rigid during placing & compaction of concrete & shall be such as to prevent loss of slurry from the concrete.
- 2.4.7 The vertical supports shall be adequately braced or otherwise secured in position that these do not fall when the load gets released or the supports are accidentally hit.
- 2.4.8 A thorough inspection of tubular steel centering is necessary before its erection and members showing evidence of excessive rusting, kinks, dents or damaged welds shall be discarded. Buckled or broken members shall be replaced. Care shall also be taken that locking devices are in good working order and that coupling pins are effectively aligned to frames. Tubes should have end to end joints in adjacent tubes staggered. Sleeve couplers should be used in preference to joint pins for axial connections.
- 2.4.9 Inclined forms which give rise to very high horizontal forces should be taken care of by trussing and diagonal bracing
- 2.4.10 Vertical members should be placed centrally under the members to be supported and over the member supporting them with no eccentricity exceeding 25mm
- 2.4.11 The centering frames shall be tied together with sufficient braces to make a rigid and solid unit. It shall be ensured that struts and diagonal braces are in proper position and are secured so that frames develop full load carrying capacity. As erection progresses, all connecting devices shall be in place and shall be fastened for full stability of joints and units.
- 2.4.12 Wedges under the supports shall be set on firm soil / PCC which assures adequate stability for all props. Care shall be taken not to disturb the soil under the supports. Adequate drainage shall be provided to drain away the water coming due to rains, easing of forms or during the curing of the concrete to avoid softening of the supporting soil strata.
- 2.4.13 During pouring of the concrete the centering shall be constantly inspected and strengthened, if required wedges below the vertical supports tightened and adjustment screws properly adjusted as necessary.
- 2.4.14 Only workmen actually engaged in the form work shall be allowed in the area during operations. Those engaged in removing the form work shall wear helmets, gloves and heavy soled shoes and approved safety belts etc.
- 2.4.15 The safety code as lay down in respective clauses of Agreement shall be strictly followed.

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

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SPECIAL CONDITIONS FOR RO PLANT

Technical and Equipment Specifications for Installation of 1000 litres per hour capacity R.O plant
(Just indicative not exhaustive)

S.No	Details	Nos. Offered	Material of Consultation	Size/Capacity	Make
1	Raw water pump	01	CI	Leo horizontal type 3000 LPH ,1HP	CRI or equivalent
2	Multimedia filter	01	FRP	1354	Aventura /pentair / Alpha/aerosil
3	Activated Carbon filter	01	FRP	1354	Aventura/Advance composite / Alpha/Pentair
4	Anti scalant dosing system	01	PP	6 LPH @ 3.5 bar	e dose
5	Micron cartridge filter	02	PP/Wound	20" Length(jumbo)	
6	High Pressure Pump	01	SS	3000 lph/hr@ 2 to 50kgs/Cm2	CRI (4-12) old Model / lubi
7	8" Membranes	01	TFC/PA	8" x 40" Long	Toray/DOW-film tech
8	Pressure Tubes (suitable for 1membrane)	01	FRP	8 " x 80" Long	Aventura/Pentair / Advance composite / Alpha
9	Pressure Gauges	04	SS (Glycerine filled)	2 1/2" Dial size 1/4 " BSP Back entry	Waree/Hguru/Equiv
10	Flow indicators	02	Acrylic	0-1200 lph	UKL / Aster /Equivalent
11	SS skid	01		40 mm	
12	Inter connecting pipe work	As required	CPVC	25 NB	Ashirvad/sudhakar/supreme
13	Electrical Control Panel	01			Automatic (accord)
14	U.V Sterilizer	01	SS/12watts	1000 LPH	AIFA
15	SS tank	01		2000ltrs	304 grade
16	25nb Multi port valve	02	HDPE		innovative

RAW WATER PARAMETERS

S.No	PARA METER	VALUE	UNIT
1	SOURCE	BOREWELL	NA
2	TDS	<2500	Mg/liter
3	PH	6.5 – 7.7	In the range of
4	TOTAL HARDNESS AS CaCO3	800	Mg/litre
5	TOTAL ALKALITY AS CaCO3	>2500	PPM
6	CHLORIDE AS CI	>2800	Mg/litre
7	SULPHATE AS SO4	300	PPM
8	SILICA AS SiO2 (Reactive)	20	PPM
9	SILICA (COLLODIAL)	NIL	PPM
10	HEAVY METAL	<0.1	PPM
11	COD	5<	PPM
12	BOD	<2	PPM
13	SDI	<3	PPM

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

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14	FREE CHLORINE	NIL	PPM
15	O & G	NIL	PPM
16	IRON	<3.5	PPM
17	TURBIDITY	<5	NTU
18	ELECTRICAL CONDUCTIVITY	>25500	M.ohms/CM2c
19	NITERATE	>30	PPM
20	FLUORIDE	<1	Mg/litre
21	MEGNISM	>350	PPM

OUTLET PARAMETERS

S.No	PARA METER	VALUE	UNIT
1	PH VALUE	6.5 to 8.5	In the range of
2	TURBIDITY (MAXIMUM)	≠1	NTC
3	TDS (MAXIMUM)	20 to 50	PPM
4	COLOUR (MAXIMUM)	≠5	HAZEN Units
5	CHLORIDE	≠250	Mg/litre
6	TOTAL HARDNESS (AS CaCO3) (MAXIMUM)	≠200	Mg/litre
7	E-COLE	Nil	
8	FLUORIDES (MAXIMUM)	≠1	Mg/litre
9	TASTE AND COLOUR	shall be agreeable	

The Installation of RO plants to be executed as per approved design to be submitted by the contractor

PARTICULAR SPECIFICATIONS (Civil Component)

1. GENERAL

- 1.1** The work shall be carried out as per CPWD Specifications 2019 Vol. I & II with up-to-date correction slips.

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

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- 1.2** The work shall be executed and measured as per metric dimensions given in the Schedule of quantities, drawings etc. (F.P.S. units wherever indicated are for guidance only).
- 1.3** Wherever any reference to any Indian Standard Specification occurs in the documents relating to this contract, the same shall be inclusive of all amendments issued thereto or revisions thereof, if any.
- 1.4** Unless otherwise specified in the schedule of quantities the rates for all items of the work shall be considered as inclusive of pumping out or bailing out water if required for which no extra payment will be made. This will include water encountered from any source, such as rains, floods, and sub-soil water table being high due to any other cause whatsoever.
- 1.5** Unless otherwise specified in the schedule of quantities, particular specifications or CPWD specifications (subject to the order or preference) the rates tendered by the tenderer shall be all inclusive and shall apply to all lifts, all heights and all floor including terrace, leads and depths and nothing extra over and above the schedule of quantity shall be payable on this account.
- 1.6** The work shall be carried out in accordance with the Architectural drawings, structural drawings and approved shop drawings. The structural shop and architectural drawings shall have to be properly correlated before executing the work. In case of any difference noticed between architectural and structural drawings, the contractor shall obtain final decision of the Engineer-in-charge. In case of any discrepancy in the item given in the schedule of quantities appended with the tender and architectural drawings related to the relevant items, the former shall prevail unless and otherwise given in writing by the Engineer in charge. Nothing extra shall be payable on this account.
- 1.7** Wherever any reference to any Indian Standards occurs in the documents relating to this contract, the same shall be inclusive of all amendments issued thereto or revisions thereof, if any, up to the date of receipt of tenders.
- 1.8** The following additional specifications shall apply:
- 1.8.1** All stone aggregate and stone ballast shall be of hard stone variety and to be obtained from quarries near& around to site of work, approved by the Department of Mines, Govt. of A.P. and as per direction of the Engineer in charge
- 1.8.2** Coarse sand should be obtained from sand quarries of nearby rivers, approved by the Department of Mines, Govt. of A.P. and as per direction of the Engineer in charge and to be used for cement concrete work including RCC, mortar for masonry and plaster work shall be of standard quality and screened as required. It shall be clean sand.
In case of non-availability of sand, the agency may be permitted at the discretion of Engineer-in-Charge to use **crushed stone sand** on their request on production of adequate proof of non-availability of the same, provided it confirms to grading and other requirements given in CPWD specifications. The change in sand type or source would require revision of Mix Design of Concrete from the approved laboratories such as AU/Visakhapatnam or JNTU Kakinada or NCCBM Hyderabad or any Government Engineering College /Institute, for which nothing extra shall be paid nor any extra time will be granted. In case of use of crushed stone sand, all necessary precautions for CC work, RCC work, masonry work, plaster work and all other related works shall be taken by the agency as per relevant CPWD specifications and BIS codes without any extra cost.
- 1.9** The rates for all items of work shall unless clearly specified otherwise include for all floor levels of building and cost of all operations and all inputs of labour, material, T&P, scaffolding, wastages, watch and ward, other inputs, all incidental charges, all taxes, GST, duties, levies etc. required for execution of the work.
- 1.10** All crossings, embedment etc. in walls and floors for water supply, drainage and sanitary pipes, fittings etc. shall be provided for individual walls and floors so as to avoid cuttings of masonry work and floors. All such areas shall be made good during finishing and nothing extra shall be payable on these accounts.

NIL	Ins	NIL
Omi	NIL	Ovw
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1.11 Product delivery, storage and handling of chemicals.

- 1.11.1 The contractor shall construct storage space for Chemicals to ensure that the storage conditions are as recommended by the manufactures.
- 1.11.2 All the materials shall be procured and delivered in sealed containers with labels legible and intact.
- 1.11.3 All the chemicals (polymers, epoxy, water proofing compound, plasticizer, Polysulphide, all exterior and interior paints, polish etc.) shall be procured in convenient packs say 20 liters/Kgs.} Capacity packing only or as approved by the Engineer-in-Charge, and not in bigger capacity containers, say 200 litre (Kgs.) drums unless otherwise specifically permitted by the Engineer-in-Charge. One sample from each lot of the chemical procured by the contractor shall be tested in a laboratory as approved by the Chief Engineer.
- 1.11.4 All material required for the execution of the work shall be got approved, procured and deposited with the Departmental supervisory staff. The materials shall be kept in joint custody of the contractor and the Department. The watch and ward of such material shall, however, remain to be the responsibility of the contractor and no claim, whatsoever, on this account shall be entertained. Different containers of each chemical shall be serially numbered on packing and also consumed in that order. Day-to-Day account of receipt, issue and balance shall be regulated by the Department and proper account shall be maintained at site of work in the prescribed form as per the standard practice.
- 1.11.5 All the chemicals shall be procured by the contractor directly from the manufacturer. In exceptional circumstances, the contractor may be allowed to procure the materials from the authorized dealers of the manufacturers, if specifically permitted by the Engineer-in-Charge.
- 1.11.6 The original copies of challan / cash memos towards the quantity of various chemicals procured shall be made available by the contractor at the request from the Engineer-in-Charge and a copy of the same shall be kept in record.
- 1.11.7 The Name of manufacturers, manufacturer's product identification, and manufacturer's mixing instructions, warning for handling and toxicity and date of manufacturing and shelf life shall be clearly and legibly mentioned on the labels of the each container.
- 1.11.8 The contractor shall submit for the chemicals procured, manufacturer's and / or a u t h o r i z e d dealer's certificate regarding supplying and verifying conformance to The material specifications, as specified.
- 1.11.9 All filled containers shall be handled in safe manner and in a way to avoid breaking container seals.
- 1.11.10 Empty containers of the chemicals should not be removed from site till the completion of work and shall be removed only with the written approval of the Engineer-in-Charge.
- 1.11.11 All arrangements for measuring, dosing and mixing of material / chemicals at site have to be made by the contractor.
- 1.11.12 Contractor shall suitably advise his site Engineer and all the workers as regards safe handling of chemicals. Necessary protective and safety equipments in form of hand gloves, goggles etc. shall be provided by the contractor and be also used at site.
- 1.11.13 All incidental charges of any kind including cartage, storage and wastage and safe custody of material etc. shall be borne by the contractor and no claim, whatsoever, shall be entertained on this account.
- 1.11.14 The chemicals shall be tested in an independent laboratory as approved by the Chief Engineer at the frequency as specified. If required, more samples may have to be tested as per the directions of the Engineer-in-Charge. Nothing extra shall be payable on this account. However, all the testing charges shall be borne by the Contractor.

2 EARTH WORK:-

NIL	Ins	NIL
Omi	NIL	Ovw
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- 2.1** Earth work shall be executed as per CPWD specifications.
- 2.2** Excavation shall be undertaken to the width of footing including necessary margins for construction operation as per drawing or directed otherwise. Where the nature of soil or the depth of the trench and season of the year, do not permit vertical sides, the contractor at his own expense shall put up the necessary shoring, strutting and planking or cut slopes with or without steps, to a safer angle or both with due regard to the safety of personnel and works and to the satisfaction of the Engineer. Measurement of plan area of excavation for payment shall only be permitted.
- 2.3** All the major excavation shall be carried out by mechanical excavator. No extra payment shall be made for that.
- 2.4** The contractor shall make at his own cost all necessary arrangements for maintaining water level, in the area where works are under execution low enough so as not to cause any harm to the works or problems in carrying out with the execution and the rates for all items of work shall be considered as inclusive of pumping out or bailing out water, if required and for which no extra payment shall be made. This will include water coming from any source, such as rains, accumulated rain water, floods, leakages from sewer and water mains subsoil water table being high or due to any other cause whatsoever. The contractor shall make necessary provision of pumping, dredging, bailing out water coming from all above sources and excavation and other works shall be kept free of water by providing suitable system approved by the Engineer-in-Charge.
- 2.5** De-watering required, if any, shall be done conforming to BIS Code IS: 9759 (guide lines for de-watering during construction) and / or as per the specifications approved by the Engineer-in-Charge. Design of an appropriate and suitable dewatering system shall be the Contractor's responsibility. Such scheme shall be modified / augmented as the work proceeds based on fresh information discovered during the progress of work, at no extra cost. At all times during the construction work, efficient drainage of the site shall be carried out by the Contractor and especially during the laying of plain cement concrete, taking levels, etc. The Contractor shall also ensure that there is no danger to the nearby properties and installations on account of such lowering of water table. If needed, suitable precautionary measures shall be taken by the Contractor. Also the scheme of dewatering adopted shall have adequate built in arrangement to serve as stand-bye to attend to repair of pumps etc. and disruption of power / fuel supply. Nothing extra shall be payable on this account.
- 2.6** In trenches where surface water is likely to get into cut / trench during monsoons, a ring bund of puddle clay or by any other means shall be formed outside, to the required height, and maintained by the Contractor. Also, suitable steps shall be taken by the Contractor to prevent back flow of pumped water into the trench. Nothing extra shall be payable on this account.

3.0 R.C.C. WORK:-

3.1 Design Mix Concrete.

- 3.1.1** The term machine batched, machine mixed and machine vibrated design mix cement concrete used in the document shall mean the concrete produced in fully automatic concrete batching & mixing plant, placed in position by the concrete pump and vibrated by surface vibrator/ needle vibrator/ plate vibrator, as the case may be to achieve the required strength and durability.

The RCC work shall be done with Design Mix Concrete. Wherever letter "M" has been indicated, the same shall imply for the Design Mix Concrete. The Design Mix Concrete will be designated based on the principles given in IS: 456, 10262 & SP 23. The Conditions & Specifications stated herein shall have precedence over all conditions & specifications stated in relevant I.S. Codes / C.P.W.D. Specifications. The concrete mix shall be designed for the specified target mean compressive strength in order to ensure that work test result do not fall below the acceptance criteria specified for the concrete mix. The cement shall be actually weighed as presumption of each bag having 50kg shall not be allowed. The Contractor shall design mixes for each class of concrete indicating that the concrete ingredients and proportions will result in concrete mix meeting the requirements specified. Nothing extra shall be paid on this account.

(a) The contractor has to submit design mix without use of admixtures.

(b) Admixture may be added in case of specific technical requirement so as to meet the workability / slump requirement or for any other reason but nothing extra is to be paid to contractor on account of adding admixtures. The admixture shall conform to IS: 9103. The chloride content in admixture shall satisfy the requirement of BS: 5075. The total amount of chlorides in admixture mixed concrete shall also satisfy the requirements of IS: 456:2000. Admixtures shall not be used

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)	AE	

without approval of Engineer-in-Charge. Whenever required, the admixture of approved quality & approved make only shall be used to attain the required workability. Nothing extra on account of use of Admixture / Plasticizer shall be payable.

- 3.1.2** The sources of coarse aggregate, fine aggregate, water, admixture & cement to be used in concrete work shall be identified by the contractor & he will satisfy himself regarding their conforming to the relevant specifications & their availability before getting the same approved from the Engineer-In-Charge.

3.2 GENERAL INFORMATION FOR READY MIX CONCRETE (RMC) TO BE GIVEN TO THE SUPPLIER BY THE CONTRACTOR

- 3.2.1** The contractor shall bring Ready Mix Concrete from approved RMC plants as mentioned in the list showing preferred Brands/ Manufacturers/Makes enclosed in this NIT. The contractor has to produce text of MOU proposed to be entered between purchaser (the contractor) and supplier (R.M.C. plant) to the Engineer-in-charge. The Engineer-in-charge shall give approval in writing. The contractor shall draw the MOU with approved RMC plant owner / company and submit to Engineer-in-charge within a week of such approval. The contractor will not be allowed to purchase ready mixed concrete without completion of above stated formalities for use in this project.

