OULGARET MUNICIPALITY
PUDUCHERRY

Name of work: **Improvements to the link road from ECR to 12th Street - I Cross extension at Krishna Nagar in Kamaraj Nagar Constituency, Puducherry.**

NOTICE INVITING TENDER

(Through e-tender mode)

NOTICE INVITING e-TENDER

The *Commissioner, Oulgaret Municipality* invites on behalf of Oulgaret Municipal Council, online **Percentage Rate** bids from the approved and eligible Contractors / firms for following work:

Name of Work	Improvements to the link road from ECR to 12th Street - I Cross extension at Krishna Nagar in Kamaraj Nagar Constituency, Puducherry.
Tender Reference/I.D. No.	OM/e-tenders/037/2026-27 // 2026_DLA_23033_1
Approximate cost put to tender	Rs.19,51,839/- (inclusive of GST)
EMD	Rs. 39,037/-
Class of Contractor	Class IV & above
Time for Completion	5 Months (including monsoon period)
e-tender processing fee (Non-refundable)	Rs.500/- + GST @ 5%)
Pre-bid Meeting Date, Time & Place	Nil
Last date & Time of Submission of bid on (or) before	13/11/2026 @ 03.30 PM
Date & Time of Opening of Bid	13/11/2026 @ 04.00 PM

The Bid forms and other details can be obtained from the Web Site: ***www.pudutenders.gov.in***

COMMISSIONER,
OULGARET MUNICIPALITY .

INFORMATION AND INSTRUCTIONS FOR BIDDERS FOR E-TENDERING FORMING PART OF BID DOCUMENT

On behalf of the **Oulgaret Municipal Council**, tenders are invited through e-Tendering by the ***Commissioner, Oulgaret Municipality*** for the following work from the eligible contractors/firms. Contractors / Firms other than those registered with PWD, Puducherry should produce documentary evidence in support of their having satisfactorily completed three similar works each of 40% of estimate cost put to tender or two works each of 60% of estimate cost put to tender or one work of 80% of estimate cost put to tender in the last seven years ending previous day of last date of submission of tenders. (Similar work means execution of ***"ROAD WORK".*** 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 last date of receipt of applications for tenders. The contractor after purchasing the valid ikey and Digital signature Certificate can only be able to download the Press Notice, NIT and other related documents and upload the bid document online by verifying the Tender Number assigned for this work from www.pudutenders.gov.in

Sl	Tender Reference No.// Tender ID	Name of work and Location	Approx. Estimate cost put to e-tender (Inclusive of GST)	Earnest Money Deposit (Rs)	Cost of tender Schedule	Eligibility of contractor	Time allowed for carrying out the work
1	2	3	4	5	6	7	8
1		Improvements to the link road from ECR to 12th Street - I Cross extension at Krishna Nagar in Kamaraj Nagar Constituency, Puducherry.	Rs.19,51,839/-	Rs.39,037/-	Rs.500/- + GST @ 5%	Class-IV & above	5 (Five) Months (including Monsoon period)
Pre-bid Meeting Date, Time & Place				*Nil*			
Last date of online submission of EMD, bid and other documents as specified in the bid document.				upto 13/11/2026 @ 03.30 PM			
Date and time of opening of bid				on 13/11/2026 @ 04.00 PM			

Note:

1) The intending bidder must read the terms and conditions of FORM-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 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 and downloaded from website **www.pudutenders.gov.in** at free of cost.

4) Tenders shall be accompanied with e-tender processing fee & Earnest money shall be payable using payment e-gateway of ICICI Bank through internet banking or DIRECT DEBIT/RTGS/NEFT/RTGS mode through online drawn in favour of the **Commissioner, Oulgaret Municipality** for which necessary challan will be available in the website.

List of Documents to be scanned and uploaded within the period of bid submission: MANDATORY DOCUMENTS

1) The e-tender processing fee & EMD should be deposited only through NEFT/ RTGS/Direct Debit mode available in the website. The e-tender processing fee & EMD should be drawn in favour of the **Commissioner, Oulgaret Municipality**.
2) *All contractors should upload* PWD/ CPWD/ MES/ Railways/ TWARD/ Any State PWD Registration Certificate /Enlistment Order of the appropriate class.
3) Certificate of Registration for GST, and Acknowledgement of up to date filed return of GST, if already obtained by the bidder.
4) If the bidder has not obtained GST registration as applicable, then he shall scan and upload following undertaking along with the bid document "If work is awarded to me, I/we shall obtain GST registration certificate, as applicable, within one month from date of receipt of award letter or before release of any payment whichever is earlier, failing which I/we shall be responsible for delay in payments which will be due towards me/us on account of the work executed and/or for any action taken by **Oulgaret Municipality** or GST department in this regard."
5) Contractors / Firms other than those registered with PWD, Puducherry shall upload the Form “C” that the statement of detail of completed works as per the eligibility criteria specified in the NIT. Necessary Attested copies of the Work Order, final completion certificate from the client for the said work(s) in Form “C” have to be attached.
6) Valid Notarized Affidavit of Non-black listing by PWD / State / Central Departments / PSU / Autonomous bodies as per Form “J” on Non-Judicial stamp paper of Rs.100/- duty signed by the authorized persons of agency / firm, to be submitted by the Contractors who have not enlisted in PWD, Puducherry.
7) Valid Notarized Affidavit of “No back to back execution of work as per Form “G” on Non-Judicial stamp paper of Rs.100/- duly signed by the authorized person of agency / firm, to be submitted by the successful bidder.
8) Declaration about site inspection.

Note:

1) All the above documents must be clearly displayed and seen by the tender opening authority before opening the actual bid.

2) All the bidders should submit the original documents uploaded for the above work after opening of the tender on the Same/ Next day for verification.

Document to be submitted after acceptance:

1. The registration certificate from the Employees Provident Fund Organisation (EPFO) and Employees State Insurance Corporation (ESIC) may not be collected from the contractors for the works costing less than Rs.1.00 Crore. However, the (i) EPFO registration certificate is to be collected from the contractor if 20 or more employees/ labourers are employed, (ii) ESIC registration certificate is to be collected from the contractor if 10 or more employees/ labourers are employed. This may be verified and collected by the Executive Engineers during the period of Implementation, Wherever EPF & ESI is not applicable, the BOCW Certificate is not required.

2. Other licenses, if any, as applicable.

3. Willingness certificate from concerned competent electrical contractor if required.

COMMISSIONER,
OULGARET MUNICIPALITY

FORM 'C'

DETAILS OF ELIGIBLE SIMILAR NATURE OF WORKS COMPLETED DURING THE LAST SEVEN YEARS ENDING LAST DAY OF THE MONTH PREVIOUS TO THE ONE IN WHICH THE TENDERS ARE INVITED

Sl. No.	Name of work / project and location	Owner or sponsoring organization	Cost of work in Crores of rupees	Date of Commen-cement as per Contract	Stipulated Date of completion	Actual date of completion	Litigation/ arbitration cases pending/ in progress with details*	Name and Address/ telephon enumber of officer to whom referenc emay be made	Whether the work was done on back to back basis Yes/No
1	2	3	4	5	6	7	8	9	10

** Indicate gross amount claimed and amount awarded by the Arbitrator Tribunal*

Note: *Attested copies of the Work Order, final completion certificate from the client for the above said work(s) have to be attached.*

Signature of Bidder(s) /
Authorized Authority of the firm
(With Name & Seal)

FORM 'J' AFFIDAVIT

Name of work: Improvements to the link road from ECR to 12th Street - I Cross extension at Krishna Nagar in Kamaraj Nagar Constituency, Puducherry.

I/we undertake and confirm that our firm/partnership firm has not been blacklisted by any State/ Central Departments /PSUs /Autonomous bodies during the last 7 years of its operations. Further that, if such information comes to the notice of the Oulgaret Municipality then I/we shall be debarred for bidding in Oulgaret Municipality in future forever. Also, if such information comes to the notice of Oulgaret Municipality on any day before date of start of work, the Engineer-in-charge shall be free to cancel the agreement and to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.

NOTE: Affidavit to be furnished on a 'Non-Judicial' stamp paper worth Rs.100/-

Signature of Bidder(s) or An Authorized Officer of the firm with stamp (with Name & Seal)

Date:

Signature of Notary with seal

FORM'G'

AFFIDAVIT

Name of Work: Improvements to the link road from ECR to 12th Street - I Cross extension at Krishna Nagar in Kamaraj Nagar Constituency, Puducherry.