- 3.2.2** Notwithstanding the approval granted by Engineer-in-charge in aforesaid manner, the contractor shall be fully responsible for quality of concrete including input control, transportation and placement etc.

- 3.2.3** The Engineer-in-charge will reserve right to inspect at any such stage and reject the concrete if he is not satisfied about quality of product. The contractor should therefore draw MOU / agreement with RMC owner / company very carefully keeping all terms and conditions / specifications forming a part of this tender document.

- (i) The Engineer-in-charge reserves the right to exercise control over the ingredients, water and admixtures purchased, stored and to be used in the concrete including conducting of tests for checking quality of materials, recordings of test results and declaring the materials fit or unfit for use in production of mix.
- (ii) Calibration check of the RMC.
- (iii) Weight and quantity check on the ingredients, water and admixtures added for batch mixing.
- (iv) Time of mixing of concrete.
- (v) Testing of fresh concrete, recordings of results and declaring the mix fit or unfit for use. This will include continuous control on the workability during production and taking corrective action.

- 3.2.4** For exercising such control, the Engineer-in-charge shall periodically depute his authorized representative at the RMC plant. It shall be responsibility of the contractor to ensure that all necessary equipment manpower & facilities are made available to E-in-C and/ or his authorized representative at RMC plant.

- 3.2.5** Ingredients, admixtures & water declared unfit for use in production of mix shall not be used. A batch mix found unfit for use shall not be loaded into the truck for transportation.

- 3.2.6** All required relevant records of RMC shall be made available to the Engineer-in-charge or his authorized representative. The E-in-C shall, as required, specify guidelines & additional procedures for quality control & other parameters in respect of materials and production & transportation of concrete mix, which shall be binding on the contractor & the RMC plant.

3.3 Ingredients:

- 3.3.1** The sources of coarse aggregate, fine aggregate, water, admixture & cement to be used in concrete work shall be identified by the contractor & he will satisfy himself regarding their conforming to the relevant specifications & their availability before getting the same approved from the Engineer-In-Charge.

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

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- (a) **Coarse Aggregate:-** As per CPWD Specifications
- (b) **Fine Aggregate:-** As per CPWD Specifications
- (c) **Water:-** It shall conform to requirements laid down in IS:456-2000 / Para 3.1.1 of CPWD Specifications (Vol. I 2019)
- (d) **Cement:-** Portland Pozzolona Cement (Fly Ash based) conforming to IS: 1489/ OPC of grade 43 shall conform to IS: 8112, required in the work from reputed manufacturers of cement as per the approved make in 50 kg. bags bearing manufacturer's name and ISI marking, along with manufacturers test certificate for each lot. Portland Pozzolona Cement is to be used for RCC works only subject to fulfillment of conditions of circular number CDO / SE (RR) / fly ash (MAN) 02 dated 09.04.09 shall be used for design mix concrete and shall conform to IS-1489 (Part I). However, if the contractor uses higher grade of cement nothing extra shall be paid.
- Sulphate Resistant Cement wherever mentioned in the item of work to be confirmed to IS 12330.**
- (e) **Admixture/ Plasticizer: -** The admixture shall conform to IS: 9103. The chloride content in admixture shall satisfy the requirement of BS: 5075. The total amount of chlorides in admixture mixed concrete shall also satisfy the requirements of IS: 456:2000. Admixtures shall not be used without approval of Engineer-in-Charge. Whenever required, the admixture of approved quality & approved make only shall be used to attain the required workability. Nothing extra on account of use of Admixture / Plasticizer shall be payable.

3.4. WATER CEMENT RATIO AND SLUMP

- 3.4.1** In proportioning a particular mix, the manufacturer/producer/contractor shall give due consideration to the moisture content in the aggregates, and the mix shall be so designed as to restrict the maximum free water cement ratio to less than the 0.45.
- 3.4.2** Due consideration shall be given to the workability of the concrete thus produced. Slump shall be controlled on the basis of placement in different situations.

Placing Conditions	Degree of Workability	Slump (mm)
(1)	(2)	(3)
Lightly reinforced sections in slabs, beams, walls, columns	Low	25-75
Heavily reinforced section in slabs, beams, walls, columns.	Medium	50-100
Pumped concrete	Medium	75-100

3.5 CHARACTERISTIC COMPRESSIVE STRENGTH COMPLIANCE REQUIREMENT

In the designation of concrete mix letter M refers to the mix and the number to the specified characteristic compressive strength of 15 cm – Cube at 28 days expressed in N/mm².

Specified Grade	Mean of the Group of 4 Non-overlapping consecutive test results in N/mm²	Individual Test Results in N/mm²
(1)	(2)	(3)
M25 Or Above	$\geq F_{ck} + 0.825 \times \text{established standard deviation (rounded off to nearest 0.5 N/mm}^2\text{)}$ Or $F_{ck} + 3 \text{ N/mm}^2$, whichever is greater where f_{ck} is characteristic compressive strength of CC cube at 28 days.	$\geq F_{ck} - 3 \text{ N/mm}^2$

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

Note :	(i)	In the absence of established value of standard deviation, the values given in Table as mentioned below may be assumed, and attempt should be made to obtain results of 30 samples as early as possible to establish the value of standard deviation.
	(ii)	The acceptance criteria for compressive strength as mentioned in IS:456- 2000 as amended upto date shall prevail over the above criteria in case of any difference.

- 3.6 The Contractor shall engage one of the following approved laboratories / test house for designing the concrete mix in accordance with relevant IS Code and to conduct laboratory tests to ensure the target strength & workability criteria for a given grade of concrete: -

The contractor shall submit at his own cost, the mix design report from approved laboratories such as AU/Visakhapatnam or JNTU Kakinada or NCCBM Hyderabad or any Government Engineering College /Institute for approval of Engineer-in-charge within 30 days from the date of issue of letter of acceptance of the tender. No concreting shall be done until the mix design is approved. Every time sources of materials/cement is changed mix design report shall be got re- done and has to be got approved from Engineer In charge.

The various ingredients for mix design / laboratory tests shall be sent to the lab/ test houses through the Engineer-in-charge and the samples of such aggregates sent shall be preserved at site by the department. Nothing extra shall be paid on this account.

In the event if all the **above** laboratories are unable to carry out the requisite design/ testing, the contractor may have it done from any other NABL accredited laboratory with prior approval of the **Chief Engineer.**

- 3.7 **The contractor shall submit the report on design mix from any of above approved laboratories for approval of Engineer in Charge within 30 days from the date of issue of letter of acceptance of the tender.** No concreting shall be done until the design mix is approved. In case of the likely use of admixtures in concrete, the contractor shall design and test the concrete mix by using trial mixes with admixtures also, for which nothing extra shall be payable.
- 3.8 In case of change of source or characteristic properties of the ingredients used in the concrete mix design during the work, the contractor as per the directions of the Engineer-in-charge shall submit a revised concrete mix design report conducted at laboratory established at site. Nothing extra shall be paid on this account.
- 3.9 All cost of mix designing and testing, connected therewith, including charges payable to the laboratory shall be borne by the Contractor including redesigning of the concrete mix whenever required & as directed by Engineer-In-Charge.
- 3.10 The mix design for a specified grade of concrete shall be done for a target mean compressive strength $T_{ck} = F_{ck} + 1.65s$
Where F_{ck} = Characteristic compressive strength at 28 days.
s = Standard deviation which depends on degree of quality control.

The degree of Quality Control for this work is “good” for which the standard deviation obtained for different grades of concrete shall be as follows: -

GRADE OF CONCRETE	STANDARD DEVIATION
M-25	4.0
M-30	5.0
M-35	5.0
M-40	5.0

NIL	Ins	NIL
Omi	NIL	Ovw
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However, actual standard deviation based on test strength of samples for each grade of concrete shall be calculated separately as per procedure laid down in clause 9.2.4 of Code of Practice IS 456:2000.

3.10.1 TRIAL BATCHES

- (a) The designed mix proportions shall be checked for target mean compressive strength by means of trial batches.
- (b) Minimum three sets of separate preliminary tests shall be carried out for each trial batch of concrete mix. Each test shall comprise of six specimens and only one test-set of six specimens shall be made on any particular day.
- (c) The quantities of materials for each trial mix shall be sufficient for at least six specimens (cubes) and the concrete required for carrying out workability tests.
- (d) The workability of trial mix No.1 shall be measured and mix shall be carefully observed for freedom from segregation, bleeding and its finishing characteristics. The water content, if required, shall be adjusted corresponding to the required changes in the workability.
- (e) With the modified Water Content, the mix proportions shall be recalculated by keeping with water cement ratio unchanged. The mix proportion, as modified, shall form the Trial Mix No.2 and tested for the specified strength and workability.
- (f) In addition, trial mix No.3 and 4 shall be designed by keeping water contents same as that determined for trial mix 2 but varying the water cement ratio by ± 10 percent of the specified value and tested for their design characteristics.
- (g) Out of the six specimen of each set, three shall be tested at seven days and remaining three at 28 days. The preliminary tests at seven days are intended only to indicate the strength to be attained at 28 days, while the design mix shall be approved only on the basis of test strength at 28 days.

3.10.2 APPROVAL OF DESIGN MIX

The design mix shall be considered satisfactory and approved if at least three preliminary test-sets individually satisfy the following strength and workability criteria:

- (a) The average strength of each test-set is not less than the specified target mean compressive strength (T_{ck}).
- (b) The strength of any specimen cube is not less than $0.85 f_{ck}$.
- (c) The concrete mix is of required degree of workability and acceptable concrete finish.

3.11 DESIGN MIX CONCRETE FROM FULLY AUTOMATIC COMPUTERISED CONCRETE BATCHING AND MIXING PLANT

3.11.1 Proportioning Concrete

In proportioning cement concrete, the quantity of both cement and aggregates shall be determined by weight. The cement shall be weighed separately from the aggregates. Water shall either be measured by volume in calibrated tanks or weighed. All measuring equipment shall be maintained in a clean and serviceable condition. The amount of mixing water shall be adjusted to compensate for moisture content in both coarse and fine aggregates. The moisture content of aggregates shall be determined in accordance with IS : 2386 (Part III). Suitable adjustments shall also be made in the weights of aggregates to allow for the variation in weight of aggregates due to variation in moisture content.

3.11.2 Production of Concrete

- 3.11.2.1 The concrete shall be produced in a central batching and mixing plant with, computerized printing for contents and admixture dosage. The batching plant shall be fully automatic. Automatic batcher shall be charged by devices which, when actuated by a Single starter switch will automatically start the weighing operation of each material and stop automatically, when

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Omi	NIL	Ovw
AE (P)	AE	

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the designated weight of each material has been reached. The batching plant shall have automatic arrangement for dispensing the admixture and shall also be capable of discharging water in more than one stage. A print out from the batching plant for every lot shall be submitted. A batching plant essentially shall consist of the following components: Separate storage bins for different sizes of aggregates, silo for cement; and water storage tank.

- Batching equipment
- Mixers
- Control panels
- Mechanical material feeding and elevating arrangements

3.11.2.2 The compartments of storage bins for aggregates shall be approximately of equal size. The cement compartment shall be centrally located in the batching plant. It shall be watertight and provided with necessary air vent, aeration fittings for proper flow of cement & emergency cement cut off gate. The aggregate and sand shall be charged by power operated centrally revolving chute. The entire plant from mixer floor upward shall be enclosed and insulated. The batch bins shall be constructed so as to be self-cleansing during drawdown. The batch bins shall in general conform to the requirements of IS : 4925.

3.11.2.3 WATER:

1. Water to be used in manufacturing and curing of Concrete shall be tested before use. All such tests shall be submitted to the Engineer in charge for his approval before water is used in work.
1. Contractor shall identify the location of source of water intended to be used. Each source of water shall be separately tested. In the event of a change in source of water all tests specified herein shall have to be repeated.
2. In the event of water is drawn from tube wells or open wells, water samples shall be for seasonal fluctuations in water table or at intervals to be directed by the Engineer in charge.
3. Water samples from each source shall be tested as under:

Test	Number of tests for each source
a. Acidity	3
b. Alkalinity	3
c. Presence of Solids	3

Mean values of the above tests shall be taken as the representative value and the acceptance criteria shall be based on these test results. All testing procedure and computation of test results shall conform to IS: 3025

4. Approved quality water shall be collected and stored in the Under Ground sumps/elevated tanks for the day to day requirement of work and same shall be used for all cement works and also for curing. Due care shall be taken in this regard.

3.11.2.4 The batching equipment shall be capable of determining and controlling the prescribed amounts of various constituent materials for concrete accurately i.e. water, cement, sand, individual size of coarse aggregates etc. The accuracy of the measuring devices shall fall within the following limits.

Measurement of Cement	±2% of the quantity of cement in each batch
Measurement of Water	± 3% of the quantity of water in each batch
Measurement of Aggregate	± 3% of the quantity of aggregate in each batch
Measurement of Admixture	± 3% of the quantity of admixture in each batch

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

3.11.2.5 Mixing Concrete

- 3.11.2.5.1 The mixer in the batching plant shall be so arranged that mixing action in the mixers can be observed from the operator's station. The mixer shall be equipped with a mechanically or electrically operated timing, signaling and metering device which will indicate and assure completion of the required mixing period. The mixer shall have all other components as specified in IS : 4925.

3.11.2.6 Transportation, Placing and Compaction of Concrete

- 3.11.2.6.1 Mixed concrete from the batching plant shall be transported to the point of placement by transit mixers or through concrete pumps or steel closed bottom buckets capable of carrying 0.6 cum concrete. In case the concrete is proposed to be transported by transit mixer, the mixer speed shall not be less than 4 rev/ min. of the drum nor greater than a speed resulting in a peripheral velocity of the drum as 70 m / minute at its largest diameter. The agitating speed of the agitator shall be not less than 2 rev / min. nor more than 6 rev / min. of the drum. The number of revolutions of the mixing drum or blades at mixing speed shall be between 70 to 100 revolutions for a uniform mix, after all ingredients, have been charged into the drum. Unless tempering water is added, all rotation after 100 revolutions shall be at agitating speed of 2 to 6 rev / min. and the number of such rotations shall not exceed 250. The general construction of transit mixer and other requirements shall conform to IS : 5892.
- 3.11.2.6.2 In case concrete is to be transported by pumping, the conduit shall be primed by pumping a batch of mortar / thick cement slurry through the line to lubricate it. Once the pumping is started, it shall not be interrupted (if at all possible) as concrete standing idle in the line is liable to cause a plug. The operator shall ensure that some concrete is always there in the pump-receiving hopper during operation. The lines shall always be maintained clean and shall be free of dents.
- 3.11.2.6.3 Materials for pumped concrete shall be batched consistently and uniformly. Maximum size of aggregate shall not exceed one-third of the internal diameter of the pipe. Grading of aggregate shall be continuous and shall have sufficient ultra-fine materials (materials finer than 0.25mm). Proportion of fine aggregates passing through 0.25mm shall be between 15 & 30% and that passing through 0.125 mm sieve shall not be less than 5% of the total volume of aggregate. When pumping long distances and through hot weather, set-retarding admixtures may be used. Admixtures to improve workability can be added. Suitability of concrete shall be through pumping shall be verified by trial mixes and by performing pumping tests.

3.12 PREPARATION OF MIXES AS PER APPROVED DESIGN MIX AND CONDUCTING CONFIRMATORY TEST AT FIELD LAB.

- 3.12.1 The contractor shall make the cubes of trial mixes as per approved Mix design at site laboratory for all grades, in presence of Engineer in charge using sample of approved materials proposed to be used in the work prior to commencement of concreting and get them tested in his presence to his entire satisfaction for 7 days and 28 days . Test cubes shall be taken from trial mixes as follows.
- 3.12.2 For each mix, a set of six cubes shall be made from each of the three consecutive batches. Three cubes from each set of six shall be tested at age of 7 days and remaining three cubes at age of 28 days. The cubes shall be made, cured, transported and tested strictly in accordance with specifications. The average strength of nine cubes at age of 28 days shall exceed the specified target mean strength for which design mix has been approved, the evaluation of test results will be done as per IS : 456-2000.

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

3.12.3 Frequency of Sampling**3.12.3.1 Sampling Procedure engaged for**

A random sampling procedure shall be adopted to ensure that each concrete batch shall have a reasonable chance of being tested that is the sampling should be spread over the entire period of concreting and cover all mixing units.

3.12.3.2 Frequency

The minimum frequency of sampling of concrete of each grade shall be in accordance with the following:

Quantity of Concrete in the Work, m³	Number of Samples
I - 5	1
6 - 15	2
16 - 30	3
31 - 50	4
51 and above	4 plus one additional sample for each additional 50 m ³ or part thereof

NOTE- At least one sample shall be taken from each Shift. Where concrete is produced at continuous production unit, such as batch-mixed concrete plant, frequency of sampling may be decided by Engineer-in-charge in such a manner so as to ensure that each concrete batch shall have a reasonable chance of being tested.

3.12.4 Test Specimen

Three test specimens shall be made for each sample for testing at 28 days. Additional samples may be required for various purposes such as to determine the strength of concrete at 7 days or at the time of striking the formwork, or to determine the duration of curing, or to check the testing error. Additional samples may also be required for testing samples cured by accelerated methods as described in IS 9103. The specimen shall be tested as described in IS 516.

3.12.5 Test Results of Sample

The test results of the sample shall be the average of the strength of three specimen. The individual variation shall not be more than +/- 15 percent of the average. If more, the test results of the sample are invalid. 90% of the total tests shall be done at the laboratory established at site by the contractor and remaining 10% in the laboratory as mentioned in para 3.6, or in any other NABL accredited laboratory as directed by the Chief Engineer, CPWD, Vijayawada.

3.12.6 ACCEPTANCE CRITERIA**3.12.6.1 Compressive Strength**

The concrete shall be deemed to comply with the strength requirements when both the following condition are met:

- The mean strength determined from any group of four consecutive test results complies with the appropriate limits in col 2 of Table given under para 3.5 above.
- Any individual test result complies with the appropriate limits in col 3 of Table given under para 3.5 above.

3.12.6.2 Quantity of Concrete Represented by Strength Test Results

NIL		Ins	NIL
Omi	NIL	Ovw	NIL
AE (P)		AE	

The quantity of concrete represented by a group of four consecutive test-results shall include the batches from which the first and last samples were taken together with all intervening batches.

Where the mean rate of sampling is not specified the maximum quantity of concrete that four consecutive test results represent shall be limited to 60 m³.

3.12.6.3 Concrete of each grade shall be assessed separately.

3.12.6.4 Concrete is liable to be rejected if it is porous or honey-combed, its placing has been interrupted without providing a proper construction joint, the reinforcement has been displaced beyond the tolerances specified, or construction tolerances have not been met. However, the hardened concrete may be accepted after carrying out suitable remedial measures to the satisfaction of the Engineer-in-Charge.

3.12.7 Ultrasonic Pulse Velocity Method of Test for RCC

3.12.7.1 The underlying principle of assessing the quality of concrete is that comparatively higher velocities are obtained when the quality of concrete in terms of density, homogeneity and uniformity is good. The consistency of the concrete as regards its general quality gets established. In case of poorer quality lower velocities are obtained. If there are cracks, voids or flaws inside the concrete which come in the way of transmission of pulse, lower velocities are obtained.

3.12.7.2 The quality of concrete in terms of uniformity, incidence or absence of internal flaws, cracks and segregation etc. indicative of the level of workmanship employed, can thus be assessed using the guidance given in table below, which have been evolved for characterizing the quality concrete in structure in term of the ultrasonic pulse velocity.

Velocity criterion for Concrete Quality Grading.

Sl. No.	Pulse velocity by Cross Probing (km/sec)	Concrete Quality Grading
1	Above 4.5	Excellent
2	4.5 to 3.5	Good
3	3.5 to 3.0	Medium
4	Below 3.0	Doubtful

Note : In Case of “doubtful” quality it may be necessary to carry further tests.

3.12.7.3 Pulse velocity method of test of concrete is to be conducted for CPWD works as a routine test. The acceptance criteria as per the above table will be applicable which is as per IS 13311 (part-1): 1992. From the above “Good” and “Excellent” grading are acceptable and below these grading the concrete will not be acceptable. **The cost of testing shall be borne by the contractor.**

3.12.7.4 5% of the total number of RCC members in each category i.e. beam, column, slab and footing may be tested by UPV test method for establishing quality of concrete. It is suggested that test be conducted on RCC beam near joint with column, on RCC column near joint with beam, on RCC footings and rafts. On RCC rafts a suitable grid can be worked out for determining number of tests. In addition doubtful areas such as honeycombed locations, locations, where continuous seepage is observed, construction joints and visible loose pockets will also be tested.

3.12.7.5 The test results are to be examined in view of the above acceptance criteria “Good” and “Excellent” and wherever concrete is found with less than required quality as per acceptance criteria, repairs to concrete will be made. Honeycombed areas and loose pockets will be repaired

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

by grouting using Portland Cement Mortar/Polymer Modified Cement Mortar /Epoxy Mortar etc. after chipping loose concrete in appropriate manner. In areas where concrete is found below acceptance criteria and defects are not apparently visible on surface ,injecting approved grout in appropriate proportion using epoxy grout /acrylic Polymer modified cements slurry made with shrinkage compensating cement / plain cement slurry etc will be resorted to for repairs.(refer relevant chapters from CPWD Hand Book on Repairs and Rehabilitation of RCC Buildings).Repair to concrete will be done till satisfactory results are obtained as per the acceptance criteria by retesting of the repaired area. If satisfactory results are not obtained dismantling and relaying of concrete will be done.

3.13 SPECIAL CONDITIONS FOR DESIGN MIX CONCRETE

- 1 The term machine batched, machine mixed and machine vibrated design mix cement concrete used in the document shall mean the concrete produced at site in fully automatic concrete batching & mixing plant (IS 4925), placed in position by the concrete pump and vibrated by surface vibrator/ needle vibrator/ plate vibrator, as the case may be to achieve required strength and durability. (However for small elements like lintels, chajjas, shelves etc, the requirement of pumping would be dispensed with as per direction of Engineer – in – charge and placement would be done through alternative means).
2. Design mix concrete shall be used in the work for all structural members. For design mix concrete revised CPWD specifications 2019 along with relevant IS codes shall be followed in general along with the specific provisions made herein.
3. Following parameters shall be adopted for mix design.

3.1

Grade of Concrete	M25	M30	M40
(i) Nominal Max size of aggregate	20 mm angular as per CPWD specification	20mm angular as per CPWD specification	20 mm angular as per CPWD specification
ii) Degree of workability (Slump) mm			
a) Without Pump	25 to 75mm	25mm to 75mm	25 to 75 mm
b) With Pump	75 to 100 mm	75mm to 100 mm	75 mm to 100 mm
(iii) Degree of quality control	Good.	Good.	Good.
(iv) Type of exposure	Severe	Severe	Severe
(v) Max free water cement/ ratio	0.45	0.45	0.40
(vi) Minimum Cement Content	Superstructure: 330kg/cum and as specified in the item in case of use of PPC	Superstructure: 350 kg/cum and as specified in the item in case of use of PPC	390 kg/cum and as specified in the item in case of use of PPC
(Vii) Fine Aggregate	Coarse sand as per CPWD specifications.	Coarse sand as per CPWD specifications.	Coarse sand as per CPWD specifications.
(Viii) Mix applicable	Plain cement concrete	Plain cement concrete	Plain cement concrete
(ix) Method application	Pumping	Pumping	Pumping
(x) Max Cement content	500 kg/Cum	500 kg/Cum	500/Cum

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

(xi) (A) Characteristic compressive strength compliance requirement. (Mean of group of 4 non-overlapping tests and consecutive test) (N/Sqmm)	Greater than or equivalent to $f_{ck}+0.825 \times \text{Established standard deviation}$ Or $F_{ck}+3$ whichever is more	Greater than or equivalent to $f_{ck}+0.825 \times \text{Established standard deviation}$ Or $F_{ck}+3$ whichever is more	Greater than or equivalent to $f_{ck}+0.825 \times \text{Established standard deviation}$ Or $F_{ck}+3$ whichever is more
(B) Individual test (N/Sqmm)	$F_{ck}-3$	$F_{ck}-3$	$F_{ck}-3$

Design parameters for M 10 & M15 Design mix concrete

Following parameters shall be adopted for mix design.

S.No	Grade of Concrete	M10	M20
1	Nominal Max size of aggregate	20 mm angular as per CPWD specification	20 mm angular as per CPWD specification
2	Degree of workability (Slump) mm	25 - 75	25 - 75
13	Degree of quality control	Good.	Good.
4	Type of exposure	Severe	Severe.
5	Max free water cement/ ratio	0.50	0.50
6	Type of cement used	Portland Pozzolana cement or OPC- 43 grade	Portland Pozzolana cement or OPC- 43 grade
7	Minimum Cement Content	220Kg/cum. and as specified in the item in case of use of PPC	270Kg/cum. and as specified in the item in case of use of PPC
8	Fine Aggregate	Coarse sand as per CPWD specifications..	Coarse sand as per CPWD specifications..
9	Mix applicable	Plain cement concrete	Plain cement concrete
10	Method application	Pumping	Pumping
11	Max Cement content	500 kg/Cum	500 kg/Cum
12	(C) Characteristic compressive strength compliance requirement. (Mean of group of 4 non-overlapping tests and consecutive test) (N/Sq.mm)	Greater than or equivalent to $f_{ck}+0.825 \times \text{Established standard deviation}$ Or $F_{ck}+3$ whichever is more	Greater than or equivalent to $f_{ck}+0.825 \times \text{Established standard deviation}$ Or $F_{ck}+3$ whichever is more
	(D) Individual test (N/Sq.mm)	$F_{ck}-3$	$F_{ck}-3$

Sl.no.12 above is added for the purpose of operation of Clause 16 of IS 456 2000.

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

- (1) Approved admixtures conforming to IS-9103 shall be permitted to be used. The chloride content in the admixture shall satisfy the requirement of BIS 5075. The total amount of chloride content in the admixture mixed concrete shall satisfy the requirement of IS 456-2000.
 - (2) The concrete mix design with and without admixture will be carried out by the contractor through the laboratory to be approved by the Engineer-in- Charge.
 - (3) The various ingredients for mix design/ laboratory tests shall be sent to the lab/test houses through the Engineer-in-Charge and the samples of such ingredients sent shall be preserved at site till completion of work or change in Design Mix whichever is earlier. The sample shall be taken from the approved materials, which are proposed to be used in the work.
 - (4) The contractor shall submit the mix design report from approved laboratories such as Andhra University Visakhapatnam or JNTU Kakinada or NCCBM Hyderabad or any Government Engineering College /Institute for approval of Engineer-in-charge within 30 days from the date of issue of letter of acceptance of the tender. No concreting shall be done until the mix design is approved.
 - (5) The contractor shall make cubes of trial mixes as per approved mix design at site laboratory for all grades of concrete in presence of the Engineer-in-charge using same ingredients as adopted for design mix, prior to commencement of concreting and get them tested in presence of Engineer- in – Charge for 7 days and 28 days. For each design mix, a set of six cubes shall be prepared from each of the three consecutive batches. Three cubes from each set shall be tested at the age of 7 days and three cubes at the age of 28 days. The cubes shall be made, cured, transported and tested strictly in accordance with CPWD specification. The average strength of nine cubes at the age of 28 days shall exceed the specified target mean strength for which design mix has been approved.
 - (6) Tests shall be done at the laboratory as approved by the Engineer-in-charge.
 - (7) For each change of source or quality / characteristic properties of the ingredients during the work, from that approved & used in the concrete mix a fresh mix design shall be got done by the contractor. Revised trial mix test shall be conducted and shall be submitted by the contractor as per the direction of the Engineer-in-charge.
 - (8) The cost of packaging, scaling, transportation, loading, unloading cost of samples and the testing charges for mix design in all cases shall be borne by the contractor.
 - (9) The mix design shall be done considering the degree of quality control as ‘good’ in all cases.
 - (10) The Item of design mix cement concrete shall be inclusive of all the ingredients including admixtures it required labour, machinery, T&P etc. (Expect shuttering which will be measured & paid for separately) required for a design mix concrete of required strength and workability. The rate quoted by the agency for the mix design items shall be net & nothing extra shall be payable on account of change in quantities of concrete ingredients like cement, sand, aggregates and admixtures etc. as per the approved mix design until unless specified elsewhere in the Notice Inviting Tender Documents.
 - (11) No fly ash shall be allowed to be added in the Design Mix at site
- 3.14. COVER BLOCKS:** Contractor shall use factory made cover blocks of approved shape and strength for all RCC works to avoid displacement of bars in any direction and to ensure proper cover. Alternatively, the contractor may manufacture the cover blocks as per approved methodology by Engineer-In-charge. The grade of concrete shall be same grade as of concrete in which they will be used. The concrete shall be fiber reinforced concrete with 6mm downgraded aggregate. Shape & size shall be as decided by Engineer-In-charge.

3.15. CURING:

- i) The contractor shall ensure moist curing to all structural members in general. Curing shall be done with 2 or 3 layers of wet hessian cloth covered by PVC sheets in order not to allow the moisture to evaporate.

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)	AE	

- ii) Since the design mix is having controlled water content, the contractor shall protect the concrete from drying shrinkage by resorting to early age curing. Covering of wet hessian cloth shall be done after the onset of the final setting time.
- iii) The contractor shall submit methodology of proposed curing which ensures continuous maintenance of required temperature regime.
- iv) Membrane curing by chemical compounds may be allowed at places which are normally inaccessible and repair works and nothing extra is payable on this account. If curing compounds are proposed for any particular use, the contractor shall obtain permission for use of any particular brand of compounds from Engineer-In-Charge.

3.16 RATES: -

- (i) The rate includes the cost of materials, labour and T&P, including mixing, placing, pumping of concrete and transportation involved in all the operations described above except for the cost of centering, shuttering & reinforcement which will be paid for separately.
- (ii) In case of rejection of concrete on account of unacceptable compressive strength, governed by para “Standard of Acceptance” as above, the work for which samples have failed shall be redone at the cost of contractor. However, the Engineer-in-charge may order for additional tests (like cutting cores, ultrasonic pulse velocity test, load test on structure or part of structure, etc.) to be carried out at the cost of contractor to ascertain if the portion of structure wherein concrete represented by the sample has been used, can be retained on the basis of results of individual or combination of these tests. The Contractor shall take remedial measures necessary to retain the structure as approved by the Engineer-in-charge without any extra cost. However, for payment, the basis of rate payable to contractor shall be governed by the 28 days cube test results and reduced rates shall be regulated in accordance with CPWD Specifications.

3.17. RCC WORK (ORDINARY)

3.17.1 The work shall be done in accordance with CPWD Specifications.

3.17.2 Water Cement ratio for Ordinary RCC work shall not be more than 0.5. Contractor shall use concrete mixture of proper design having arrangement for measuring water for mixing of concrete.

3.18 FORM WORK

3.18.1 The work shall be done in general as per CPWD Specifications.

3.18.2 Only M.S. centering / shuttering and scaffolding material unless & otherwise specified shall be used for all R.C.C. work to give an even finish of concrete surface. However, marine-ply shuttering in exceptional cases as per site requirement may be used on specific request from contractor to be approved by the **Engineer-in-Charge**.

3.18.3 Nothing extra shall be paid for the centering and shuttering, circular in shape whenever the formwork is having a mean radius exceeding 6m in plan.

3.18.4 Nothing extra shall be paid for grid beams and the corresponding slabs having clear span more than 1.20 metres.

3.18.5 In order to keep the floor finish as per architectural drawings and to provide required thickness of the flooring as per specifications, the level of top surface of R.C.C. shall be accordingly adjusted at the time of its centering, shuttering and casting for which nothing extra shall be paid to the Contractor except the places where different type of flooring is provided in the same room.

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)	AE	

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As per general engineering practice, level of floors in toilet / bath, balconies, shall be kept 12 to 20mm or as required, lower than general floors shuttering should be adjusted accordingly. Nothing extra is payable on this account.

3.18.6 Steel shuttering as approved by the Engineer-in-Charge shall be used by the contractor. Minimum size of shuttering plates shall be 600mm x 900mm except for the case when closing pieces are required to complete the shuttering panels.

Dented, broken, cracked, twisted or rusted shuttering plates shall not be allowed to be used on the work.

The shuttering plates shall be cleaned properly with electrically driven sanders to remove any cement slurry or cement mortar or rust. Proper shuttering oil or de-bonding compound such as "Reebol" or FOSROC or equivalent shall be applied on the surface of the shuttering plates in the requisite quantity before assembly of steel reinforcement. Nothing extra shall be paid on this account.

3.18.7 Concreting of upper floor shall not be done until concrete of lower floor has set at least for 14 days but form work and reinforcement can be taken up after the concrete has set at least for three days.

3.18.8 Double steel scaffolding having two sets of vertical supports shall be provided for external wall finish, cladding etc. The supports shall be sound and strong, tied together with horizontal pieces over which scaffolding platform shall be fixed. Scaffolding shall have steel staircase for inspection of works at upper levels. Nothing extra shall be paid on this account.

3.19. REINFORCEMENT:-

3.19.1. The reinforcement shall be done as per CPWD Specifications.

3.19.2. The rate of item of reinforcement of RCC work includes all operations including straightening, cutting, bending, welding, binding with annealed steel or welding and placing in position at all the floors with all leads and lift complete as per CPWD Specifications.

3.19.3 The contractor shall provide approved type of support for maintaining the bars in position and ensuring required spacing and correct cover of concrete to reinforcement as called for in the drawings, spacer blocks of required shape and size. Chairs and spacer bars shall be used in order to ensure accurate positioning of reinforcement. **Spacer blocks shall be cast well in advance with approved proprietary pre-packed free flowing mortars (Conbextra as manufactured by M/S Fosroc Chemicals India Ltd. or approved equivalent)** of high early strength and same colour as surrounding concrete. However, Cover Guard Bars shall also be used to maintain proper cover of RCC Columns in addition to spacer blocks as mentioned above. Pre-cast cement mortar/concrete blocks/blocks of polymer shall not be used as spacer blocks unless specially approved by the Engineer-in-charge. The rate of RCC items is inclusive of cost of such cover blocks & Cover Guard Bars. Nothing extra shall be paid on this account.