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 **Oulgaret Municipality**, then I/we shall be debarred for tendering in **Oulgaret Municipalit**y in future forever. Also, if such a violation comes to the notice of **Oulgaret Municipality** before date of start of work, the Engineer-in-charge shall be free to cancel the agreement and to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.

NOTE: Affidavit to be furnished on a 'Non-Judicial' stamp paper worth Rs.100/-

Signature of Bidder(s) or An Authorized
Officer of the firm with stamp
(with Name & Seal)

Date:

Signature of Notary with seal

DECLARATION ABOUT SITE INSPECTION

To,
The Executive Engineer,
Oulgaret Municipality,

Name of Work: Improvements to the link road from ECR to 12th Street - I Cross extension at Krishna Nagar in Kamaraj Nagar Constituency, Puducherry.

Dear Sir,

It is hereby declared that as per **Oulgaret Municipality** 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/ 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 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.

Yours faithfully

Signature of Bidder(s) or
An Authorized Officer of the firm
(with Name & Seal)

Note: The above declaration shall be scanned and uploaded online.

Oulgaret Municipality - FORM-6 FOR E- TENDERING

1) Percentage rate bids are invited on behalf of **Oulgaret Municipal Council** from eligible Contractors for the Work of "**Improvements to the link road from ECR to 12th Street - I Cross extension at Krishna Nagar in Kamaraj Nagar Constituency, Puducherry."**

2) The enlistment of the contractors should be valid upto 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 upto the original date of submission of bids. The work is estimated to cost *Estimate Cost of* ***Rs.19,51,839/-.*** This estimate, however, is given merely as a rough guide.

3) Agreement shall be drawn with the successful bidders on prescribed Form No. **6,7/8 which is available with Oulgaret Municipality, Puducherry** Bidders shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.

4) The time allowed for carrying out the work will be **5 (Five)** ***Months*** *including monsoon period* including monsoon period 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.

5) (i) The site for the work shall be made available in parts as per execution of work.

(ii) The architectural and structural drawings shall be made available in phased manner, as per the requirement of the same as per approved programme of completion submitted by the contractor after award of work.

6) 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 Contract Form can be seen on website www.pudutenders.gov.in free of cost.

7) 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.

8) While submitting the revised bid, contractor can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items) but before last time and date of submission of bid as notified.

9) When bids are invited in three stage system and if it is desired to submit revised financial bid then it shall be mandatory to submit revised financial bid. If not submitted then the bid submitted earlier shall become invalid.

10) Earnest Money shall be deposited through DIRECT DEBIT / NEFT / RTGS mode only through online in favour of the *Commissioner,* ***Oulgaret Municipality*** for which necessary challan will be available in the website.

The earnest money given by all the tenderers 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.

Copy of Enlistment Order and certificate of work experience and other mandatory documents as specified in the NIT shall be scanned and uploaded to the e-Tendering website within the period of bid submission. Online bid documents submitted by intending bidders shall be opened only of those bidders, whose Processing fee, EMD got deposited and other documents scanned and uploaded are found in order.

The bid submitted shall be opened at *04.00 P.M on* 13/11/2026*.*

11. *The bid submitted shall become invalid and e-tender processing fee shall not be refunded if:*

a) The bidder is found ineligible.

b) The bidder does not upload scanned copies of all the mandatory documents stipulated in the bid document.

c) If any discrepancy is noticed between the mandatory documents as uploaded at the time of submission of tender and hard copies as submitted physically by the bidders in the office of tender opening authority.

d) If a bidder 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 bidder.

12 The contractor whose bid is accepted will be required to furnish performance guarantee at specified percentage of the tendered amount 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 Bank 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 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 and Programme chart (Time and Progress) within time specified in Schedule-F 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 within the period specified in Schedule-F.

13 The description of the work is as follows: Improvements to the link road from ECR to 12th Street - I Cross extension at Krishna Nagar in Kamaraj Nagar Constituency, Puducherry.

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 bidders 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 bidders 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 factor shaving a bearing on the execution of the work.

14. The competent authority on behalf of the **Oulgaret Municipal Council** 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.

15. 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.

16. The competent authority on behalf of Oulgaret Municipal Council 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.

17) The contractor shall not be permitted to bid for works in the **Oulgaret Municipality**, Puducherry (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 **Oulgaret Municipality** or in the Ministry of Urban Development. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Oulgaret Municipality.

18) No Engineer of Gazetted Rank or other Gazetted Officer employed in Engineering or Administrative duties in this Municipality 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 Oulgaret Municipal Council in writing. This contract is liable to be cancelled 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 Oulgaret Municipal Council as aforesaid before submission of the bid or engagement in the contractor's service.

19) The bid for the works shall remain open for acceptance for a period of 90 days from the due date of its opening in case of single bid system. If any bidder withdraws his bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to the **Oulgaret Municipality**, then the Oulgaret Municipal Council shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the bidders shall not be allowed to participate in the rebidding process of the work.

20) This notice inviting Bid shall form a part of the contract document. The successful bidder/contractor, on acceptance of his bid by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of:-

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. Standard **P.W.D. Form 7/8 (OR)** other Standard P.W.D. Form as applicable.

21) The Performance of the contractor will be evaluated by the **Executive Engineer, Oulgaret Municipality** and report will be sent to the Superintending Engineer periodically to assess the Progress of work, workmanship, quality of work etc. Based on the Performance, score will be awarded to the ongoing work and penal measures will be imposed as per the contract Enlistment Act 2019 for renewal of enlistment and participating in future tenders.

22) This work is covered under Puducherry Goods and Service Tax Act, 2017 and Central Goods and Service Tax Act 2017, hence the contractors are requested to quote the rates including the effect of GST. Additional/Separate claim for GST will not be entertained on any account after the award of work. The payment is also liable for TDS as per provision of GST Act and Rules.

23) The contractor/firm must obtain necessary prior permit from *Pondicherry Ground Water Authority,* for the water requirement of the of the proposed construction/road works which will be meet out either from tube well or transportation through tanker lorries before commencement of the construction work.

24) As per the *Central Vigilance Commission guidelines* and GFR Rules, negotiations with the 'L1' tenderer may be conducted at the discretion of the Competent Authority as prescribed in the Rule 173 (xiv) of GFR 2017. However, the tenderers are expected to quote their rates within permissible limit of variation.

25) The intending bidders are required to upload their profile in **www.pudutenders.gov.in** e-tender portal and 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 **Executive Engineer**, **Oulgaret Municipality** OR e-procurement cell 3rd floor, Chief Secretariat, e-tender help desk for guidance in phone No.0413- 2220225 & 180030702232 (Toll Free) mail ID: Support-eproc.pon@nic.in. The e- tendering bidders are also advised not to wait to raise any issue till the last date of submission of bid in their own interest**.**

For any clarification the contractors are free to contact the **Executive Engineer, Oulgaret Municipality,** Puducherry. (Mobile: ……/ Officer: ……..)

OULGARET MUNICIPALITY

PERCENTAGE RATE TENDER & CONTRACT FOR WORKS

Tender for the work of: Improvements to the link road from ECR to 12th Street - I Cross extension at Krishna Nagar in Kamaraj Nagar Constituency, Puducherry.

Last date and time of submission of e-tenders shall be up to 03.30 P.M on 13/11/2026

To be opened in presence of bidders who may be present at 04.00 P.M on 13/11/2026

in the office of **Commissioner, Oulgaret Municipality.**

TENDER

I/We have read and examined the notice inviting tender, schedule, A,B,C,D,E & F, 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 **Oulgaret Municipal Council** 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.

I/We agree to keep the tender open for **90 days** from the due date of its opening in case of single bid system/.

I/We have deposited EMD for the prescribed amount on behalf of the Commissioner 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 Scheduled 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 **Oulgaret Municipal Council** or his successors, in office shall without prejudice to any other right or remedy be at liberty to forfeit the said earnest money absolutely. Further, if I /we fail to commence work as specified, I/we agree that **Oulgaret Municipal Council** or his successors in office shall without prejudice to any other

right or remedy available in law, be at liberty to forfeit the said the performance guarantee absolutely. The said performance 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 **Oulgaret Municipality,** then I/We shall be debarred for tendering in **Oulgaret Municipality** in future forever. Also, if such a violation comes to the notice of **Oulgaret Municipality** 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……..