4.0 MASONRY WORK:-

4.1.1 The PCC block work shall be carried out with good quality Fly ash cement blocks of class designation 10 (strength not less than 100kg/sq.cm) as per CPWD Specifications.

4.1.2 The rate shall also include for leaving chases / notches for dowels / cramps for all kinds of cladding to come over brick work.

4.1.3 Brick work provided around shaft or lift walls or around slab cutouts shall be measured in the brick for corresponding floor level. Nothing extra shall be paid on this account.

4.1.4 M.S. Strip/ Bar provided at every third course of half brick masonry shall be in single piece. If required, welding joint can be used without overlaps. Nothing extra shall be paid for welding and overlaps.

5.0 EXPANSION JOINT

5.1 General

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)	AE	

- 5.1.1** Seismic / separation/ expansion joints shall be provided where shown in the drawings and as per CPWD specifications and as directed by Engineer-in-Charge. They shall be constructed with in gap between the adjoining parts of the works of the width specified.
- 5.1.2** The contractor shall ensure that no debris is allowed to enter and be lodged in seismic/ separation/ expansion joints.
- 5.1.3** The expansion joint shall be cleaned and made dry completely. All loose materials shall also be removed. The joints gap shall be made uniform in width and depth after cleaning the joints. The backup materials of best quality shall be provided in position in order to produce thoroughly together in required proportion as prescribed by manufacture specification, so that a uniform mixture obtained. The mixed solution shall be applied to two sides of the joint that it covers the sides complete. Disturbed edges of RCC members near expansion joints shall be finished with rich mortar without any extra work includes providing required width of expansion board in the joints and measurement of expansion board only shall be taken.

6.0 GRANITE/ MARBLE OR LIKE WORKS

- 6.1** The granite/ marble or like stonework shall, in general, be carried out as per the CPWD Specifications. The specifications for dressing, laying, curing, finishing, measurements, rate etc. for the granite/ marble or like stone flooring shall be same as that of works for the Marble flooring, skirting and risers of steps under Flooring Sub Head of the CPWD Specifications. The wall lining / veneer work with granite/ marble or like stone shall be as per the CPWD Specifications for Marble work Sub Head.
- 6.2** The decision of the Engineer-in-Charge as regards the approval of the samples for the various types of the granite/ marble or like stones shall be final and binding on the Contractor. No claim of any kind whatsoever shall be entertained from the Contractor on this account. The Contractor shall then procure and get the mock up prepared at site of work for approval of quality of workmanship and the granite/ marble or like stone as specified. The mock up shall be prepared in lift lobby, toilet etc. on one of the floors. The size of the stones shall be as per the architectural drawings. If the quality of the workmanship and the material is as per the required standards, the mock up shall be allowed as part of the work and measured for payment and shall not be dismantled. Otherwise, it shall be dismantled by the contractor as directed by the Engineer-in-Charge and taken away from the site of the work at his own cost. Nothing extra shall be payable on this account.
- 6.3** The granite/ marble or like stone slabs shall be cut to required sizes and shapes, as per the architectural drawings, to negotiate the curved steps in segmented manner. The risers shall also be cut to required sizes and shapes and the edges chamfered at the joints, all as per the architectural drawings. However, the Contractor shall prepare the detailed shop drawings for the same and commence work only after the approval by the Engineer-in-Charge. The rate shall also include any consequent wastage, incidental charges involved in this work. Nothing extra shall be payable on this account. For the purpose of payment, the actual area of each type of granite/ marble or like stone as laid shall be measured.
- 6.4** For the steps (risers and treads) in the linear profile, the granite/ marble or like stone shall be provided in single pieces as per the architectural drawings, unless otherwise specifically permitted by the Engineer-in-Charge. Wherever grooves are required to be provided the same is to be done as per architectural drawings and as directed by the Engineer-in-charge. Wherever required, the joints shall be provided as per the architectural drawings. Nothing extra shall be payable on these accounts.
- 6.5** The granite/ marble or like stone slabs used for providing and fixing in the sills, soffits and jambs of doors, windows, ventilators and similar locations shall be in single piece unless otherwise directed by the Engineer-in-Charge. Wherever stone slab other than in single piece is allowed to be fixed, the joints shall be provided as per the architectural drawings and as per the directions of the Engineer-in-Charge. Depending on the number of joints, as far as possible, the stone slabs shall be procured and fixed in slabs of equal lengths as per the architectural drawings and as directed by Engineer-in-Charge.

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)	AE	

6.6 While fixing the granite/ marble or like stone slabs in sills, soffits and jambs of doors, windows, ventilators etc., rebates shall be made by overlapping the stones at the required places for fixing shutters for doors, windows and ventilators etc. as shown in the architectural drawings and as per the directions of the Engineer-in-Charge. Epoxy based adhesives shall be used for fixing the granite/ marble or like stones to each other, or wherever required. The authorized overlap as per the architectural drawings or as directed by the Engineer-in-Charge shall be measured for payment under the same item. However, any extra mortar thickness required due to the overlap arrangement shall be deemed to have been included in the rate of this item. Nothing extra shall be payable on this account. The stone shall have uniform thickness and shall be provided in sizes as per the architectural drawings. The stone slab shall have uniformly leveled surface after fixing. All the joints shall be finished smoothly in a workmanlike manner.

6.7 The granite/ marble or like stone work shall be adequately protected by a layer of Plaster of Paris, which shall be maintained throughout and removed just before handing over of the works for which nothing extra shall be payable.

Leave installation clean and in good working order.

LIST OF FIELD TESTS

- i) Particle size and shape.
- ii) Slump test.
- iii) Flakiness & Elongation Index tests.
- iv) Compressive strength (concrete or bricks) test.
- v) Rebound Hammer test.
- vi) Bulking of sand.
- vii) Silt content of sand.

LIST SHOWING PREFERRED BRANDS/ MANUFACTURERS/MAKES

1) A List of Preferred Brand Names of Various Materials / Products are shown below for usage in execution of Work. However, Approved equivalent material of any other Specialized Companies / Firms may also be used, in case it is established that the Brands Specified below are not available in the market or in other unavoidable circumstances and subject to Approval of the alternate Brand by the Engineer- In -charge. However, in case, the equivalent model so approved, is cheaper than the model already mentioned in item/approved makes list, the price adjustment will be made based on the difference in market rate. In case, the rate of subsequently approved model is more, no extra payment will be made on this account.

2) It must be ensured, in general, that all materials to be used in the works shall bear BIS Certification mark. In cases where for a particular material/product, BIS Certification Mark is not available, then the material proposed to be procured can be used subject to the condition that it should conform to CPWD Specifications and relevant BIS codes. In such cases written approval of the Engineer-in -Charge shall be obtained before use of such material in their works.

3) The list given below does not absolve the Executing Agency from their responsibility for using these products. It is only after, they are satisfied about the quality and performance, the products shall be used. To achieve this, proper check on the quality of the product, actually to be used, should be exercised

4)The Superintending Engineer VJCC, CPWD, Vijayawada reserves the right to add or delete any materials and brands in the list of approved makes. However, in case, the equivalent model so approved, is cheaper than the model already mentioned in item/approved makes list, the price adjustment will be made based on the difference in market rate. In case, the rate of subsequently approved model is more, no extra payment will be made on this account

Table 1

LIST SHOWING PREFERRED BRANDS

S.No	Material Description	Brand	Preferred Material / Make
1	Chloropyriphos	PIRAMID	AMVAC AGRI RASAYAN Pvt. Ltd.
		NOBAN	Chemts Wets & Flows Pvt. Ltd.
		DURSBANTCT	DE-NOCIL Ltd.

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

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S.No	Material Description	Brand	Preferred Material / Make
		Premise Agenda	Bayer Ltd
		HILBAN	Hindustan Insecticides Ltd.
		Sarups Pest Control	Sarups Pest Control Ltd.
2	Ordinary Portland (43 grade) and Portland Pozzolana Cement	ACC	ACC cements Ltd
		Ultra Tech	Ultra Tech Cement Ltd.
		Coromandal	India Cements Ltd.
		Birla	Birla Corportion Ltd.
		Chettinadu	Chettinadu Cements Corportion Ltd.
		Bharathi	Bharathi Cement Corportion Ltd.
		Dalmia	Dalmia Cement Bharat Ltd.
		Zuari	Zuari Cement Limited
		Jaypee Cement.	Jaypee Cement Ltd.
		Maha Cement	Myhome Industries Pvt.Ltd.
		J.K.Cement	J.K.CementPvt.Ltd.
		Ambuja Cement	Ambuja Cements Ltd.
		Penna Cement	Penna Cement Industries Ltd.
		Konark Cement	Konark Cement
		Century Cement	Birla Gold Cement
		Shree Cement	Shree Cement
3	Damp Proof material	MAPEI	MAPEI Construction Products India P Ltd.
		Ferrous Crete	Ferrous Crete (India) Pvt. Ltd.
		Impermo	Snowcem Paints
		Duraseal	Apurva India Pvt. Ltd.
		ACCO Proof	ACC Cement Ltd.
		Dr. Fixit	Pidilite Industries
		Fosroc	Fosroc Chemicals India Pvt. Ltd.
		CICO	CICO Industries
		SIKA	Sika India Pvt. Ltd
		PIDILITE	Pidilite Industries Ltd.
		BASF	BASF India Ltd
		MYK	MYK LATICRETE India Pvt. Ltd
4	TMT bars Fe-500D	SAIL	Steel Authoirty of India Ltd.
		TISCO	TATA STEEL Ltd
		VIZAG	Rastriya Ispat Nigam Ltd.
		JSW	JSW Steel Ltd
5	Plasticiser& Super Plasticiser	Contrament, Power flow	MC Bauchemie (India) Pvt. Ltd
		Sunanda Chemicals	Sunanda Chemicals Ltd.
		MYK Schomburg	MYK Arments range of products
		Plastiment, Sikament	Sika Inida Pvt Ltd.,
		Conplast SP430	FOSROC India

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

PART-B 64

S.No	Material Description	Brand	Preferred Material / Make
		Chryso-HP / Delta / Optima	Chryso India Pvt. Ltd.,
		BASF	BASF India Ltd
		CICO	CICO Industries
6	Expansion Joint Bitumen board	Dura board HD100	Supreme Industries
		STP	Shalimar Tar Products
		DURAFILL	Supreme Industries
7	Post tensioning System	CRUX	Crux Processing systems Pvt Ltd.,
		VSL	VSL India Pvt Ltd.
		Ultracon	Ultracon Structural Systems Pvt Ltd
		BBR	BBR (India) Pvt . Ltd
8	PT Strands	DP wires	D.P Wires Ltd.
		TATA wiron	TATA Steel Ltd.,
		Usha Martin	Usha Martin Ltd
9	Adhesive	Dunlop	India Tyre& Rubber Co (India) Ltd.
		Vamorganic	Vamorganic Ltd.,
		Sika	Sika India Pvt. Ltd
		Fevicol	Pidilite Industries
		CICO	CICO Industries
		Proofex of adhesive	FOSROC India Ltd
10	Grout	Ardex	Ardex Endura Adhesive India Pvt. Ltd
		Ferrous Crete	Ferrous Crete (India) Pvt. Ltd.
		LATA POXY	MYK LATICRETE India Pvt. Ltd
		BASF	BASF India Ltd
		Fosroc GP2	Fosroc India Ltd.
		MYK Schomburg	MYK Arments range of products
		Fugabella, Porcelana	Kerakoll India Pvt. Ltd
		Dr. Fixit	Pidilite Industries
		Weber	Saint-Gobin India Pvt. Ltd
11	Ready Mix Concreate	Ultra Tech ACC RMC (India) Lafarge SCS Infra Concrete	Ultra Tech Concrete ACC Ltd RMC (India) Pvt. Ltd. Lafarge India Pvt. Ltd M/s SCS Infrastructure Pvt. Ltd.,
12	AAC Blocks	Xtralite	UITRATECH Cement Ltd
		Areocon	HIL
		Siporex	SIPOREX
		Nucon	Green way building materials India Pvt. Ltd
		NCL	NCL VEKA Ltd.
		Renacon	RenaatusProcon Pvt. Ltd.
13	Wooden Flush door shutters	Jayna Flush Doors	Jain Wood Industries
		Raavella door	Raavella Industrials (P) Ltd

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

PART-B 65

S.No	Material Description	Brand	Preferred Material / Make
		Kailash	Kailash Hi tech Timber Industries India Pvt. Ltd
		Indian Timber Products	Indian Timber Products
		Shakthi	Shree Shakthi Modern Flush doors
		Greenlam	Greenlam Ply Industries Ltd.
		Mayur	Mayur Ply Industries
		MP Ply wood products	MP Wood products
		Kitply	Kitply Industries Ltd.
		DuroFlushdoors	Duro Ply Industries Ltd.
		Kenwood	Kenwood Ply & Board
		Century	Century Flush Doors
		KANCHAN PLY	Vidya ply & Board Pvt. Ltd.
14	Water Proof Plywood, Commercial ply, Fire retardant ply and Block boards	Jayna ply	Jain Wood Industries
		Green Ply	Green ply Industires Ltd.
		Kitply	Kitply Industries Ltd.
		Duroply	Duro Ply Industries Ltd.
		Archidply	Archid ply industries Ltd.
		Century ply	Century Flush Doors
15	Laminate	Green Lam	Green lam Industries Ltd.
		Centuary	Centuray laminates
		Merino	Merino laminates
		Archidply	Archid ply industries Ltd.
		Sonear	Sonear Laminates
		Royal touche	Royal touche laminates
		Kitmica	Kitply Industries Ltd.
		Sunmica	Sunmica Industries
		Vidya Ply	
		Formica	Formica Laminates (India) Pvt Ltd.
		Decolam	Decolam India Pvt Ltd.
16	Prelaminated particle board Exterior Grade	Novapan	GVK NovapanIndustries Pvt Ltd.,
		Merino	Marino laminates
		Kitlam	Kit PlyIndustires Ltd,
		TESA Action Co.	TESA Action Co.
		Ecoboard	Ecoboard Industries Ltd.
		Associate	Associate Décor Limited
		Archid ply	Archid ply industries Ltd.
		Centuary	Centuary MDF
17	High Density (HDF) Prelaminated board	Green Lam	Green lam Industries Ltd.
		Pergo	Red Floor India
18	Gypsum board	Green Ply	Green Ply Industries Ltd.
		Gyproc Saint Gobain	Saint Gobain Gyprock India Ltd.,
		Lafarge	Lafarge Gypsum India Pvt. Ltd
		USG Boral Board	USG Board India (P) Ltd.
		Armstrong	Armstrong wold Industries

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

PART-B 66

S.No	Material Description	Brand	Preferred Material / Make
19	Glass door hardware	Dorma	Dorma India Pvt Ltd
		Kich	Kich Architectural Products Ltd.
		Classic	Classic hardware
		Garg	D.P. Garg Pvt Ltd., Delhi
		Squash	Squash glass doors
		Hafele	Hafele India Pvt. Ltd
		Ozone	Ozone Hardware.
		Geze	Geze GMBH
		Dorset	Dorset Industries Pvt Ltd
20	Hydraulic door closers/ Floor springs	Godrej	Godrej locking solution & systems
		Hardwyn	Hardwyn hardware
		MAGNUM KIT	Mukund Overseas
		Dorma	Dorma India Pvt Ltd.
		Everite	Everite agencies
		Garg	D.P. Garg Pvt Ltd., Delhi
		Dorset	Dorset Industries Pvt Ltd
21	Locks & Latches	Dorset	Dorset Industries Pvt Ltd
		Godrej	Godrej locking solutions& systems
		Hitech	Globe Locks India
		Hafele	Hafele India Pvt. Ltd
		Harrison	Harrison locks
		Plaza	Bharat lock House
		Yale	ASSA ABLOY India (P) Ltd.
		Link	Link Locks
22	Metalic / Steel Fire Door	Shakthi Hormann	Shakthi Hormann Pvt Ltd,
		Promot	Promot fire & Insulation (P) Ltd.
		MPP Schodders	MPP Technology Pvt.Ltd.
		NAVAIR	NAVAIR International Pvt Ltd
		Signumfire Protection	Signumfire Protection Pvt. Ltd
		Sukri	Sukri Fire doors Pvt.Ltd
		Kenwood	Kenwood Ply & Board
		Godrej	Godrej Security solutions
23	Fire Smoke Seal	Hilti	Hilti India Pvt Ltd.
		Promat	Promat fire & Insulation (P) Ltd.
		Atroflame	Atroflame Ltd.
		Raven	Raven Global
24	Fire rated hardware	Dorma	Dorma India Pvt. Ltd
		Ingersolrand	Ingersolrand (India) Ltd,
		Dorset	Dorset Industries Pvt Ltd
		Backers FS	Backers FS
		Garg	D.P. Garg Pvt Ltd., Delhi
		Geze	GezeGmbH
25	Non Metalic Fire door	NAVAIR	NAVAIR International Pvt Ltd
		Promat	Promat fire & Insulation (P) Ltd.
		Godrej	Godrej Security solutions
26	Stainless steel screws	Kundan	Kundan Industries Ltd.

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

PART-B 67

S.No	Material Description	Brand	Preferred Material / Make
		Alloy	Alloy ltd
		GKW	GKW Limited
		Nettlefold	Nettlefold screws
		Pooja	Pooja SteelCorportion
		Atul	Atul fasteners Ltd.
27	Butt Hinges openable window shutters	Hafela	Hafele India Pvt. Ltd
		Earlt Bihari	EarltBihari India Pvt .Ltd.
		Dorma	Dorma India Pvt. Ltd
		Garg	D.P. Garg Pvt Ltd., Delhi
		Dorset	Dorset Industries Pvt Ltd
		Alu Alpha	Alu Alpha India
28	Mild Steel Butt Hinges / Piano hinges	Jolly	Jolly Engineering works
		Supreme	Supreme
		Saswat	Saswat
		Deepak	Deepak
		Swift	Swift screws
		Garg	D.P Garg& Company
		Amit	Lovely metal industries Pvt Ltd.
		Jyoti	Jypti Architectural Pvt Ltd.
29	Stainless steel Butt hinges	Prayag	PrayagPolymers (P) Ltd
		Ozone	Ozone Hardware.
		Dorma	Dorma India Pvt Ltd
30	Concealed tower bolt	Dorma	Dorma India Pvt Ltd
		Ingersolrand	Ingersolrand (India) Ltd,
		Garg	D.P. Garg Pvt Ltd., Delhi
		DORSET	Dorset Industries Pvt Ltd
		Alu Alpha	Alu Alpha India
31	UPVC doors, frames and windows	Fenesta	Fenasta DCM Shriman
		Encraft	Encraft India Pvt Ltd
		LG	LG Housys India
		Rehau	Rehau Unlimited Polymer Solutions
		Aluplast	Alu Alpha India
		Komarling	Profine India Window technology Pvt Ltd.
		Sintex	Sintexplastic technology Ltd.,
		Duroplast	Duroplast extrusion Pvt Ltd
		VEKA	NCL Veka Ltd.
		MARCOLINI	Mathura Polypack Pvt. Ltd.
		VENSTER / OKOTECH	Aparna Enterprises Ltd.
		Rajshri	Rajshri Plastiwood
32	PVC Doors and Frames	Accucel	Accura Polytech Pvt.Ltd
		Sintex	Sintexplastic technology Ltd.,
		Duroplast	Duroplast extrusion Pvt Ltd
		Polyline	Polyline extrusion Pvt. Ltd.
		Rajshri	Rajshri Productions Pvt. Ltd.
		NCL VEKA	NCL VEKA Ltd.

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

PART-B 68

S.No	Material Description	Brand	Preferred Material / Make
33	Stainless friction hinges	Hetich	HetichIndia Pvt .Ltd.
		Haffle	Haffle India Pvt .Ltd.
		Securistyle	Securistyle India Pvt .Ltd.
		Earl Bihari	Earl Bihari India Pvt .Ltd.
		EBCO	EBCO
		ROTO	ROTO Frank Asia
34	Float Glass	Saint Gobain,	Saint Gobain India Pvt .Ltd. ,
		Asahi	Asahi India glass .Ltd.
		Pilkinton	Pilkinton India Pvt .Ltd.
		Modiguard	Gujarat Guardian Ltd.
35	Reflective glass	Saint Gobain,	Saint Gobain India Pvt .Ltd. ,
		Asahi	Asahi India glass .Ltd.
		Pilkinton	Pilkinton India
		Modifloat	Gujarat Guardian Ltd.
		Glaverbel	Glaverbel India
36	Tempered reflective/clear glass	Saint Gobain,	Saint GobainIndia Pvt .Ltd.
		FUSO	FUSO Glass India Pvt .Ltd.
		Gurind	Gurind India
		Asahi	Asahi India glass Ltd,
		Modiguard	Gujarat Guardian Ltd.
		Impact safety	Impact safety glassworkes Pvt Ltd
37	Fire rated glass	Contra flam/ Pyroswiss of SanitGobain	Saint Gobain India Pvt Ltd.
		Promat	Promat fire & Insulation (P) Ltd.
		Pyran of Schott	Schott glass India Pvt .Ltd.
		Pilkinton	Pilkinton India
38	Dash fasteners	Hilti	Hilti India Pvt .Ltd.
		Fischer	Fischer India
		Anchor	Anchor Ltd
		Nutech	
		Canon	Cannon
		Wurth	Wuerth India Pvt. Ltd
		Trixel	Axel India Pvt.Ltd
		Helfen	HelfenGmbh
		BOSCH	BOSCH Ltd
39	Structural Steel	SAIL	SAIL
		TISCO	TATA STEEL
		VIZAG	RINL
		JSW	JSW
40	M.S. Pipe, Tubes	SAIL	SAIL
		TISCO	TATA STEEL
		Apollo	
		Kalinga	
		JINDAL	JSW
41	Stainless steel	Salem	SAIL
		Connect	Connect ltd.

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

PART-B 69

S.No	Material Description	Brand	Preferred Material / Make
		Ark Product Pvt. Ltd	Ark Product Pvt. Ltd
		Jindal	JSW
		SAIL	SAIL
		KINGSTON	KINGSTON Brass
42	Stainless steel Bolts, washers, nuts	Kundan	Kundan Industires Ltd
		Pooja	Pooja Steel Corpporation
		Atul	Atul fasterners Ltd
		Hilti	Hilti India Pvt. Ltd
43	Stainless steel pressure plate screws	Kundan	Kundan Industires Ltd
		Pooja	Pooja steel corporation
		Atul	Atul fasterners Ltd
44	Welding rods	Advani	Advani oerlikon Ltd.
		ESAB	ESAB India Pvt. Ltd
45	Metal Deck Sheet	TATA	TATA STEEL
		SAIL	SAIL
46	Shear Stud/ Connector	KOCO	KOSTER & Co.
47	Vitrified tiles	AGL	Asian Granite India Ltd
		Marbitto	Marbitto tiles
		NITCO	NITCO Ltd
		RAK	RAK Ceramic India Pvt Ltd.
		Restile	Restile Ceramic Ltd.
		Kajaria	Kajaria Ceramic Ltd
		Somany	Somany Ceramic Ltd
		Jhonson	Prism Jhonson Ltd
		VarmoraGranito	VarmoraGranito Granite Pvt. Ltd
		Naveen	Murudeshwar Ceramics Ltd.
		Viero	Aparna Tiles
		CERA	Cera Sanitaryware Ltd.
48	Glazed Ceramic tiles (Also wall tiles)	AGL	Asian Granite India Ltd
		NITCO	NITCO Ltd
		RAK	RAK Ceramic India Pvt Ltd.
		Kajaria	Kajaria Ceramic Ltd
		Somany	Somany Ceramic Ltd
		Jhonson	Prism Jhonson Ltd
		Varmora Granito	Varmora Granito Granite Pvt. Ltd
		Naveen	Murudeshwar Ceramics Ltd.
49	Synthetic Sports flooring	Armstrong	Armstrong flooring
		LG	LG Hausys India
		Wondorfloor	RMG Polyvinyl India Ltd.
50	Linoleum sports flooring	Armstrong	Armstrong flooring India Pvt Ltd.
		Forbo	Forbo flooring India Pvt. Ltd.
		Gerflor	Gerflor flooring
51	False floor	Hewetson	Hewetson India
		Access floor system	Access Floor System

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

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S.No	Material Description	Brand	Preferred Material / Make
		Unifloor	UnifloorIndia Ltd
		Unitile	Unitile office systems Pvt. Ltd
		PINNACLE	PINNACLE
		Kebao	Inner Space (Distributors)
52	Engineered wood floor	Armstrong	Armstrong flooring
		Mikasa Real wood floors	Green Lam Industries
		New wood	New Wood india ltd
		Werner	Duraflorwerner GmbH
		Pergo	Redfloor India
53	Floor spring (For non DSR items)	Dorma	Dorma India Pvt Ltd
		Ingersolrand	Ingersolrand India Pvt Ltd
		Garg	D.P. Garg Pvt Ltd., Delhi
		OZONE	Ozone Hardware.
		GEZE	GEZE GmbH
54	Cement concrete parking tiles	NITCO	NITCO Ltd
		Poddar	Poddar Udyog
		Eurocon	Eurocon tiles India
		Dazzle	Dazzle Designer tiles Pvt Ltd
		NTC	NTC Parking tiles
		Hindustan tiles	Hindustan tiles, Ranchi Pune
		Ultra	Ultra tile private Ltd.
55	Synthetic Carpet tiles	TOLI	TOLI corporation
		Hollitex	Hollitex carper tiles
		Standard Carpets	Standard Carpets
56	Vitrified paving tiles	PAVIT	PAVIT ceramics Pvt Ltd.
57	Glass mosaic tiles	Italia	Tile Italia mosaics Pvt Ltd.
		Coral	Coral tiles
		Mridul	Mridul tiles
		Palladio	Palladio Mosaics
		Bisazza	Bisazza Italy
		Birla While	Birla Corportion Ltd.
		JK White	JK Cement ltd.
		PAVIT (Eco Tile)	PAVIT Ceramics Pvt Ltd.
58	Thermal Insulation treatment	Pidilite	Pidilite industries
		Elastospray	BASF
		Rock India Pvt.LTd	Rock India Pvt.Ltd
59	Acoustic Insulation	Twingerinsul	U.P.Twiga fiber glass Ltd
		Lloyd Insulation	Lloyd Insulation (India) Ltd
		Saint Gobain Gyproc	Saint GobainGyproc India
		Himalyan Acoustics	Himalyan Acoustics
		Knauf	Knauf Gypsum India Pvt. Ltd.
		Anutone	Anutone Acoustics Ltd.
60	UPVC Pipes and fittings	Supreme	Superme Industries Ltd.

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

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S.No	Material Description	Brand	Preferred Material / Make
	(Rain water pipes)	Prince	Prince pipes and fittings Ltd.
		Finolex	Finoles Industries Ltd.
		Prepoly	Premier PVC Industry
		Astral	Astral polytechnik Ltd.
		Ashirwad	Ashirwad PVC Pipes
		Flow Guard	Flow Guard
61	Sandwich PUF panelled roofing sheets	Lloyd Insulation	Lloyd Insulation (India) Ltd
		JINDAL MEC TEC/ JINDAL	Mectec Pvt. Ltd
		Danpalon	Danapal Light architecture
		GE Plastic	GE Silicones
		LEXAN	LEXAN Ltd
62	Polycorbanate Sheet	MG Polyplast	MG Polyplas
		GE Lexon	GE Silicones
		Alcox	HindegganAlcox Ltd.
		Polygal	Polygal India Pvt Ltd.
63	False ceilings	Aerolite	Andhra Polimers Pvt. Ltd.
		Anutone	AnutoneAccoustics Ltd.
		Armstrong	Armstrong World Industries
		Gridsquare	Gridsquare Ceilings
		Knauf	Knauf Gypsum India Pvt. Ltd.
		USG Boral	USG Boral
		Hunter Dougals	Hunter Dougals
64	False Ceiling Members (Perimeter, Ceiling section, intermediates, angles etc.,)	Saint Gobain Gyproc	Saint GobainGyproc India
		Armstrong	Armstrong World Industries
		Aerolite	Andhra Polimers Pvt. Ltd. / Aerolite Industries Pvt. Ltd.
		Gridsquare	Gridsquare Ceilings
		Gypframe steel	British Gypsum
		Knauf	Knauf Gypsum India Pvt. Ltd.
		Lloyd	Lloyd Insulation (India) Ltd
65	Synthetic enamel Paint	Saint Gobain	Saint Gobain Gyproc
		Premium gloss enamel	Asian paint Ltd
		Dulex	ICI dulex Ltd
		Nerolac	Nerolac Paints Ltd
		Berger	Berger Paints
66	Pink primer	Nippon	Nippon Paint India Ltd.
		Wood primer	Asian paint
		Dulex	ICI dulex
		Nerolac	Nerolac Kansia Nerolac Paints Ltd.,
		Berger	Berger Paints
		Nippon	Nippon

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

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S.No	Material Description	Brand	Preferred Material / Make
67	Red Oxide Zinc Chromate primer	High performance yellow metal primer	Asian paint
		Dulex	ICI dulex
		Nerolac	Nerolac
		Berger	Berger Paints
		Nippon	Nippon
68	Oil Bound Distemper	Tractor Aqalock	Asian paint
		Dulux (Maxilite)	Dulux
		mGPolyplast	Nerolac
		Berger (Bisom)	Berger Paints
69	Acrylic emulsion	Premium emulsion	Asian Paint
		Dulux (Super Cover)	ICI Dulux
		Nerolac (Beauty Gold)	Nerolac
		Berger (BISM)	Berger Paints
70	Water Proof Cement paint	Asian external wall primer	Asian paint
		Berger	Berger Paints
		Surfa	Surfactoats (India) Pvt. Ltd.
		ICI DULUX	ICI DULUX
		CemColour	Snowcem Paints
71	Acrylic smooth exterior paint	Dulux	ICI dulux
		Apex	Asian Paints
		Nerolac	Nerolac
		Berger	Berger
		Nippon	Nippon
72	Premium Acrylic smooth exterior paint with silicon additives	ULTIMA	Asian paint
		Dulux	ICI dulux
		Nerolac	Nerolac
		Berger	Berger
73	Cement based wall putty	J.K.wall putty	J.K. Cement Ltd.
		Birla wall care	Birla Cements Ltd.,
		Asian paints	Asian paints Ltd
		Altek	NCL Alltek & seccold Ltd.
		Berger	Berger
		Ferrous Crete	Ferrous Crete
74	Acrylic textured plaster	Apex Duracast	Asian paints
		Spectrum paints	Spectrum paints Ltd.
		Heritage	Heritage Rajkamal Group
		Asian paints	Asian paints
		Neroloc	Neroloc
75	Ready mix cement plaster	ReadiPlast	Ultratech cements Ltd.

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

PART-B 73

S.No	Material Description	Brand	Preferred Material / Make
		Gyproc Plasters	Saint GobainGyproc India
		Ultra tech	Ultra tech Cement Ltd.
		Ferrous Crete	Ferrous Crete (India) Pvt. Ltd.
76	Melamine Polish	Asian paints	Asian paints
		Melamine Gold wudfin	Pidilite industries
		Polycure	Polycuremalaysia
77	Fire retardant paint	Jotun	Jotun paints
		Hilti	Hilti India
		Akzonobel	DulexAkzonobel Paints
		Asian Paints	Asian Paints
		STPL Ltd.	STPL Ltd.
78	Anticorrosive bitumastic paint	Berger	Berger paints India Ltd.
		Shalimar	Shalimar paints India Ltd.
		IS 158 bituminous black	Asian Paints
79	Cement Primer	Asian paints	Asian paints
		JK Primaxx	JK Cement Ltd.
		Berger	Berger paints India Ltd.
80	Epoxy paint	Asian epoxy	Asian paints
		Berger	Berger paints India Ltd.
		Shalimar	Shalimar paints
		STP Ltd.	Shalimar Tar Products
		Ardex Endura	Ardex Endura India Pvt. Ltd
		Nerolac	Nerolac
81	Epoxy coating	BASF	BASF India Ltd.
		Fosroc	Fosroc India
		Laticrete	MYK Laticrete India
		Ardex Endura	Ardex Endura India Pvt. Ltd
		Ferrous Crete	Ferrous Crete (India) Pvt. Ltd.
82	Sililcon coating	Dow corning	Dow corning India
		BASF	BASF India Ltd.
		GE	GE Silicones
		Wacker	Wacker silicones.
83	Interlocking Concrete Paver Blocks	Dazzle	Dazzle designer tiles (P) Ltd.
		Ultra	Ultra tiles Pvt Ltd.,
		Shree	Shree Bharat Paver blocks
		Hindustan tiles	Hindustan tiles, Ranchi Pune
		Vyara tiles	VYARA TILES Pvt Ltd., / Surat
		NITCO (ROCKARD)	NITCO
		BHARAT (NILSAN)	Bharat
		REGENCY	Regency
		Basant Betons	Basant Betons
84	Solar studs/ Median markers	3M	3M Science
		Avery Dennison	Avery Dennison India Pvt Ltd.