Witness :

Signature of Bidder(s) or
An Authorized Officer of the firm
(with Name & Seal)

Address:

Occupation:

ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for and on behalf of the **Oulgaret Municipal Council** for a sum of Rs. ---------- (Rupees_____ _____)

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

(a)

(b)

For & on behalf of the **Oulgaret Municipal Council.**

Signatures……

Dated: Designation

On non- judicial stamp paper of minimum Rs.100
(Guarantee offered by Bank to Oulgaret Municipality in connection with the execution of contracts) FORM OF BANK GUARANTEE FOR EMD / PERFORMANCE GUARANTEE / SECURITY DEPOSIT / MOBILIZATION ADVANCE

1. Whereas the **Commissioner, Oulgaret Municipality** on behalf of the **Oulgaret Municipal Council** (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 Commissioner, Oulgaret Municipality** on behalf of the **Oulgaret Municipal Council** (hereinafter called "The Oulgaret Municipal Council") has 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 Oulgaret Municipal Council has further agreed to accept 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.

3. We, ... (indicate the name of the bank) herein after referred to as "the Bank"), hereby undertake to pay to the Oulgaret Municipal Council an amount not exceeding Rs..... /-(Rupees..... Only) on demand by the Oulgaret Municipal Council within 10 days of the demand.

4. We, ...(indicate the name of the Bank) do hereby undertake to pay the amount due and payable under this guarantee without any demur, merely on a demand from the Oulgaret Municipal Council stating that the amount claimed is required to meet the recoveries due or likely to be 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).

5. We, ……(indicate the name of the Bank) further undertake to pay the Oulgaret Municipal Council any money so demanded notwithstanding any dispute or disputes 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 a valid discharge of our liability for payment there under and the Contractor shall have no claim against us for making such payment.

6. We, ……(indicate the name of the Bank) further agree that the Oulgaret Municipal Council shall have the fullest liberty without our consent and without affecting in 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 form time to time or to postpone for any time or from time to time any of the powers exercisable by the Oulgaret Municipal Council 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 Oulgaret Municipal Council or any indulgence by the Oulgaret Municipal Council 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.

7. We, …….. (indicate the name of the Bank) further agree that the Oulgaret Municipal Council 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 Oulgaret Municipal Council may have in relation to the Contractor's liabilities.

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

9. We, …….. (indicate the name of the Bank)…, undertake not to revoke this guarantee except with the consent of the Oulgaret Municipal Council in writing.

10. This Bank Guarantee shall be valid up to unless extended on demand by the Oulgaret Municipal Council. 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 of expiry or extended date of expiry of this guarantee, all our liabilities under this guarantee shall stand discharged.

Date: ……

Witnesses:

1. Signature …….. Authorized signatory

Name and address Name & Designation

Staff Code no. & Bank seal

2. Signature ……..

Name and address

** In paragraph 1, strike out the portion not applicable. Bank Guarantee will be made either for Earnest money or for Performance Guarantee / Security deposit/ Mobilization advance, as the case may be.

PROFORMA SCHEDULE (Civil & Electrical)

SCHEDULE 'A'

Schedule of quantities (as per **Oulgaret Municipality**): **As per separate Schedule attached.**

Note:

1) Schedule of materials to be issued to the contractor: **Contractors Own arrangement**
2) Tools and plants to be hired to the contractor : **Contractors Own arrangement**

SCHEDULE 'D'

Extra schedule for specific requirements /documents for the work, if any: **NIL.**

SCHEDULE 'E'

Reference to General Conditions of contract: **GCC 2023 for Construction works incorporating Amendments upto Circular bearing No. DG/CON/Construction 2023/05 Dated:08.02.2024.**

Name of work:		Improvements to the link road from ECR to 12th Street - I Cross extension at Krishna Nagar in Kamaraj Nagar Constituency, Puducherry.
Estimate cost of work		Rs.20,00,000/-
(i)	Earnest money (to be refunded after receiving PG)	Rs. 39,037/-
(ii)	Performance Guarantee	5% of tendered value
(iii)	Security Deposit	2.5 % of tendered value

SCHEDULE 'F'

1.General Rules & Directions:	
Officer inviting tender	**Commissioner,** **Oulgaret Municipality,**
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

2.Definitions:	
2(vi) Engineer- in- Charge for Civil & Electrical	**Executive Engineer, Oulgaret Municipality,**
2(viii) Accepting Authority	**The Oulgaret Municipal Council/The Director, LAD, Puducherry.**
2(x) Percentage on cost of materials and labour to cover all overhead and profits.	15% (including all risk insurance policy for Labour)
2(x)(a) Standard Schedule of Rates	As per PSR 2024-25 and PWD Circular No.395/PW/EE(D)/AE(C)/F.No.290/2025-26, dt. 10/06/2025 including GST @ 18% (Applicable to Puducherry Region)
2(xi) Department	**Oulgaret Municipality, Puducherry**
9 (ii) Standard PWD **Contract Form**	GCC 2023 (Puducherry PWD Form 7) as modified and corrected upto date as available

Clause 1			
i)	Time allowed for submission of Performance Guarantee, Programme Chart (Time and Progress) and applicable labour licenses, registration with EPFO, all risk insurance policy for labours, ESIC and BOCW Welfare Board or proof of applying thereof, from the date of issue of letter of acceptance	:	14. *days (The Performance Guarantee shall be submitted by the Contractor and shall be initially valid up to the stipulated date of completion plus minimum* 03 *Months)*
ii)	Maximum allowable extension with late fee @ 0.1% per day of performance Guarantee amount beyond the period provided in (i) above	:	7 days
Clause 2			
Authority for fixing compensation under clause 2		:	**Superintending Engineer, LAD, Puducherry**
Clause 2A Incentive for early completion of work		:	Not Applicable

Clause 5		
Number of days from the date of issue of letter of acceptance f o r reckoning date of start	:	Ten (10) Days (or) Date of handing over of site whichever is later

Mile stone(s) as per table given below:-

*(to be filled by **Executive Engineer, Oulgaret Municipality)***

Sl. No.	Description of milestone (Physical)	Time allowed in days (from date of start)	Amount to be withheld in case of non-achievement of Mile(s) Stone
1.			% of tender amount
2.			% of tender amount
3.			% of tender amount
4.			% of tender amount

Time allowed for execution of work: **Five (05)** Months (Including monsoon period)

Authority to decide:

i)	Extension of time	***Superintending Engineer, LAD***
ii)	Rescheduling of mile stone	
iii)	Shifting of date of start in case of delay in handing over of site	

PROFORMA OF SCHEDULES

Clause-5 Schedule of handing over of site

*(to be filled by **Executive Engineer, Oulgaret Municipality)***

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	--------	…….. days
Part B	Portions with encumbrances	------	…….. days

Clause-6	Computerized Measurement Book (CMB)	**Applicable**
Clause-7	Gross work to be done together with net payment/ adjustment of advances for material collected, if any since the last such payment for being eligible to interim payment	**Rs. 3,90,368/-**
Clause 7A	Whether Clause 7A shall be applicable	Applicable
Clause 8A	Authority to decide compensation on account if contractor fails to submit completion plans	**Superintending Engineer, LAD**
Clause 10A	List of testing equipment to be provided by the Contractor at site lab.	As per Sl.No.9 of particular Specifications and special conditions of this NIT
Clause 10B (ii)	**Mobilization Advance**	Not Applicable
Clause 10C	Component of labour expressed as percent of Value of work	Applicable 25%
Clause 10CC	Component for Materials, Labour etc. for price adjustment for works	Not Applicable

Clause 11 Specifications to be followed for execution of work for Civil Work	For Civil -CPWD specification 2019 Vol. I to II with correction upto date of receipt of tender, "MORTH specification 5th revision, CPHEEO specification, and relevant IRC and BIS codes"
Specifications to be followed for execution of work for Electrical Work	For Electrical works - CPWD specification 2023 Vol. I to II with correction upto date of receipt of tender,

Clause 12- Deviation / Variation extent and pricing	
Clause 12.2 & 12.3- Deviation Limit beyond which clauses 12.2 & & 12.3 shall apply for building work.	100%
Clause 12.4 (i) Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for foundation work. (except items mentioned in earthwork subhead in PSR & related items)	100%
(ii) Deviation Limit for items in earthwork Sub head of PSR & related items.	100%