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

PART-B 74

S.No	Material Description	Brand	Preferred Material / Make
		Nikkalite	Nippon carbideIndustires (USA)
85	Polycarbonate Convex mirrors, Rubberised road hump	Unique safety solutions	Unique safety solutions
86	Mirror	Modi Guard	Gujarat Guardian Ltd.
		Saint Gobain	Saint Gobain Glass India Ltd.,
		AIS mirror	Asahi India glass Ltd,
		Atul	Atul glass Industries Ltd.,
87	Vitreous Commodes/ Washbasin	Hindware	HSIL Ltd,
		Roca	ROCA Bath room products
		Parryware	ROCA Bath Pvt. Ltd.,
		Kohler	Kohler world wide
		CERA	CERA Sanitaryware Ltd.,
		Jaquar	Jaquar Group
88	Flushing Cistern	Parryware	ROCA Bath Pvt. Ltd.,
		Kohler	
		Hindware	HSIL Ltd,
		CERA	CERA Sanitaryware Ltd.,
		Jaquar	Jaquar Group
89	SWR PVC Pipes & fittings	Supreme	SupermeIndustires Ltd.
		Astral	Astral polytechnik Ltd.
		Finolex	Finolex Industries Ltd.,
		Flowgard	Ashirwad PVC Pipes
		Prince	Prince Pipes and fittings
90	Stainless Steel Kitchen sink	Jhonson	PrisionJhonson Ltd.,
		Diamond	Pheonix Appliances Pvt. Ltd.
		Jindal	Centuarypolytech
		Nilkanth	Nilkant
		Nirali	Jyoti (India) matel Industries Pvt Ltd.
		Hindware	HSIL Ltd
		Silver shine	Blue stone sanitary Industries Pvt. Ltd.
		Joyna	Joyna
		Navkar	Shri Navkar Metals Ltd.
		Franke	Franke India Ltd.
		Futura	Futura Kitchen Sinks India Pvt. Ltd.
91	Centrifugally Caste (Spun) Iron Soil Pipes	Neco	JayaswalNeco Ltd
		SKF brand	SKF Industries
		HEPCO	Hepco
		Bengal Iron Corporation	Bengal Iron Corporation
		Neco	JayaswalNeco Ltd.
		RPMF	Raj Pattern Makers and Founders Pvt. Ltd.
92	PE-AL-PE Composite pipes	Kitec	Kitec Industries (India) Pvt. Ltd.
93	G I Pipes	TATA	TATA Steel Ltd.,
		Zenith	Zenith Birla (India) Ltd.

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

PART-B 75

S.No	Material Description	Brand	Preferred Material / Make
94	G I Pipe fittings	HISSAR	HISSAR
		Jindal	Jindal Pipes Ltd.,
		Zoloto	Zoloto Industries
		Unik	Unikmalleables
95	Water supply Valves	HB	HB Industries
		ICS	Sgreesamarth Engineers
		Zoloto	Zoloto Industries
		leader	leader valves Ltd.,
96	CPVC pipes and fittings	ARCO	Arco valves Pvt. Ltd.,
		Nanda	Nanda Miller company
		Supreme	Supreme Industries Ltd.
		Finolex	Finolex Industries Ltd.
		Astral	Astral Polytechnik Ltd.,
		Prince	Prince Pipes and fittings Ltd.,
		Truflo	HIS Ltd.
		Birla Aerocon	HIL Ltd.
97	PVC / HDPE water storage tanks	Ashirwad	Ashirwad PVC Pipes
		Flowgard	Flowgard
		Sintex	Sintex plastic technology Ltd.,
98	DI Pipes	Vectus	Vectus Industries Ltd.
		Supreme	Supreme Industries Ltd.
		Electrosteel	Electrosteel
		Jindal	Jindal
		Tata Ductura	Tata Ductura
99	DI Fittings	Kapilansh	Kapilansh
		Keshoram	Keshoram
		Electrosteel	Electrosteel
		Jindal	Jindal
		Tata Ductura	Tata Ductura
100	Water supply fixtures like bibcock, Shower panels	Kapilansh	Kapilansh
		Keshoram	Keshoram
		Jaquar	Jaquar Group
		Parryware	Roca bath room products Pvt. Ltd,
		Metro	Metro sanitations Pvt. Ltd.,
		Waterman	Kewal brothers
		Seiko	Seiko Sanitations
		Prayag	Prayag polymers Pvt Ltd.,
		Kingston	Kingston brass India
		Johnson	Prism Jhonson Ltd
101	Air release valve	MARC	MARK Showers
		HINDWare	HSIL Ltd.
		Kirloskar	Kirloskar brothers Ltd.,
102	Centrifugally (Spun) Cast Iron	RBM	AFS Ltd.,
		Kartar	Kartar valves private Ltd.,
		Lanco	Electrosteel castings Ltd.
102	Centrifugally (Spun) Cast Iron	Jindal	Jindal saw Ltd.
		Kesoram	Kesoram Industries Ltd.

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

PART-B 76

S.No	Material Description	Brand	Preferred Material / Make
		Electrosteel	Electrosteel castings Ltd.
103	Spun cast iron fittings	Neco	JayaswalNeco Ltd.
		Kartar	KartarValves Private Ltd.
		Electrosteel	Electrosteel castings Ltd.
		Kapilansh Centrifugal	Kapilansh Dhatu Udyog(P)Ltd.
		SKF brand	SINGHALIRON FOUNDARY Pvt. Ltd.,
104	CI double flange sluice valve	Kirloskar	Kirloskar brothers Ltd.,
		RBM	AFS Ltd.,
		Kartar	Kartar valves private Ltd.,
		IVS	Indian valves private Ltd.,
		Zoloto	Zolota Industries
		BURN	BURN
		Leader	Leader valves Ltd.
105	CI double flanged non return valve	Kirloskar	Kirloskar Brothers Ltd.,
		Fluidtech	Fluidtech
		Zolto	Zolota Industries
106	Gun metal Valves	Zolto	Zolota Industries
		Leader	Leader valves Ltd.
		Sant	Sant valves Pvt Ltd,
		Audco	L&T Valves
107	PTMT/PVC water supply sanitary fittings, bibcocks, pillar cock, Angle valve, Stop Valve	PEARL	Precision Products
		Prayag	Prayag Polymers (P) Ltd
		Supreme	Supreme Industries
108	RCC Pipes	Indian Hume Pipe	Indian Hume Pipe Ltd.,
		Madurai spun pipe	Madurai spun pipe company
		Lakshmi Sood&Sood	Lakshmi Sood&Sood Pipe Co.
		Jain & Co	Jain spun pipes Co.,
109	CI Manhole cover	Neco	JayaswalNeco Ltd.,
		BIC	Bengal iron corporation
110	SFRC Cover and grating	KK	KK Manhole and gratings Co Pvt Ltd.,
		Advent	Advent concrete vision
		Kutty	Kutty Industries
		Nu-TEC	Nu-Tech concrete products (P) Ltd.,
111	Plastic Encapsulated Foot Rest	KK India	KK Manhole and gratings Co Pvt Ltd.,
		KGM	KGM Exports .
		Accurate Buildcon	Accurate Buildcon company.
112	Spun cast iron covers & gratings	Neco	JayaswalNeco Ltd
		Jagannath	Sri Jagannath Iron Foundry Pvt. Ltd.
		Kapilansh Centrifugal	Kapilansh Dhatu Udyog(P)Ltd.
		SKF brand	SINGHALIRON FOUNDARY Pvt. Ltd.,

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

PART-B 77

S.No	Material Description	Brand	Preferred Material / Make
113	Aluminium doors/windows sections	Hindalco	Hindalco Industries Ltd.,
		jindal	jindalAluminium Ltd.,
		Padmavathi Extrusion	Padmavathi Extrusio Private Ltd.
		Hyd	Hydro tech Ltd
		Omalco Extrusion	Omalco Extrusion Pvt Ltd.
		Bhoruka	BhorukaAluminium Ltd.,
		Indal	Indian Aluminium Ltd.,
114	Aluminium systems/ Anodisedaluminium fittings for doors/windows	Define	Define Overseas Pvt. Ltd.
		Schueco	SchuecoIndia Pvt. Ltd.,
		Bhoruka	BhorukaAluminium Ltd.,
		Kawneer	Kawneer India
		Hardima	Hardima sales corporation
		Everite	Everite Agencies
		Jyothi	Jyothi Industries
		Sigma	Sigma Corporation
115	Friction stay hinges	Earl Bihari	Earl Bihari Pvt. Ltd.
		Garg	D.P. Garg Pvt Ltd., Delhi
		KINLONG	Kinlong Industries
116	EPDM Gaskets	Anand	Anand NVH products (P) Ltd.,
		Roop	Roop Polymers Ltd.,
		Bohra	Bohra rubber Pvt Ltd.,
		Hanu	Hanu Industries
		Ame Rubber	Ame Rubber Industries Pvt Ltd.
117	Silicon Gaskets	Sree Gaurav	Sree Gaurav Rubber products
118	Masking Tapes	3M	3M
		Sun	Sun
		Wonder polymer	Wonder Tape Industries
		Roop	Roop Polymers Ltd.,
119	Water proofing compound	Fosroc	Fosroc India
		Ferrous Crete	Ferrous Crete (India) Pvt. Ltd.
		Sika	Sika India
		MYK Schomburg	MYK Arments range of products
		Penetron	Penetron India Pvt. Ltd.
		Dr. Fixit	PidiliteIndustires
		Accoproof	ACC cements Ltd.,
		Ardex Endura	Ardex Endura (India) Ltd
		Alchemica	Alchemica Ltd.
120	Membarane Water proofing system	BASF	BASF India Ltd.,
		Ferrous Crete	Ferrous Crete (India) Pvt. Ltd.
		STP Ltd	Shalimar Tar Products
		MYK Schomburg	MYK Arments range of products
		Asian paints	Smart care water proofing products
		Dr. Fixit	PidiliteIndustires
		Alchemica	Alchemica Ltd.
		Ardex Endura	Ardex Endura ltd

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

PART-B 78

S.No	Material Description	Brand	Preferred Material / Make
		Hydro tech	Hydro tech Ltd
121	Chemical water proofing system	BASF	BASF India Ltd.,
		MC-Bauchemie	MS-Bauchemie India Ltd.,
		Sika	Sika India
		Sunanda speciality coating	Sunanda specialitycoating Pvt Ltd.
		Perma construction Aid	Perma construction Aid Pvt Ltd,
		Fosroc	Fosroc India
		Dr. Fixit	PidiliteIndustires
122	Water stops	Hydrotite	Sika India
		BASF	BASF India Ltd.,
		Dr. Fixit	PidiliteIndustires
		Ardex Endura	
		Hydroswell	Sika India
123	Aluminium composite panels	Alucobond	3A Composites India Pvt.Ltd.
		Eurobond	M/S Euro panel products Pvt. Ltd.
		Aludecor	M/S Aludecor Lamination Pvt. Ltd.
		Reynobond	Reynobond
		Hynadecor	Hynadecor AC panels, Delhi
		Alstone	Alstone, New Delhi
		Eurobond	Eurobond Pvt Ltd, Delhi
		Alpolic	Alpolic
		Alstrong	Alstrong
124	PVC Perforated Pipes	Rex Polyextrusion	Rex Polyextrusion Ltd,
		Akash Enterprises	Akash Enterprises
		Zenplas Pipes	Zenplas Pipes Pvt. Ltd.,
		Supreme	Supreme Industries
125	Play Equipements	Koochie Play	Koochie Play Systems Pvt. Ltd,
		Playworld Systems	Playworld Systems India
126	Structural Sealant	Dow corning	Dow corning India
		Wacker	Wacker Silicones.
		GE	GE Silicones
		STP Ltd.	Shalimar Tar Products
		Fosroc	Fosroc India
		BASF	BASF India Ltd.,
		Asian Paints – Smart Care	Asian Pants (Bath Division)
127	Poly-sulphide sealant	Dr. Fixit	PidiliteIndustries Ltd,
		Ferrous Crete	Ferrous Crete (India) Pvt. Ltd.
		MYK Schomburg	MYK Arments range of products
		Pidilite	PidiliteIndusteries
		STP Ltd.	Shalimar Tar Products
		Fosroc	Fosroc India
		Techseal	Choksey Chemical Pvt. Ltd,
		Tuff seal	Bondit construction Chemical

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

PART-B 79

S.No	Material Description	Brand	Preferred Material / Make
128	Bitumen Impregnated Board	Shalitex	Shalimar Tar Products
129	Polyethylene backer rod	Supreme	Supreme Industries
130	Epoxy	Fosroc	Fosroc India
		Shalibons	Shalimar Tar Products
		Asian paints	Asian Paints
		Ardex	ArdexEndura (India) Pvt. Ltd.,
131	Weather Silicon make and grade	Dow corning	Dow corning India
		Momentive (GE)	GE Silicones
132	GRC Jali	Terrafirma	Terrafirma GRC Industries
		Ecovision	Ecovision Industries Pvt. Ltd.,
		Mahesh GRC	Mahesh Prefab Pvt Ltd.,
133	Air transfer grills	Cool grills	Cool grills, Pune
		Systemair India	Systemair India Pvt. Ltd.,
134	Ready made / Gypsum Plaster	Ferrous Crete	Ferrous Crete (India) Pvt. Ltd.
		Gyproc cute 100	Gyproc India
		Ultratech	Ultratech cements Ltd.
135	Steel Windows/Pressed Steel Frames	Madhu Industries,	Madhu Industries, San Harvic, NCL
		San Harvic,	San Harvic
		NCL	NCL Industries
136	PVC Door Frames & Shutters	Rajshri	Rajshri Productions Pvt. Ltd.
		Plastiwood	Plasiwood
		Sintex	Sintexplastic technology Ltd.,
		Accucel	Accura Polytech Pvt.Ltd
137	PVC Flooring	LG Hausys	LG Hausys
		Ger flor	Gerflor flooring
		Armstrong	Armstrong World Industries
138	Grass Paver	Unistone	Unistone
		Ultra	Ultra Ltd.
139	FRP Door Frames & Shutter	Meena Fibre Glass,	Meena Fibre Glass
		Duroplast	Duroplast extrusion Pvt Ltd
		Cactus	Cactus
		Polyline.	Poluline
140	Nom Metallic Floor Surface Hardners	Ironite	Ironite
		Hardonite,	Hardonite
		FOSROC	Fosroc India
		SIKA	SIKa India

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

PART-B 80

S.No	Material Description	Brand	Preferred Material / Make
		BASF	BASF India Ltd.,
		CICO,	CICO Technologies Ltd.,
		Pidilite	Pidilite Industries Ltd,
141	PU Enamel Metallic Paints on MS Structure & Epoxy paints (Premium Quality)	SKK	SKK Ltd.
		Akzonobel	Akzonobel
		Asian	Asian Paints
		Berger,	Berger paints India Ltd.
		MRF	MRF Paints
142	Rockwool/Glasswool insulation	Twigafiber, ,	Twigafiber glass ltd
		Llyod Insulation	Llyod Insulation Ltd.
		Supereme	Supereme Industries ltd
143	Actactic Polypropylene (APP) Modified Water proof Membrane	STP	Shalimar Tar Products
		Ferrous Crete	Ferrous Crete (India) Pvt. Ltd.
		Bitumat Co. Ltd,	Bitumat Co. Ltd,
		Pidilite	Pidilite Industries Ltd,
		Ardex Endura	Ardex Endura
		Hydrotech Ltd.	Hydro tech Ltd
144	Structural Glazing	Modi	Modi Guard
		Saint Gobain	Saint Gobain Glass India Ltd.,
		Asahi,	Asahi India glass Ltd,
		Glaverbel.	Glaverbel India
145	Sensor Based Auto flush Systems	AOS Systems	AOS Systems
		TOTO	TOTO Ltd
		Parryware,	Parryware Sanitaryware
		Hindware,	HSIL Ltd
		Grohe,	Grohe
		Kochier	Kochier
146	Float Valve (Ball Valve)	Prayag,	Prayag Polymers (P) Ltd
		Leader,	Leader valves Ltd.
		Zoloto,	Zolota Industries
		IBP	IBP Industries
		Arco	Arco valves Pvt. Ltd.,
147	Spider Patch Fittings for Structural Glazzing	Dorma	Dormakaba
		Sevax	Saint Gobain Glass India Ltd.,
		Kich	Kich India
		Ozone	Ozone Ltd
		Hafele	Hafele Ltd
148	Multi Walled Polycarbonate Roofing Sheets	Lexan GE	GE Lexan
149	AAC Block Adhesive	Ultrtech	Ultratech cements Ltd.