Clause 16- Action in case work not done as per Specifications- Competent Authority for deciding reduced rates.	**The Commissioner, OM and advise of EE, OM / Superintending Engineer, LAD**
Clause 17- Contractor liable for damages, defects during defect liability period	Enhancement of Maintenance Period: 12 Months
Clause 18 **List of mandatory machinery, tools & plants to be deployed by the contractor at site**	As per the list mentioned Sl.No.6 of Particular Specifications and Special Conditions in this NIT
Note: 1) *In additional Machinery, Tools and Plants are required it may be added by the Engineer in Charge.* *2. Contractor should upload the R.C. book, ownership documents for proof for documentary evidence of Own / Lease Agreement for the following Machinery, Tools and Plants.*	
Clause 19- Labour Laws to be complied by the Contractor	Applicable
Authority to decide penalty (including amount) for each default under Clause-19 – Superintending Engineer, LAD	
Clause 19C- Contractor should provided Safety Equipment's for the Laborer's working in the Site.	
Clause 19D- Contractor should submit the statement /details of Laborer's employed in the site along with Working Hours, wages paid, no. of female works allowed for maternity benefit & amount Paid, accidents if any occurred.	
Clause 19G- Contractor should provide approved standard Huts & Sanitary arrangements.	
Clause-19K-Contractor should deploy qualified Skilled / semi Skilled tradesman arrangements.	
Clause 25- Arbitration Clause	Deleted As per G.O.Ms. No.30 dt. 05/09/2024 issued by Under Secretary (Works), Puducherry.

Clause 32 Requirement of Technical Representative(s) and recovery Rate

S. No.	Minimum qualification of Technical Representative	Discipline	Number	Minimum Experience	Designation (Principal Technical)	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of Clause 36(i)	
						Figures	Words
1.	Graduate Engineer (or) Diploma Engineer	Civil	1	*2*	Project Manager Cum Planning/ Quality/Site/ Billing Engineer	Rs.15,000/ per Month	Rupees Fifteen thousand/ per month
			1	*5*			

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

Diploma holder 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-33
Levy/Taxes payable by the Contractor

During the course of execution, the contractor is liable to pay all taxes (GST, Income Tax, CESS, Service Tax or other tax) as per Statutory orders issued by the concerned Departments.

CESS

(i) During the course of contract period, deduction of 'CESS' to provide social security and various welfare benefits through the Puducherry Buildings and Other Construction Workers Welfare Board under Section - 18 of Buildings and Other Construction Workers (RECS) Act, 1996 and as per Section-3 of the Buildings and Other Construction Workers Cess Act, 1996 shall be made at the rate of 1% (One Percent) of the gross amount of each bill or as per the advice of the Government of Puducherry.

(ii) Contractors are liable to register themselves and submit returns to the Registering Officer viz. Labour Office (Enforcement), Puducherry for Puducherry, Mahe & Yanam Regions and Labour Office (Karaikal) in respect of Karaikal Region in compliance to the provisions of Buildings and Other Construction Workers

(RECS) and Buildings and Other Construction Workers Cess Act, 1996 and Rules issued by Government of Puducherry from time to time.

GST

As per Circular No.673/FD/F.3/2022-23 dt.24.08.2022 insertion of Clause in the Tender/ Bid/ RFP Document towards mandatory furnishing of GST Particulars by Contractors/Service Providers.

"The Contractor/Service Provider shall mandatorily furnish the following documents to the Commissioner, Commercial Tax:

i) Copy of the Work Order

ii) HSN[1] Code of Goods and Service Accounts Code of Services which shall be supplied during the execution of the Contract.

iii) GST Rate at which the GST would be paid to the Commercial Tax Department against each of the items in (ii) above.

The information shall be submitted to the Commissioner, Commercial Tax, with a copy to the Procuring/Government Entity, within 15 calendar days of receipt of the Work Order".

Clause 38

(a) Schedule/statement for determining theoretical quantity of cement & bitumen on the basis of **Puducherry Schedule of Rates 2024-25 applicable for Puducherry region.**

Variations permissible on theoretical quantities:

(a)	Cement	
	For works with estimated cost put to tender not more than Rs.25 lakh.	3% plus/minus.
	For works with estimated cost put to tender more than Rs.25 lakh.	2% plus/minus.
(b)	Bitumen 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

PARTICULAR SPECIFICATIONS & SPECIAL CONDITIONS

1. GENERAL

1.1 Wherever any reference to any Indian Standard Specifications of BIS or other International standards of ASTM / BS/EN occurs in the documents relating to this contract, the same shall be inclusive of all amendments issued there-to or revisions thereof, if any, up to the date of receipt of tenders.

1.2 Detail Architectural drawings and structural drawing will be issue during execution of work. if any additional features in the crown road the Agency has to get the Structural Design as per Architectural Drawings and get it vetted from IIT Madras/Any other IIT. However, the agency is free to get the Structural design for additional features likes wild life crossing tunnel, birds' nest etc shall be paid for design cost and for vetting cost.

1.3 The contractor shall take instructions from the Engineer-in-charge for stacking of materials at site. No excavated earth or building materials shall be stacked on areas where the buildings, roads, services or compound walls are to be constructed.

1.4 If as per Municipal or prevailing rules of the secured campuses owned by paramilitary forces, Institutions etc, the huts for labour are not to be erected at the site of work by the contractors, the contractors shall provide such accommodation at such locations as are acceptable to local bodies with all provisions concerning labour safety & sanitation as contained in the relevant clause of the contract, for which nothing shall be payable.

1.5 Unless otherwise provided in the Schedule of quantities, the rates tendered by the Contractor shall be all inclusive and shall apply to all heights, lifts, leads and depths of the building and nothing shall be payable to him on this account.

1.6 The working drawings shall mean to include both architectural and structural drawings respectively. The structural and architectural drawings shall be properly correlated before executing the work. In case of any difference noticed between architectural and structural drawings, final decision, in writing of the Engineer-in-charge shall be obtained by the contractor before proceeding further.

1.7 Some restrictions may be imposed by the security staff etc. on the working and for movement of labour, materials etc. The contractor shall be bound to follow all such restriction / instructions including issue of identity cards to all persons authorized by him to do work / visit the work site and nothing shall be payable on this account.

1.8 The contractor shall make his own arrangements for obtaining electric connections, if required, and make necessary payments directly to the department concerned.

1.9 The contractor shall conduct his work, so as not to interfere with or hinder the progress or completion of the work being performed by other contractor (s) or by the Engineer- in-Charge and shall as far as possible arrange his work and shall place and dispose off the materials being used or removed, so as not to interfere with the operations of other Contractors, or he shall arrange his work with that of the others in an acceptable and coordinated manner and shall perform it in proper sequence to the complete satisfaction of Engineer-in-Charge. The contractor shall be responsible for any damage due to hindrance caused by him.

1.10 Cast iron pipes and fittings without ear shall be used. However, pipes and with ears may be accepted without any extra payment. In such cases, clamps are not required and no extra payment shall be made for fixing the pipes in a different manner.

1.11 Any cement slurry added over base surface for bond or for continuation of concreting, for protecting reinforcement bars, its cost shall be deemed to have been included in the respective items, unless specified otherwise and nothing extra shall be payable nor extra cement shall be considered in the cement consumption on this account.

1.12 Stacking of materials and excavated earth including its disposal shall be done as per the directions of the Engineer-in-Charge. Double handling of materials or excavated earth if required at any stage shall have to be done by the contractor at his own cost.

1.13 No claim for idle establishment & labour, machinery & equipments, tools & plants and the like, for any reason whatsoever, shall be admissible during the execution of work as well as after its completion.

1.14 Only Star headed Stainless Steel screws shall be used unless otherwise specified.

1.15 Work shall be carried out in professional manner with finished product serving the intended purpose with specified strength, durability and aesthetics.

1.16 Work activities shall be executed in well thought out sequences such that consequent activities not adversely affecting previously done work. Nothing extra shall be payable to protect the works already done.

1.17 The contractor shall prepare all the needed shop drawings well in advance and get them approved before placing the order and execution of the item.

1.18 The contractor shall, at his risk and cost, make all arrangements and shall provide all facilities as the Engineer-in-Charge may require for collecting, and preparing the required number of samples for such tests at such time and to such place or places as may be directed by the Engineer - in -Charge and bear all charges and cost of testing which shall not be reimbursed.

1.19 The contractor shall not store /dump construction material or debris on metalled road.

1.20 The contractor shall get prior approval from Engineer-in-charge for the area where the construction material or debris can be stored beyond the metalled road. This area shall not cause any obstruction to the free flow of traffic / inconvenience to the pedestrians. It should be ensured by the contractor that no accidents occur on account of such permissible storage.

1.21 The contractor shall take appropriate protection measures like raising wind breakers of appropriate height on all sides of the plot / area using CGI sheets or plastic and / or other similar material to ensure that no construction material dust fly outside the plot area.

1.22 The contractor shall ensure that all the trucks or vehicles of any kind which are used for construction purposes / or are carrying construction material like cement, sand and other allied material are fully covered. The contractor shall take every necessary precautions that the vehicles are properly cleaned and dust free to ensure that enroute their destination, the dust, sand or any other particles are not released in air / contaminate air.

1.23 The contractor shall provide mask to every worker working on the construction site and involved in loading, unloading and carriage of construction material and construction debris to prevent inhalation of dust particles.

1.24 The contractor shall provide all medical help, investigation and treatment to the workers involved in the construction of building and carry of construction material and debris relatable to dust emission.

1.25 The contractor shall ensure that C&D waste is transported to the C & D waste site only and due record shall be maintained by the contractor.

1.26 The contractor shall compulsory use of wet jet in grinding and stone cutting.

1.27 The contractor shall comply all the preventive and protective environmental steps as stated in the MoEF guidelines, 2010.

1.28 The contractor shall carry out on-Road-Inspection for black smoke generating machinery. The contractor shall use cleaner fuel.

1.29 The contractor shall ensure that all DG sets comply emission norms notified by MoEF.

1.30 The contractor shall use vehicles having pollution under control certificate. The emissions can be reduced by a large extent by reducing the speed of a vehicle to 20 kmph. Speed bumps shall be used to ensure speed reduction. In cases where speed reduction cannot effectively reduce fugitive dust, the contractor shall divert traffic to nearby paved areas.

1.31 The contractor shall ensure that the construction material is covered by tarpaulin. The contractor shall take all other precaution to ensure that no dust particles are permitted to pollute air quality as a result of such storage.

1.32 The paving of the path for plying of vehicles carrying construction material is more permanent solution to dust control and suitable for longer duration projects.

1.33 Design of pavement will be carried out by the agency at free of cost and nothing extra shall be paid by Department.

1.34 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. Further, the Contractor shall take all precautions to abide by the environmental related restrictions imposed by Puducherry Pollution Control Committee, Govt. of Puducherry.

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, inadequate availability of skilled, semi-skilled or unskilled workers in the near vicinity, non- availability of construction machinery spare parts and any other constraints not specifically stated here, shall be entertained from the Contractor. Therefore, the Bidders are advised to visit site and get first-hand information of site constraints. Accordingly, they should quote their tenders. Nothing extra shall be payable on this account.

2. CO-OPERATION WITH OTHER CONTRACTORS/ SPECIALIZED AGENCIES/ SUB- CONTRACTORS

2.1 The Contractor shall cooperate with and provide the facilities to the sub-Contractors and other agencies working at site for smooth execution of the work.

2.2 The Contractor shall :

2.2.1 Allow use of scaffolding, toilets, sheds etc.

2.2.2 Properly co-ordinate their work with the work of other Contractors.

2.2.3 Provide control lines and benchmarks to his Sub-Contractors and the other Contractors.

2.2.4 Provide electricity and water at mutually agreed rates.

2.2.5 Provide hoist and crane facilities for lifting material at mutually agreed rates.

2.2.6 Co-ordinate with other Contractors for leaving inserts, making chases, alignment of services etc. at site.

2.2.7 Adjust work schedule and site activities in consultation with the Engineer-in-Charge and other Contractors to suit the overall schedule completion.

2.2.8 Resolve the disputes with other Contractors/ sub-contractors amicably and the Engineer-in-Charge shall not be made intermediary or arbitrator.

2.4 The work should be planned in a systematic manner so as to ensure proper co-ordination of various disciplines viz. sanitary & water supply, drainage, rain water harvesting, electrical, fire fighting, information technology, communication & electronics and any other services.

2.5 Other agencies will also simultaneously execute and install the works of sub-station / generating sets, air-conditioning, lifts, etc. for the work and the contractor shall afford necessary facilities for the same. The contractor shall leave such recesses, holes, openings trenches etc. as may be required for such related works (for which inserts, sleeves, brackets, conduits, base plates, clamps etc. shall be supplied free of cost by the department unless otherwise specifically mentioned) and the contractor shall fix the same at time of casting of concrete, stone work and brick work, if required, and nothing extra shall be payable on this account.

2.6 The contractor shall conduct his work, so as not to interfere with or hinder the progress or completion of the work being performed by other contractor(s) or by the Engineer-In-Charge and shall as far as possible arrange his work and shall place and dispose off the materials being used or removed so as not to interfere with the operations of other

contractor or he shall arrange his work with that of the others in an acceptable and in a proper co-ordination manner and shall perform it in proper sequence to the complete satisfaction of others.

2.7 Concrete Pavers shall be carried out as per IS codes (IRC-SP-63: 2018 and IS 15658: 2006) with the satisfaction of approved make list. The agency shall get PCC pavers of grade M50 approved by the Engineer-in-charge before execution of work.

2.8 GSB & WMM Design mix for execution should be as per Morth & PWD Specification (IRC 109 –1997 & IRC 37 – 2018) to be submitted by agency before execution without any extra payment. The same will be approved by the Engineer-in-charge for execution within 3 days.

2.9 Cement Concrete Pavements shall be carried out as per section 302 of MORTH specification.

2.10 Sub bases and bases and shoulder shall be carried out the section 401,406, 408, 409,410 as per MORTH specification

2.11 Site clearance work carried out as per the section 200 of MORTH specification & PWD specifications

2.12 Excavation for road way and drains as per the section of MORTH specification –301 and Embankment construction for 305, 306, 308,311,312 of MORTH specification.

2.13 Traffic signs, marking and other road appurtenances provided at regular intervals as per the section 800 of MORTH specification

2.14 Dry lean cement concrete sub-base is considered as per the section of 601 MORTH specifications

2.15 Precast Design and Erection using mixed construction of IS 15917 (2020) & IS 11447 (1985) relevant IS Code, Technical Specifications shall be followed.

3. CONDITION FOR CEMENT: -

3.1 The Contractor shall procure 43 grade Ordinary Portland cement (conforming to IS 8112) or Portland slag cement (conforming to IS : 455) or Portland Pozzolana Cement(PPC) (Fly ash based) conforming to IS :(Part-I) as required in the work, from reputed manufactures of cement as mentioned in the list of approved materials provided in the NIT.

Supply of cement shall be taken in 50 Kg bags bearing manufacturer's name and ISI marking. Samples of cement arranged by the contractor shall be taken by the Engineer-in-charge and got issue in accordance with provisions of relevant BIS codes. 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 to do so.

If Portland Pozzolana cement or Portland slag cement is used, suitable modification in de-shuttering time etc. shall be done if need be as per specifications and standards and as directed by Engineer – in – charge and nothing extra shall be payable on this account.

No extra payment / deduction shall be made from the payment to the contractor for using any of the above type of cement.

3.2 The cement shall be brought at site in bulk supply of approximately 50 tonnes or as decided by the Engineer - in - charge.

3.3 For each grade / type, cement bags shall be stored in two separate godown, one for tested cement and the other for fresh cement (under testing) constructed by the contractor at site of work as per sketch shown in General conditions of contract for Oulgaret Municipality works 2023 with weather proof roofs and walls, for which no extra payment shall be made. The size of the cement godown is indicated in the sketch for guidance only. The actual size of godown shall be as per site requirements and as per the direction of the Engineer in charge and nothing extra shall be paid for the same. The decision of the Engineer-in-charge regarding the capacity required/needed will be final. However, the capacity of each godown shall not be less than 100 tonnes. Each godown shall be provided with a single door with two locks. The keys of one lock shall remain with Oulgaret Municipality Engineer-in-charge or his authorized representative and that of other lock with 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 the 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 in token of its correctness.