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

PART-B 81

S.No	Material Description	Brand	Preferred Material / Make
		Ardex Endura	Ardex Endura
		Ferrous Crete	Ferrous Crete
150	Aluminium Framework	MFE(MIVAN)	MIVAN
		S-Form	S-Form
		MFS	MFS
151	EPDM Water Proofing Membrane	Smart Care	Asian Paints
		Ferrous Crete	Ferrous Crete (India) Pvt. Ltd.
		Pidilite	Pidilite Industries
		STP	Shalimar Tar Products
		Fosroc	Fosroc India
152	PU Coating (UV Resistant Liquid Applied Coating	Smart Care	Asian Paints
		Pidilite	Pidilite Industries
		BASF	BASF
		Fosroc	Fosroc India
		SIKA	SIKa India
153	Polyurea Ultroh	Smart Care Ferrous crete	Asian Paints
		Ferrous Crete	Ferrous Crete (India) Pvt. Ltd.
		BASF	BASF
		SIKA	SIKa India
		Pidilite	PidiliteIndustires
154	Modular Kitchen /Wardrobes/Hardware and Accesseries	Sleek	Asian Paints
		Godrej	Godrej & Boyce Co.
		Spacewood	Spacewood
		Evoke	Evoke
155	High and Exterior Textures	Allura/Graniza Range	Asian Paints
		SKK Brand	SKK Ltd.
		Berger	Berger paints India Ltd.
156	Acrylic Exterior Textures	Asian paints	Asian Paints
		Berger	Berger paints India Ltd.
		Akzonobel	Akzonobel
		Ebco	Ebco
		Neroloc	NerolacPaints Ltd
157	Puff Insulations	Smart Care	Asian Paints
		Llyod Insulation	Llyod Insulation (India) Ltd.
		Fosroc	Fosroc India
		BASF	BASF
		Pidilite	Pidilite Industries Ltd.
		Supreme	Supreme ltd
158	GP Grout	Ferrous Crete	Ferrous Crete (India) Pvt. Ltd.
		Asian paints	Smart care water proofing products

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

PART-B 82

S.No	Material Description	Brand	Preferred Material / Make
		BASF	BASF
		Pidilite	Pidilite Industries Ltd.
		Care	Care
		Mapectill GPIN	MAPEI construction products India P Ltd
		Smart care SC GP Grout Grey	Asian Paints
		Home shield Super grout	Berger paints
		SIKA	SIKa India
159	Galvolume sheet for roofing, cladding, Sandwich Panel	Llyod Metal Craft	Llyod Insulations
		Tata Blue Scope	Tata Bluescope
		Bhushan	Bhushan Steel
		JSW	JSW
		Essar	Essar Group
160	Mechanical Coupler for Reinforcement	Dextra	Dextra India Pvt. Ltd.
		Sanfield	Sanfield India Ltd.
161	Aluminium composite panels	Hynadecor	Hynadecor
		Alstone	Alstone
		Eurobond	Eurobond Pvt. Ltd.
162	GRP/SMC Panel Tank (New product in the market performance is yet to be established)	PIPECO Tanks	PIPECO Tanks
		FLOSTO Tanks	Devi Polymer Pvt Ltd., Chennai
		VIVANTA	VIVANTA Enterprises, Mumbai
		AMITEX	AMITEX Enterprises, Delhi
163	Wood Polymer composite material for door frames and shutters, plain/pre laminated boards for wall linings etc	Alstone	Alstone Industries Pvt Ltd, Jaipur, Rajasthan
		Ecoste	Ecoste wood polymer composite, Delhi
		Echon	Kumar Arch Tech Pvt Ltd, Rajasthan
		Rajasree	Rajeswari Products Pvt Ltd, Madhya Pradesh
		Qute	QuteExtructions Pvt Ltd., Chennai
164	Bamboo wood flooring and wall paneling	Epitome Bamboowood Products	Mutha Industries Pvt Ltd., Mumbai
		Floor India	Flooring India Company, Panipat, Haryana
		Ecogreen Flooring	Jupiter Traders, Bangalore
		FLOSTO Tanks	Devi Polymer Pvt Ltd., Chennai
		VIVANTA	VIVANTA Enterprises, Mumbai
		AMITEX	AMITEX Enterprises, Delhi

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

(TABLE-1)
GOVERNMENT OF ANDHRA PRADESH
ABSTRACT

Mines & Minerals - Amendment to the Rule 10 of the Andhra Pradesh Minor Mineral Concession Rules, 1966 Orders - issued.

INDUSTRIES AND COMMERCE (M.II) DEPARTMENT

Dated: 11-02-2020

G.O.MS.No. 11

Read the following:

1. G.O.Ms.No.198, Industries & Commerce (M.I) Dept., dt:13.08.2009.
2. GSR No.423 (E), dt: 10.02.2015 from the Ministry of Mines, Govt. of India, New Delhi.
3. G.O.Ms.No.100, Industries & Commerce (M.II) Dept., dt:31.10.2015.
4. G.O.Ms.No.105, Industries & Commerce (M.II) Dept., dt:13.11.2015.
5. G.O.Ms.No.38, Industries & Commerce (M.II) Dept., dt:17.03.2016.
6. G.O.Ms.No.156, Industries & Commerce (M.II) Dept., dt:03.11.2016.
7. G.O.Ms.No.131, Industries & Commerce (M.II) Dept., dt:04.10.2017.
8. G.O.Ms.No.18, Industries & Commerce (M.II) Dept., dt:29.01.2018.
9. G.O.Ms.No.28, Industries & Commerce (M.II) Dept., dt:17.04.2018.
10. G.O.Ms.No.49, Industries & Commerce (M.II) Dept., dt:21.02.2019.
11. Proposal from the Director of Mines & Geology, vide e-file No: INC04-17021(34)/1/2019-PLANNING SEC-DMG received by the Government on dt. 11.12.2019

ORDER:

After careful examination of the proposal received from the Director of Mines & Geology, Andhra Pradesh, Ibrahimpatnam in the letter 11th read above, the Government hereby decided to amend the Rule 10 of Andhra Pradesh Minor Mineral Concession Rules, 1966 for enhancing the existing Seigniorage fee and Dead Rent in respect of Minor Minerals.

2. The following notification will be published in the Extra-ordinary issue of the Andhra Pradesh Gazette, dated: 11.02.2020.

NOTIFICATION

In exercise of the powers conferred by sub-section (1) of section 15 of the Mines & Minerals (Development and Regulation) Act, 1957 (Central Act 67 of 1957), the Governor of Andhra Pradesh hereby makes the following amendments to the Andhra Pradesh Minor Mineral Concession Rules, 1966 issued in G.O.Ms.No.1172, Industries and Commerce Department, dated. 04.09.1967 and subsequent amended from time to time.

AMENDMENT

In the said rules, under Rule 10 for Schedules I and II, the following shall be substituted, namely

"SCHEDULE-I"

RATES OF SEIGNIORAGE FEE

Sl. No.	Name of the Minor Mineral	Units	Rate of Seigniorage Fee (in Rupees)
1.	Agate	M.T.	Rs. 145 (Rupees One Hundred and Forty Five)
2.	Ball Clay	M.T.	Rs. 75 (Rupees Seventy Five)
3.	Barytes		
	i. Grey Colour – A Grade	M.T.	Rs. 480 (Rupees Four Hundred and Eighty)
	ii. Grey Colour – B Grade	M.T.	Rs. 355 (Rupees Three Hundred and Fifty Five)
	iii. Grey Colour – C + D + Waste Grade	M.T.	Rs.220 (Rupees Two Hundred and Twenty)
	iv. White Colour	M.T.	Rs. 1100 (Rupees One Thousand and One Hundred)
	v. Of colour other than Grey	M.T.	Rs. 500 (Rupees Five Hundred)
4.	Building Stone	M ³ /M.T.	Rs. 90/60 (Rupees Ninety / Sixty)
5.	Calcareous Sand	M.T.	Rs. 90 (Rupees Ninety)
6.	Calcite	M.T.	Rs. 90 (Rupees Ninety)
7.	Chalcedony Pebbles	M ³ /M.T.	Rs. 90/60 (Rupees Ninety / Sixty)
8.	Chalk	M.T.	Rs. 95(Rupees Ninety Five)
9.	China Clay	M.T.	Rs. 60 (Rupees Sixty)
10.	Clay (Others)	M.T.	Rs. 60 (Rupees Sixty)

NIL	Ins	NIL
Omi	NIL	Ovw
AE (P)		AE

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11.	Corundum		M.T.	Rs. 120 (Rupees One Hundred and Twenty)		
12.	Diaspore		M.T.	Rs. 415 (Rupees Four Hundred and Fifteen)		
13.	Dimensional Stone used for Kerbs & Cubes		M.T.	Rs. 135 (Rupees One Hundred and Thirty Five)		
14.	Dolomite		M.T.	Rs. 100 (Rupees One Hundred)		
15.	Dunite or Pyroxinite		M.T.	Rs. 60 (Rupees Sixty)		
16.	Feldspar		M.T.	Rs. 100 (Rupees One Hundred)		
17.	Felsite		M.T.	Rs. 130 (Rupees One Hundred and Thirty)		
18.	Fireclay		M.T.	Rs. 60 (Rupees Sixty)		
19.	Fullers Earth / Bentonite		M.T.	Rs. 180 (Rupees One Hundred and Eighty)		
20.	Fuschite Quartzite		M.T.	Rs. 90 (Rupees Ninety)		
21.	Granite useful for cutting and polishing purpose					
S. No.	Item	Unit	Super Gang Saw equal and above 300cm x 180cm size	Mini Gang Saw equal and above 270cm x 150cm size	270cm x 150cm & Below size	Below 75cm size
i.	Black Galaxy Granite Variety	M³/ MT	Rs.4600 / Rs.1415 (Rs. Four Thousand Six Hundred / Rs. One Thousand Four Hundred Fifteen)	Rs.3680 / Rs.1130 (Rs. Three Thousand Six Hundred Eighty / Rs. One Thousand One Hundred Thirty)	Rs.3450 / Rs.1060 (Rs. Three Thousand Four Hundred Fifty / Rs. One Thousand Sixty)	Rs.1550 / Rs.480 (Rs. One Thousand Five Hundred Fifty / Rs. Four Hundred Eighty)
ii.	Black Granite other than Galaxy variety	M³/ MT	Rs.3450 / Rs.1150 (Rs. Three Thousand Four Hundred Fifty / Rs. One Thousand One Hundred Fifty)	Rs.2875 / Rs.960 (Rs. Two Thousand Eight Hundred Seventy Five / Rs.Nine Hundred Sixty)	Rs.2700 / Rs.900 (Rs. Two Thousand Seven Hundred / Rs. Nine Hundred)	Rs. 1150 / Rs.385 (Rs. One Thousand One Hundred Fifty / Rs. Three Hundred Eighty Five)
iii.	Colour Granite Srikakulam Blue, Moon White River white of Visakhapatnam Dist., Leptinites of Coastal Dists., Black pearl of Prakasam and Guntur Dists.	M³/ MT	Rs. 3450 / Rs.1255 (Rs. Three Thousand Four Fifty Rs. One Thousand Two Hundred Fifty Five)	Rs.2875 / Rs.1045 (Rs. Two Thousand Eight Hundred Seventy Five / Rs. One Thousand Forty Five)	Rs. 2700 / Rs. 980 (Rs. Two Thousand Seven Hundred / Rs. Nine Hundred and Eighty)	Rs. 1150 / Rs.420 (Rs. One Thousand One Hundred Fifty / Rs. Four Hundred Twenty)
iv.	Colour Granite of other varieties	M³/ MT	Rs.2700 / Rs.985 (Rs. Two Thousand Seven Hundred / Rs. Nine Hundred Eighty Five)	Rs.2470 / Rs.900 (Rs. Two Thousand Four Hundred Seventy / Rs. Nine Hundred)	Rs.2300 / Rs.835 (Rs. Two Thousand Three Hundred / Rs. Eight Hundred and Thirty Five)	Rs.1150 / Rs.420 (Rs. One Thousand One Hundred Fifty / Rs. Four Hundred Twenty)
v.	Kuppam Grey Granite available in Santhipuram&Ramakuppam mandals of Chittoor District	M³/ MT	Rs.1925 / Rs.700 (Rs. One Thousand Nine Hundred Twenty Five / Rs. Seven Hundred)	Rs.1650 / Rs.600 (Rs. One Thousand Six Hundred Fifty / Rs. Six Hundred)	Rs.1375 / Rs.500 (Rs. One Thousand and Three Hundred and Seventy Five / Rs. Five Hundred)	Rs.1100 / Rs.400 (Rs. One Thousand One Hundred / Rs. Four Hundred)
vi.	Chittoor Colour Granite (Other than Silver-waves, Madanapalli white and Iscon white)	M³/ MT	Rs.1925 / Rs.700 (Rs. One Thousand Nine Hundred Twenty Five / Rs. Seven Hundred)	Rs.1650 / Rs.600 (Rs. One Thousand Six Hundred Fifty / Rs. Six Hundred)	Rs.1375 / Rs.500 (Rs. One Thousand and Three Hundred and Seventy Five / Rs. Five Hundred)	Rs.1100 / Rs.400 (Rs. One Thousand One Hundred / Rs. Four Hundred)
Sl. No.	Name of the Minor Mineral		Unit	Rate of Seignorage Fee (in Rupees)		
22.	Gypsum		M.T.	Rs. 150 (Rupees One Hundred and Fifty)		
23.	Jasper		M.T.	Rs. 145 (Rupees One Hundred and Forty Five)		
24.	Kaolin		M.T.	Rs. 60 (Rupees Sixty)		
25.	Laterite					
	i. Dispatched for use in Alumina & Aluminium metal extraction		M.T.	Rs. 200 (Rupees Two Hundred)		
	ii. For use other than Alumina and Aluminium metal extraction and export		M.T.	Rs. 100 (Rupees One Hundred)		
26.	Lime Kankar / Lime stone		M.T.	Rs. 90 (Rupees Ninety)		
27.	Lime Shell		M.T.	Rs. 120 (Rupees One Hundred and Twenty)		
28.	Limestone Slabs:					
	i. Color		Sq.Mt / M.T.	Rs. 10 (Rupees Ten) per Sq. Mt		
	ii. White		Sq.Mt / M.T.	Rs.120 (Rupees One Hundred and Twenty) per MT whichever is higher		
	iii. Black		Sq.Mt / M.T.	Rs. 6 (Rupees Six) per Sq. Mt or Rs. 110 (Rupees One Hundred and Ten) per MT whichever is higher.		
29.	Manufactured Sand		M³/M.T.	Rs. 90/60 (Rupees Ninety / Sixty)		

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30.	Marble	M ³ /M.T.	Rs. 300/120 (Rupees Three Hundred / One Hundred and Twenty)
31.	Mica		
	i. Crude	M.T.	Rs.2000 (Rupees Two Thousand)
	ii. Scrap	M.T.	Rs. 750 (Rupees Seven Hundred and Fifty)
32.	Morrum / Gravel & Ordinary Earth	M ³ /M.T.	Rs.45 / 30 (Rupees Fourty Five / Thirty)
33.	Mosaic Chips	M.T.	Rs. 90 (Rupees Ninety)
34.	Ochre	M.T.	Rs. 60 (Rupees Sixty)
35.	Ordinary Clay, Silt and Brick Earth used in the Manufacture of Bricks including Mangalore Tiles		Rs. 8000 (Rupees Eight Thousand Per Kiln per Annum for Bricks and Tiles)
36.	Ordinary Sand	M ³ /M.T.	Rs. 100 / Rs. 66 (Rupees One Hundred / Rs. Sixty Six)
37.	Pyrophyllite	M.T.	Rs. 200 (Rupees Two Hundred)
38.	Quartz	M.T.	Rs. 90 (Rupees Ninety)
39.	Quartzite	M.T.	Rs. 90 (Rupees Ninety)
40.	Rehmati	M ³ /M.T.	Rs. 35 / 25 (Rupees Thirty Five / Twenty Five)
41.	Road Metal / Ballast	M ³ /M.T.	Rs. 90 / 60 (Rupees Ninety / Sixty)
42.	Rough Stone / Boulders	M ³ /M.T.	Rs. 90 / 60 (Rupees Ninety / Sixty)
43.	Sand (Others)	M.T.	Rs. 100 (Rupees One Hundred)
44.	Shale	M.T.	Rs. 180 (Rupees One Hundred and Eighty)
45.	Shingle	M ³ /M.T.	Rs. 90 / 60 (Rupees Ninety / Sixty)
46.	Silica Sand	M.T.	Rs. 100 (Rupees One Hundred)
Sl. No.	Name of the Minor Mineral	Units	Rate of Seignorage Fee (in Rupees)
47.	Slate	M.T.	Rs. 175 (Rupees One Hundred and Seventy Five)
48.	Steatite or Talc or Soapstone		
	i. Filler Grade	M.T.	Rs. 100 (Rupees One Hundred)
	ii. Other Grade	M.T.	Rs. 550 (Rupees Five Hundred and Fifty)

SCHEDULE-II RATES OF DEAD RENT

S. No.	Name of the Minor Mineral	Rate of Dead Rent per hectare per annum (In Rupees)
1	Black Galaxy Granite and Black Granite	Rs. 1,30,000/- (Rs. One Lakh Thirty thousand)
2	All Colour Granite varieties	Rs. 1,30,000/- (Rs. One Lakh Thirty Thousand)
3	Limestone other than classified as major minerals used for lime burning for Building construction purpose, marble, boulders, building stone including stone used for Road Metal, Ballast, Manufactured sand, concrete & other construction purpose, Shale, Slate & phyllites, Mosaic Chips, Fullers Earth/ Bentonite & Dimensional Stone Used for Cubes and kerbs	Rs. 65,000/- (Rs. Sixty Five Thousand)
4	Gravel, Morrum, Ordinary Earth, shingle, Limestone Slabs used for flooring purpose Limekankar, Chalcedony pebbles used in the building purpose Limeshell for burning used for building purpose and Rehmati.	Rs. 52,000/- (Rs. Fifty Two Thousand)
5	Barytes and Laterite	Rs. 26,000/- (Rs. Twenty Six Thousand)
6	Agate, Corundum, Diaspore and fluorite	Rs. 20,000/- (Rs. Twenty Thousand)
7	Mica	Rs. 15,000/- (Rs. Fifteen Thousand)
8	All minor minerals which are not covered under Serial number 1 to 7 above.	Rs. 20,000/- (Rs. Twenty Thousand)

3. This order shall come in to force with immediate effect.

4. This order issues with the concurrence of Finance Department vide their U.O No. FMUOASD(IC)/. 2019-FMU-IIEIC, dt. 09.01.2020 (computer No 1063684)

[BY ORDER AND IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH]

K. RAMGOPAL
PRINCIPAL SECRETARY TO GOVERNMENT (MINES)

To

- The Commissioner of Printing , Stationary & Store purchase (Ptg. Wing), Vijayawada. (He is requested to publish the above notification in the Extra-ordinary issue of Andhra Pradesh, and arrange to send 1000 copies of the same to Govt. Ind. & Com. (M.II) Department).
- The Director of Mines & Geology, Andhra pradesh, Ibrahimpattam.
- The Chief Executive Officer, SERP, Vijayawada.
- All the Joint Director/ Deputy Director / Asst. Director of Mines & Geology through the Director of Mines & Geology, Ibrahimpattam.