3.4 The cement shall be got tested by Engineer –in –Charge and shall be used on the work only after satisfactory test results have been received. The contractor shall supply free of charge the cement required for testing including its transportation cost to testing laboratories. All expenditure to be incurred for testing of samples e.g. packaging, sealing, transportation, loading, unloading etc. including testing charges shall be borne by the contractor.

3.5 The actual issue and consumption of cement on work shall be regulated and proper accounts maintained separately for each type of cement, as provided in clause 10 of 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 conditions laid therein. However, for consumption lesser beyond permissible theoretical variation recovery shall

be made in accordance with conditions of contract at Schedule A to F (PWD -7), without prejudice to action for acceptance of work/item at reduced rate or rejection as the case may be. In case of excess consumption no adjustment shall be made.

3.6 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.

4. CONDITIONS FOR REINFORCEMENT STEEL:

1) The contractor shall procure IS marked TMT bars of various grades from the steel manufacturers or their authorized dealers (as per following selection criteria) having valid BIS license for IS: 1786-2008 (Amendment-1 November 2012)

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.

b) Selection Criteria of steel manufacturers

The supply of reinforcement steel for all works should have following selection criteria of steel manufacturers:-

Steel producers of any capacity using iron ore / processed iron ore as the basic raw materials adopting advanced refining technologies as given under

i) I-EAF= Direct Reduced iron – Electric arc furnace or

ii) BF-BOF = Blast furnace – Basic oxygen furnace or

iii) COREX-BOF = COREX-Basic Oxygen Furnace

For production of liquid steel to finish product at single /multiple locations with NABL or any other similarly placed accrediting Government body which operates in accordance with ISO/IEC 17011 and accredits labs as per ISO/IES 17025 conforming to IS:1786-2008 (Amendment-1 November 2012).

The preferred make of steel are enclosed in approved list of materials in NIT Executive Engineer of Oulgaret Municipality, Puducherry shall approve the steel manufacturers.

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.

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's time of written orders from the Engineer-in-charge to do so.

4) The steel reinforcement bars shall be brought to the site in bulk supply of 10 tonnes or more or as decided by the Engineer-in-Charge.

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.

6) For checking nominal mass, tensile strength, bend test, re-bend test, etc., specimen 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 tonnes	For consignment above 100 tonnes
Under 10mm dia bars	One sample for each 25 tonnes or part thereof	One sample for each 40 tonnes or part thereof
10 mm to 16mm dia bars	One sample for each 35 tonnes or part thereof	One sample for each 45 tonnes or part thereof
Over 16 mm dia bars	One sample for each 45 tonnes or part thereof	One sample for each 50 tonnes or part thereof

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.

8) The actual issue and consumption of steel on work shall be regulated and proper accounts maintained as provided in clause 10 of the contract. The theoretical consumption of steel 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, recovery at the rate so prescribed shall be made. In case of excess consumption, no adjustment needs to be made.

9) The steel brought to site and steel remaining unused shall not be removed from site without the written permission of the Engineer-in-Charge.

For the purpose of payment, the actual weight of reinforcement steel shall be worked out as below:

To arrive at unit weight for the purpose of payment three random samples each of 1meter length shall be collected for each diameter of re-bar from every consignment received at site. Actual weight of three specimens for each diameter shall be taken and average weight calculated and recorded. The average weight so arrived at shall be compared with theoretical weight of that particular diameter of rebar. Actual or theoretical weight whichever is less shall be considered for making payment for that consignment. However final payment shall be made on the basis of weighted average of all the consignment. The decision of the Engineer-in-charge as regards the random samples and average weight shall be final and binding on the contractor and no claim of any kind shall be entertained in this regard.

REINFORCED CEMENT CONCRETE WORK

a. 5.1 DESIGN MIX CONCRETE

5.1.1 The RCC work shall be done with Design Mix Concrete unless otherwise specified. In the nomenclature of items wherever letter M has been indicated, the same shall imply for the Design Mix Concrete. For the nominal mix in RCC, CPWD Specifications shall be followed. The Design Mix Concrete will be designed based on the principles given in IS: 456-2000. The contractor shall design mixes for each grade of concrete indicating that the concrete ingredients and proportions will result in concrete mix meeting requirements specified. In case of use of admixture and or white cement, the mix shall be designed with these ingredients as well.

5.1.2 The concrete mix design will be carried out by the contractor through one of the following laboratories / Test houses and ready mix concrete shall conform to accepted design mix. a) IIT Chennai. b) Pondicherry Technical University, (PTO), Puducherry or any other Government institution as approved by Engineer-in-charge.

5.1.3 In the event of all the above laboratories being unable to carry out the requisite design / testing the contractor shall have to get the same done from any other laboratory with prior approval of the Engineer-in-Charge.

5.1.4 The contractor shall submit the mix design report from any of above approved laboratories for approval of Engineer-in-Charge within 45 days from the date of issue of letter of acceptance of the tender.

5.1.5 In case of white Portland cement and the likely use of admixtures where CC/RCC is done with concrete pumps in concrete with ordinary Portland/white Portland cement, the contractor shall design and test the concrete mix by using trial mixes with white cement and /or admixtures also, for which nothing extra shall be payable.

5.1.6 Each time when there is change of source or characteristic properties of the ingredients used in the concrete mix during the work, a revised mix design shall be done and approval obtained from the approved Laboratory or as per the direction of the Engineer-in-Charge. Preferably only single source of cement shall be kept for the work. In case contractor decides to use more than one source of approved cement brand then for each brand separate design mix shall be done and got approved by Engineer-in-charge.

5.1.7 The Mix shall be designed to produce the grade of concrete having required workability and characteristic strength not less than as specified.

5.1.8 The mix design for a specified grade of concrete shall be done for a target mean compressive strength $T_{ck} = F_{ck} + 1.65\ S$

Where, F_{ck} = Characteristic compressive strength at 28 days.S= Standard deviation The standard deviation for each grade of concrete shall be calculated separately. The degree of quality control for this work is “Good” for which the standard deviation (s) obtained for different grades of concrete shall be as follows for Building Works:

Grade of Concrete	For “Good” quality of control
M 20	4.0
M 25	4.0
M 30	5.0
M 35	5.0

5.1.9 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 likely to be attained at 28 days. All cost of mix designing and testing connected therewith including charges payable to laboratory shall be borne by the Contractor.

5.1.10 The samples of cement, aggregate (fine & coarse) to be sent to the laboratories shall be sealed in the presence of the Engineer- in -Charge and shall have his signature and cost of packaging, sealing, transportation, loading, unloading, cost of samples and the testing charges for Mix design in all cases shall be borne by the contractor.

5.1.11 Not with standing 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.

5.1.12 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 fit or unfit for use in production of mix.

5.1.13 The Contractor shall submit the test data of the material used for concrete mix-design in the laboratories, so the material being used at site can be compared with those data / size etc.

5.1.14 In case of change of parameters of ingredients (sand, cement, coarse aggregate) fresh concrete mix-design to be done as mentioned in paras 5.1.1, 5.1.2 & 5.1.6 to 5.1.10 above and got approved from the Engineer-in-Charge before execution.

5.1.15 The contractor shall make arrangement to install a mini laboratory at site for accelerated testing of design mix concrete as per IS: 9013. The department reserves right to take samples of design mix concrete from the mass production of the concrete for testing and compare with the laboratory's results.

5.1.16 Nothing shall be paid extra for installation and cost of batching plant and other arrangement for making necessary test of design mix concrete.

5.1.17 The item of design mix cement concrete shall be inclusive of all the ingredients including admixtures if required, labour, machinery T & P etc. (except 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 shall be net & nothing extra shall be payable on account of change in quantities of concrete ingredients like aggregates and admixtures as per the approved mix design.

5.1.18 Concrete shall be handled from the place of mixing to the place of final deposit / placement by methods, which prevent segregation, or loss of any ingredients and contamination.

5.1.19 Where concrete is conveyed by chutes, the chute shall be made of metal or fitted with metal lining. The approval of the Engineer-in-charge shall be obtained for the use of chutes in excess of 3 metres length and in such cases the concrete shall be remixed if so required by the Engineer-in-Charge or closed bottom buckets shall be used. If concrete is placed by pumping, the conduit shall be primed properly. Once pumping is started, it shall not be interrupted as far as possible. Concrete shall not be dropped into place from a height more than 1.5m.

5.1.20 Concreting of any portion of the work shall be done in presence of the representative of the Engineer-in-Charge and shall be done only after approval of the Engineer-in-Charge.

5.1.21 Concreting shall be carried out continuously between constructions joints shown on the drawings or as agreed by the Engineer-in-Charge. The contractor shall closely follow the sequence of concreting where it is specified in the drawings. If concreting is interrupted before reaching the predetermined joint an approved construction joint shall be provided. Construction joints shall be minimized as far as possible. These shall be set at right angles to the general direction of the member. The surface film of the first placed concrete should preferably be removed while the concrete is still green to expose the aggregate and leave a sound irregular surface. However care shall be taken not to disturb the concrete already laid.

5.1.22 Admixtures: Wherever required, admixtures of approved quality only shall be mixed with concrete as specified. The admixtures shall conform to IS: 9103. The chloride content in the admixture shall satisfy the requirements of BS: 5075. The total amount of chlorides in the admixture mixed concrete shall also satisfy the requirements of IS 456-2000.

5.1.23 Use of ready mixed concrete (RMC) may also be permitted, with prior approval of Engineer–in– Charge, without any extra payment. Separate account of design mix concrete and RMC shall however be kept. The ready mixed concrete shall conform to the requirement of durability, workability and strength as laid down for design mix concrete.

5.2 FORMWORK FOR EXPOSED CONCRETE SURFACES

5.2.1 Where it is specifically shown on the drawings to have original fair face finish of concrete surface without any rendering of plastering, form work shall be carried Out by using plywood on steel plates of approved quality.

5.2.2 The forms shall be constructed so as to produce a uniform and consistent texture and pattern on the face of the concrete. The formwork shall be placed so that all horizontals are constructed of lumber and are not paneled and the formwork joints shall be staggered.

5.2.3 To achieve a finish which shall be free of board marks, the formwork shall be faced with plywood or equivalent material in large sheets. The sheets shall be arranged in an approved pattern. Whenever possible, joints between sheets shall be arranged to coincide with architectural feature, sills, window heads or change in direction of surface. All joints between panels shall be vertical or horizontal unless otherwise directed. Suitable joints shall be approved between sheets. The joints shall be arranged and fitted so that no blemish or mark is imparted to the finished surfaces.

5.2.4 Forms for exposed concrete surfaces shall be constructed with grade strips (the underside of which indicate top of pour) at horizontal constructions joints, unless the use of groove strips is specified on the drawings. The reset forms shall be tightened against the concrete so that the forms will not be spread and permit abrupt irregularities or loss of mortar. Supplementary form ties shall be used as necessary to hold the reset forms tight against the concrete.

5.2.5 For fair faced concrete, the position of through bolts will be restricted and generally indicated on the drawings.

5.2.6 Plywood and steel plates used in the formwork for obtaining exposed surfaces shall be got approved from Engineer-in-Charge on each use. However no forms will be allowed for reuse if it is doubtful to produce desired texture of exposed concrete.

5.2.7 Cement of only approved shade shall be used preferably of single lot to achieve integrity of texture.

5.3 TOLERANCE IN FINISHED CONCRETE

The formwork shall be so made as to produce a finished concrete true to shape, lines, level, plumb and dimensions as shown in the drawings subject to the following tolerance unless otherwise specified in this specification or drawings.

5.3.1 Wall/Column/Fins:

i	Variation from the plumb	±6mm	Upto 3m height
ii	Variation from the plumb of conspicuous liner	±6mm	Upto 6m height
iii	Variation in the size of wall openings	(+)15mm (-)6mm	
iv	Variation in parapet wall thickness Upto 30cm thickness	±6mm	

Slab, Beam & Girder Forms:

Variation from the level or from the specified grid for beam soffit before removal offshores,

In any 3m ± 6mm

In any 6m ± 10mm

All the tolerances mentioned above shall apply to concrete dimensions only, and not to positioning of vertical steel or dowels. The tolerances given above are specified for local aberration in the finished concrete surface and should not be taken as tolerance for the entire structure taken as whole for the setting and alignment of formwork. Any error, within the above tolerance limits, or any other if noticed in any of the structure after part or portion stripping of forms, shall be corrected in the subsequent work to bring back the structure to its true line, level and alignment.

5.3 Ultrasonic pulse velocity method test for RCC as per technical circular No. 18 issued vide CE(CSQ) letter No. G-2/SE(QA)/CSQ/69 dated 12.02.2013 shall be carried out as a routine test to assess the homogeneity and uniformity of concrete. The fulfilling criteria and other conditions shall be as detailed, as per the method stated in the aforesaid circular.

6. EQUIPMENTS AND PLANTS (Refer Clause 18 of Schedule 'F')

6.1 The contractor has to deploy necessary tools & plants in required numbers to ensure smooth & timely execution of work, at his own cost & risk as per the requirement of work at different stages. The decision of Engineer-in-Charge shall be final regarding use of particular T&P(s) at a particular time(s) & the contractor has to adhere to the same strictly. The following description & quantum of T&P is given for general guidance which is not mandatory. However, the successful contractor shall give a list of tools and plants which he proposes to deploy to ensure smooth and timely execution as per different milestone fixed and timely completion of work while submitting the programme and progress chart.

To be filled as per required by the Executive Engineer, Oulgaret Municipality

The L1 Contractor should produce the R.C Book, ownership documents for proof of documentary evidence of Own/Lease Agreement for the Machinery, Tools and Plants after receipt of letter of acceptance. In case the L1 contractor fails to produce the above documents, the tender is liable for rejection and the EMD will be forfeited.

To be filled as per requirement by the Executive Engineer

Sl.No.	List of mandatory Machinery, Tools & Plants to be deployed by the contractor at site:	No
I.	Fully Automatic Batching Plant (15.00cum)	-
II.	Concrete Pump	-
III.	Concrete mixer with hopper.	-
IV.	Excavator Cum Loader.(various sizes)	-
V.	Needle Vibrator.	1 No
VI.	Plate Vibrator.	-
VII.	Steel Centering and shuttering	63.00 sqm
VIII	Bar Bending Machine.	1 No
IX	Bar Cutting Machine.	1 No
X	Compressor 5 Cmm.	-
XI	Earth compactor 2 T	-

XII	Floor grinding machine	-
XIII	Welding machine	-
XIV	DG Set(63 KVA)	-
XV	Grinder, Drilling machine etc.	-
XVI	Water Pump	1 No
XVII	Chase cutter	-
XVIII	Total station (Sokkia make)	-
XIX	Pile boring machine (Rig)	-
XX	Cranes 10 Tonne capacity	-
XXI	TIpper	1 No
XXII	Tractor with tipper	1 No

6.2 To achieve the program of work as per programme the contractor must bring at site the required shuttering materials required for cement concrete and RCC work etc. within 30 days from the date of start of work. All other equipments shall be brought, installed and commissioned at site of work at least one week before their actual planned use at site. Work shop facilities for fabrication/addition and alterations, and other allied works shall be arranged by the contractor at his own cost.

6.3 The list of equipment/T&P/machinery as per para 11.1 is for general guidance. In addition to these, machinery / equipment as required shall be arranged by the contractor in case the requirement at any stage exceeds as per the programme finalized at his own cost and nothing extra whatsoever on this account shall be paid. This include equipment for arrangement of concrete from RMC producing plants also.

6.4 All the equipment, T&P and machinery shall be kept in good condition.

7. SAFETY MEASURES AT CONSTRUCTION SITE

In order to ensure safe construction, following shall be adhered for strict compliance at the site:-

7.1 The work site shall be properly barricaded.

7.2 Adequate signage's indicating 'Work in Progress – Inconvenience caused is Regretted' or Diversion Signs shall be put on the sites conspicuously visible to the public even during night hours. These are extremely essential where works are carried out at public places in use by the public.

7.3 The construction malba at site shall be regularly removed on daily basis.

7.4 All field officials and the workers must be provided with safety helmets, safety shoes and safety belts.

7.5 Proper MS pipe scaffoldings with work – platforms and easy-access ladders shall be provided at site to avoid accidents.