Copy to:

- The Secretary to Govt. Ministry of Mines, Govt. of India, Shastri Bhawan, New Delhi.

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**GOVERNMENT OF ANDHRAPRADESH
DEPARTMENT OF MINES AND GEOLOGY**

From
Sri B. Ashok Kumar, M.Sc.,
Asst. Director of Mines and Geology,
Chittoor
e-mail ld.No.admctr@gmail.com
Cell No.910068839

To
The Executive Engineer & SM(C),
Central Public Works Department,
Ministry of Housing & Urban Affairs,
Tirupati Project Division - I,
III Permanent Campus,
Venkatagiri Road,
Yerupadu Mandal,
Chittoor District.

Lr. No. 7105/OD/2013, Dt.09-02-2021

Sir,

Sub:- Mines and Minerals – O/o. Assistant Director of Mines and Geology, Chittoor –
Furnish Seigniorage Fee deduction from work bills / ongoing work details -
Requested - Regarding.

Ref:- 1. Government Memo. No. 12326/M I (1)/2015, Dt. 26.09.2015 from Industries &
Commerce (M-II) Department.
2. Memo. No. 21684/MR.ODC/2015, Dt. 07.10.2015.
3. G.O.Ms.No.18, Ind. & Com. (M-II) Dept., Dt: 13-01-2016.
4. G.O.Ms.No.36, Ind. & Com. (M-II) Dept., Dt: 14-03-2016.
5. G.O.Ms.No.11, Ind. & Com. (M-II) Dept., Dt: 11-02-2020.
6. Lr.No.23(8)/2021-1/21(H), Dt.28-01-2021 of the Executive Engineer & SM (C)
-oOo-

With reference to your letter reference 6th cited, it is to inform that it is not possible to furnish Bank account particulars as the same is zero based Account.

Further, it is to inform that, the Director of Mines and Geology while enclosing copy of the Government Memo vide ref. 2nd cited directed this office to obtain Seigniorage Fee deductions by other departments against the Minor minerals consumed in their civil works and also to make a comprehensive survey & document the process being followed for the collection and accounting of Seigniorage fee.

Further, you are requested to remit the deducted Seigniorage fee, DMF & MERIT etc., payments under the following head of accounts as detailed below as per G.O's mentioned at reference 3rd to 5th and send the original challans/Demand Drafts to this office for reconciliation and taking further necessary action.

Mineral	Revenue Head	Amount (Rs.Per Cubic Meter / Metric Tonnes)	Head of Account	DDO Code	CFMS Service Code
Road Metal	S.Fee	90 / 60	0853-00-102-00-02	1102-1307-001	4008
	DMF (30% of S.Fee)	27 / 18	8448-00-101-01-13-001-001 (Consider for 98%)	1101-1307-001	1102
			8342-00-120-00-13-001-000 (Consider for 2%)	2703-1307-002	8093
	MERIT (2 % of S.Fee)	1.8 / 1.2	8443-00-111-01-27-003-003	2703-1307-002	8213
	IT (2% of S.Fee)	1.8 / 1.2	0021-200-6CH	TAN No.HYDO00636G	
Gravel	S.Fee	45 / 30	0853-102-02	1102-1307-001	4008
	DMF (30% of S.Fee)	13.5 / 9	8448-00-101-01-13-001-001 (Consider for 98%)	1101-1307-001	1102
			8342-00-120-00-13-001-000 (Consider for 2%)	2703-1307-002	8093
	MERIT (2 % of S.Fee)	0.9 / 0.6	8443-00-111-01-27-003-003	2703-1307-002	8213
	IT (2% of S.Fee)	0.9 / 0.6	0021-200-6CH	TAN No.HYDO00636G	

is for guidance only and Royalty / Seigniorage fee, DMF, MERIT etc., shall be deducted from the running / final bills of Contractor as per the updated Seigniorage fee intimated by the Industries and commerce (M.I) department, Government of Andhra Pradesh, from time to time and nothing extra shall be payable in this regard and no claim in this regard shall be entertained.

-2-

In view of the circumstances stated above, I request the Executive Engineer & SM (C), Central Public Works Department, Ministry of Housing & Urban Affairs, Tirupati Project Division - I, Yerpedu Mandal, Chittoor District to furnish the Seigniorage Fee payments particulars recovered from the contractor work bills to this office as per the above mentioned head of accounts immediately.

The earnest action in this regard may be highly appreciated.

Yours faithfully,

B. Ashok Kumar
Asst. Director of Mines and Geology,
CHITTOOR.

NIL
NIL

Copy Submitted to the:

- The Director of Mines & Geology, Ibrahimpatnam for favour of kind information.
- The District Collector, Chittoor District for favour of kind information.
- The Deputy Director of Mines and Geology, Chittoor for favour of kind information.

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PART-B 87

GOVERNMENT OF ANDHRA PRADESH ABSTRACT

Mines & Minerals—Levy of Consideration amount on all Minor Minerals in Addition to the Seigniorage Fee, DM F and MERIT—Orders—Issued.

INDUSTRIES&COMMERCE(M.III)DEPARTMENT

G.O.MS.No.42

Dated: 07-06-2021

Read the following;

1. G.O.Ms.No.29,Ind.&Com.(Mines-II)Dept.dated15.02.2017
2. G.O.Ms.No.21,Ind.&Com.(Mines-III)Dept.dated25.03.2021
3. FromtheDirectorofMines&Geology,singlefileNo:4072/P/2021

ORDER:

Government, vide G.O.1st read above, have included a pre-emption clause to direct the lessees to sell minerals to the processing industries duly paying the Consideration Amount in addition to Seigniorage Fee, Contribution to DMF and MERIT to the State Government.

2. In the G.O., 2nd read above, Government have ordered that the Silica Sand lease holders shall also pay Consideration Amount of Rs.212/- per ton to the State Government in addition to the Seigniorage Fee, DMF and MERIT and to use the collected fund for the purposes as specified therein.

3. The DM&G, AP., in the single file 3rd read above, while referring to there commendations of the State Level Core Committee and keeping in view the suggestions made during review meetings on Mineral Revenue receipts and Policy aspects of Department of Mines & Geology, has requested the Government to issue of necessary orders for levy of consideration amount, on the similar lines of Silica Sand orders issued vide GO 2nd read above, on the lease holders in addition to the Seigniorage Fee, DMF and MERIT, duly fixing it as one time of Seigniorage fee for all minor minerals other than granite and 0.5 time of Seigniorage fee for granite, since it is high value mineral (Seigniorage fee ranges from Rs.3,452 to Rs.4,600 per cum) irrespective of the mode of grant of leases.

4. Government, after careful examination of the proposal of the DM&G, AP, in terms of orders issued vide GO 1st read above, and on the similar lines of the orders issued vide GO 2nd read above, hereby levy consideration amount, on the lease holders, in addition to the Seign. Fee, DMF and MERIT, @ one time of Seigniorage fee for all minor minerals except granite and @ 0.5 time of Seigniorage fee for granite, irrespective of the mode of grant of leases. The fund so collected shall be used for the following purposes:

- i. To mitigate the impact of disaster and epidemic;
- ii. To provide there habilitation/employment of informal workforce;
- iii. to create all such infrastructures in the field of Cottage / village I industries, MSME generating employment and mitigating the hardships caused due to loss of jobs due to the pandemic;
- iv. to augment the existing health infrastructures;
- v. to establish the community shelters/dormitories/kitchens/food securities etc;
- vi. to provide all such necessary help/logistic support for proper cultivation to the Agriculturist;
- vii. to provide necessary logistics support for marketability of Agriculture produces;
- viii. to provide all necessary assistance/support to all such informal workforce, casual/migrant workforce, persons, who suffered loss of employment or suffered pecuniary losses during the epidemic;
- ix. to augment other welfare schemes in the State or and for all such other purposes as the Government may specify, from time to time in the State.

5. The Director of Mines & Geology, A.P., shall take necessary action accordingly in the matter.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH)

GOPAL KRISHNA DWIVEDI PRINCIPAL SECRETARY TO
GOVERNMENT (M)

To

The Director of Mines & Geology, AP, Ibrahimpatnam, Vijayawada. (w.e.file) All the District Collectors in the State.

The VC&MD, M/s APMDCLtd, Kanur, Vijayawada. Copy to:

The OSD to Hon'ble Minister (Mines & Geology) The PStoPr. Secy. To Hon'ble CM

The PS to Secretary to Govt (Mines) The Finance Department SF /SC(CompNo:1420114)

//FORWARDED BY ORDER//
SECTION OFFICER

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PART -C

Schedule of Quantities

SCHEDULE OF QUANTITIES

Name of work: Construction of Rat proof specialized controlled storage structure for storing groundnut at ICAR IIGR-RRS. Anantapur, Andhra Pradesh. SH:Providing and Fixing of Doors, Windows, Rolling shutters and Other Miscellaneous works for Specialized seed godown at ICAR, Anantapur.					
S. No	Description of Items	Qty	Unit	Rate	Amount
1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, for all lift, including getting out the excavated soil and disposal of surplus excavated soil as directed, for all leads within the campus.	12.00	Cum	265.94	3191.00
2	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m.	12.00	Cum	200.24	2352.00
3	Excavating, supplying and filling of local earth (including royalty) by mechanical transport up to a lead of 5 km, also including ramming and watering of the earth in layers not exceeding 20 cm in trenches, plinth, sides of foundation etc., complete.	5.00	Cum	715.67	3503.00
4	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : Note: If the agency wants to procure the concrete from the RMC plant, they can procure with prior approval of the design mix and RMC plant from the Engineer in charge. No additional claims will be admissible in this regards.				

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4.1	1:5:10 (1 Portland Pozzolana cement : 5 coarse sand (zone-III) derived from natural sources : 10 graded stone aggregate 40 mm nominal size derived from natural sources)	2.00	cum	6803.91	13608.00
5	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc., up to floor five level, excluding the cost of centering, shuttering and finishing:				
	Note: If the agency wants to procure the concrete from the RMC plant, they can procure with prior approval of the design mix and RMC plant from the Engineer in charge. No additional clams will be admissible in this regards.				
5.1	1:2:4 (1 Portland Pozzolana Cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)	2.00	Cum	10328.30	20657.00
6	Factory made Flyash based Precast Cement Concrete solid block masonry work with blocks of size 300 x 230 x 150 mm having minimum compressive strength not less than 70kg/sqcm in foundation and plinth with Cement mortar 1:6 (1 Portland Pozzolana Cement : 6 coarse sand). Note: The cement concrete blocks shall contain minimum of 40% flyash by volume of blocks).	10.00	Cum	6509.95	65100.00
7	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20mm nominal size) upto plinth level with :				
7.1	Cement mortar 1:6 (1 cement : 6 coarse sand).	10.00	Cum	7631.26	74695.00

8	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.				
8.1	Fixed to openings /wooden frames with rawl plugs screws etc.	200.00	kg	248.78	49756.00
9	Providing and fixing factory made uPVC glazed/wire mesh windows/doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever required) extruded profiles having minimum wall thickness of 1.70 mm for Series R1 and R2 profiles and 2.10 mm for Series R3 and R4 profiles conforming to EN: 12608 in any shape, colour and design duly reinforced with galvanized mild steel section made of required shape & size as per CPWD Specification, uPVC extruded glazing beads, interlocks and Inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8 mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 : Part 1 to 14, plastic packers, plastic caps and necessary stainless steel screws etc. Profile of frame, sash & mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc.				
	After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod pf approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-Charge.				

	Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-Charge. Wire mesh / Glazing of plain/ toughened/ laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS:16231 shall be paid separately.				
	Note:- Structural design proof checked from a Government Engineering Institute, to be provided by the manufacturer for:				
	(i) Sites with basic wind speed > 45 m/sec as per IS 875 - Part 3				
	(ii) Sites with structure height more than 20m for all wind speeds.				
9.1	Three track three panels sliding window with two glazed & one wire mesh panels with Aluminium channel for roller track, wool pile, nylon rollers with SS 304 body.				
9.1.1	Using R2 series with frame (70mm & above) x (40mm & above) & both glazed and fly screen sash (25mm & above) x (50mm & above) with zinc alloy (zamak) powder coated touch locks with hook. (Height upto 1.2 meter).	10.00	Sqm	11231.56	112316.00
10	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete	50.00	kg	136.59	6830.00
11	Providing and fixing 1mm thick M.S. sheet door with frame of 40x40x6 mm angle iron and 3 mm M.S. gusset plates at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer.				
11..1	Using M.S. angels 40x40x6 mm for diagonal braces	4.00	Sqm	5930.01	23720.00

PART-C 97

12	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters.				
12.1	80x1.20 mm M.S. laths with 1.20 mm thick top cover.	12.00	Sqm	3378.65	40544.00
13	Providing and fixing ball bearing for rolling shutters.	12.00	No.	503.01	6036.00
14	Providing & fixing fly proof wire gauze to windows, clerestory windows & doors with M.S. Flat 15 x 3 mm and nuts & bolts complete.				
14.1	Stainless steel (grade 304) wire gauze of 0.5 mm dia wire and 1.4 mm aperture on both sides.	5.00	Sqm	1158.09	5790.00
15	62 mm thick cement concrete flooring with concrete hardener topping, under layer 50 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) and top layer 12mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate, 6mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per manufacture's specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.	30.00	Sqm	1079.02	32371.00
16	Cement plaster skirting up to 30 cm height, with cement mortar 1:3 (1 cement : 3 coarse sand), finished with a floating coat of neat cement.				

PART-C 98

16.1	18 mm thick.	22.00	Sqm	676.3 8	14880.00
17	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.				
	(i)Single socketed pipes.				
17.1	110 mm diameter	25.00	m	385.16	9629.00
18	Providing and fixing on wall face unplasticised - PVC moulded fittings/accessories for unplasticised Rigid PVC rain water pipes conforming to IS 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion.				
18.1	Coupler				
18.1.1	110mm	5.00	Nos	139.10	696.00
18.2	Bend 87.5°				
18.2.1	110 mm bend	5.00	Nos	153.61	768.00
18.3	Shoe (Plain)				
18.3.1	110 mm Shoe	5.00	Nos	134.70	674.00
19	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length, including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.				
19.1	110 mm	20.00	Nos	379.3 4	7587.00

PART-C 99

20	15 mm cement plaster on the rough side of single or half brick wall of mix :				
20.1	1:6 (1 Portland Pozzolana cement: 6 fine sand)	30.00	sqm	399.7 6	11993.00
21	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade				
21.1	Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture	80.00	sqm	236.15	18892.00
22	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade :				
22.1	Old work (one or more coats applied @ 0.83 ltr/10 sqm).	30.00	Sqm	92.43	2714.00
23	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):				
23.1	With float glass panes of 5 mm thickness (weight not less than 12.50 kg/sqm)	10.00	Sqm	1537.8 4	15378.00
	Total Amount			5,43,680.00	

**Assistant Engineer-1,
KCSO, CPWD, KURNOOL**



Central Public Works Department

**NIT. No:15/EE/KURNOOL/E-Tender/2026-27**

Name of Work: -Construction of Rat proof specialized controlled storage structure for storing groundnut at ICAR IIGR-RRS. Anantapur, Andhra Pradesh. SH:Providing and Fixing of Doors, Windows, Rolling shutters and Other Miscellaneous works for Specialized seed godown at ICAR, Anantapur.

ABSTRACT OF COST

Name of the Contractor					
S.No.	Name of Component	Estimated Cost	Percentage above or below the estimated cost	% in Figures	Total
1	Civil component	Rs. 5,43,680/-			
	GRAND TOTAL	Rs. 5,43,680/-			

Important Note:

1. The estimated cost of tender has been worked out by taking into consideration the cost index of Anantapur Dist. for DSR 2023 (Civil) and market rates for NSR items; therefore are adjusted accordingly.
2. The tenderer is to quote a single consolidated percentage only at par/above/below estimated cost to cover all the rates of all the items under the schedule of composite tender.
3. If the percentage quoted is not clear, or if the rate is not quoted in percentage, the tender shall be treated as invalid and will not be considered as lowest tenderer.

Contractor

Assistant Engineer- 1
KCSD, CPWD, Kurnol.

Cor NIL	Ins NIL
Omi NIL	Ovw NIL
AE(P)	AE