7.6 Necessary First-Aid kit shall be available at the site.

The above provisions shall be followed in addition to the provisions of General Condition of Contract.

8. INSURANCE POLICIES:

Before commencing the execution of work, the contractor shall, without in any way limiting his obligations and liabilities, insure at his own cost and expense against any damage or loss or injury, which may be caused to any person or property, at site of work. The contractor shall obtain and submit to the Engineer-in-charge proper "Contractor All Risk insurance Policy (CAR)" for an amount equivalent to contract value for this work, with Engineer-in-charge as the first beneficiary. The insurance shall be obtained in joint names of Engineer-in-charge and the contractor (who shall be second beneficiary). Also, he shall indemnify the department from any liability during the execution of the work. Further, he shall obtain and submit to the Engineer-in- charge, a third party insurance policy for maximum Rs.10 lakh for each accident, with the Engineer-in-charge as the first beneficiary.

The insurance shall be obtained in joint name of Engineer-in-charge and the Contractor (who shall be second beneficiary). The contractor shall, from time to time provide documentary evidence as regards payment of premium for all the insurance Policies for keeping them valid till the completion of the work. The contractor shall ensure that insurance Policies are also taken for the workers of his Sub- contractors/specialized agencies also. Without prejudice to any of its obligations and responsibilities specified above, the contractor shall within 10 days from the date of letter of acceptance of the bid and thereafter at the end of each quarter submit a report to the department giving details of the Insurance Policies along with certificate of these insurance policies being valid, along with documentary evidences as required by the Engineer-in-charge. No work shall be commenced by the contractor unless he obtains the Insurance Policies as mentioned above. Also no payment shall be made to the contractor on expiry of insurance policies unless renewed by the contractor. Nothing extra shall be payable on this account. No claim of hindrance (or any other claim) shall be entertained from the contractor on these accounts.

9. LIST OF EQUIPMENT FOR SITE LABORATORY TO BE MADE AVAILABLE BY THECONTRACTOR AT HIS OWN COST (Refer Clause 10 A of Schedule 'F')

9.1 LABORATORY TESTING INSTRUMENTS

9.1.1 Balances

9.1.2 7 Kg. to 10 Kg. capacity, semi-self-indicating type–accuracy 10 gm.-1 No.

9.1.3 500 gm. Capacity, semi-self-indicating type – accuracy 1 gm.- 1 No.

9.1.4 Pan balance – 5 Kg. capacity – accuracy 10 gms.-1 No.

9.1.5 Ovens–electrically operated, thermostatically controlled upto 1100 C – sensitivity10 C. – 1 no.

9.1.6 Sieves: as per IS 460 – 1962.

9.1.7 IS. sieves – 450 mm internal dia, of sizes 100mm, 80 mm, 63 mm, 50mm, 40 mm, 25mm, 20 mm, 12.5 mm, 10 mm, 6.3mm, 4.75 mm, 2.36mm complete with lid and pan. – 1 Set

9.1.8 I.S. sieves - 200 mm internal dia (brass frame) consisting of 2.36mm, 1.18mm, 600 microns, 425 microns, 300 microns, 212microns, 150 microns, 90 microns, 75 microns with lid and pan. – 1 Set

9.1.9 Sieve shaker capable of 200 mm and 300 mm dia sieves, manually operated with timing switch assembly - 1 No.

9.1.10 Equipment for slump test–slump cone, steel plate, tamping rod, steel scale, scoop- 2sets

9.1.11 Dial gauges, 25 mm travel – 0.01 mm / division least count – 2 Nos.

9.1.12 100 tones compression testing machine, electrical cum manually operated. – 1No.

9.1.13 Graduated measuring cylinders 200 ml capacity – 6 Nos.

9.1.14 Enamel trays (for efflorescence test for bricks).

9.1.15 300 mm X 250 mm X 40 mm – 2 Nos. 10 Set

9.1.16 Circular plates of 2850 mm dia – 4 Nos.

9.1.17 Plate load test for obtaining load carrying capacity (CBR)

9.2 FIELD TESTING INSTRUMENTS

Following instruments in sufficient quantity as directed by the Engineer- in- Charge shall be made available by the contractor. It shall be ensured that the instruments always remain in serviceable condition else the same will be replaced.

9.2.1 Steel tapes – 3 m.

9.2.2 Vernier Calipers.

9.2.3 Micrometer screw 25 mm gauge.

9.2.4 A good quality plumb bob.

9.2.5 Spirit level, minimum 30 cm long with 3 bubbles for horizontal vertical.

9.2.6 Wire gauge (circular type) disc.

9.2.7 Foot rule.

9.2.8 Long nylon thread.

9.2.9 Rebound hammer for testing concrete

9.2.10 Dynamic penetrometer.

9.2.11 Magnifying glass

9.2.12 Screwdriver 30 cm long

9.2.13 Ball pin hammer, 100 gm.

9.2.14 Plastic bags for taking samples

9.2.15 Moisture meter for timber

9.2.16 Earth resistance tests (for Electrical Divisions)

9.2.17 Meggar (for Electrical Divisions)

10. TESTING OF MATERIALS.

10.1 The contractor shall arrange carrying out of all tests required under the agreement through the laboratory as approved by the Engineer-in-Charge and shall bear all charges in connection therewith including fee for testing unless specified otherwise. In all cases cost of samples and to & fro carriage shall be borne by the contractor. Contractor shall establish a laboratory at site of work at his own cost. The laboratory shall be equipped with all necessary equipment as per requirement of specification or as per direction of Engineer-in-Charge. A list of laboratory equipment's to be maintained by the contractor is enclosed in NIT. Establishing the laboratory at site shall not absolve the contractor from fulfilling the criteria of getting the test done in independent approved laboratories as per DG/MAN/308. The decision of the Engineer-in-Charge of allowing any test in the site laboratory shall be final.

10.2 Even ISI marked materials may be subjected to quality test at the discretion of the Engineer-in-charge besides testing of other materials as per the specifications described for the item/material. Whenever ISI marked materials are brought to the site of work the contractor hall, if required by the Engineer-in-charge, furnish manufacturer test certificate or test certificate from approved testing laboratory to establish that the material procured by the contractor for incorporation in the work satisfy the provisions if IS codes relevant to the material and/or the work done.

10.3 Sub-standard Material/Work: In case any material/work is found substandard the same shall be rejected by the Engineer-in-Charge and the same shall be removed from the site of work within 48 hours, failing which the same shall be got removed by the Engineer-in-Charge at the risk and cost of the contractor without giving any further notice and time.

11. CONDITIONS OF CONTRACT SPECIFIC TO GREEN BUILDING PRACTICES

The contractor shall strictly adhere to the following conditions as part of his contractual obligation

11.1 The contractor shall ensure that adequate measures are taken for the prevention of erosion of the top soil during the construction .The contractor shall prepare and implement the Erosion and Sedimentation Control Plan (ESCP) provided to him after approval by the Engineer- in- Charge as part of the larger Construction Management Plan(CMP). The contractor shall obtain the Erosion and Sedimentation Control Plan (ESCP)

Guidelines if required from the Engineer in Charge and then prepare “working plan” for the following month’s activities as a CAD drawing showing the construction management, staging & ESCP. At no time soil should be allowed to erode away from the site and sediments should be trapped where necessary.

11.2 The contractor shall ensure that all the top soil excavated during construction works is neatly stacked and is not mixed with other excavated earth. The contractor shall take the clearance of the Engineer in Charge before any excavation. Top soil should be stripped to a depth of 20 cm (centimeters) from the areas to be disturbed, for example proposed area for buildings, roads, paved areas, external services and area required for construction activities etc. It shall be stockpiled to a maximum height of 40 cm in designated areas, covered or stabilized with temporary seeding for erosion prevention and shall be reapplied to site during plantation of the proposed vegetation or as directed by the engineer in charge. Top soil shall be separated from subsoil, debris and stones larger than 50 mm (millimeter) diameter. The stored top soil may be used as finished grade for planting areas.

11.3 The Contractor should follow the construction plan as proposed by the Architect / Engineer in Charge to minimize the site disturbance such as soil pollution due to spilling. If required use of staging and spill prevention and control plan to restrict the Spilling of the contaminating material on site needs to be resorted. Protection of top soil from erosion by collection storage and reapplication of top soil, constructing sediment basin, contour trenching, mulching etc., may also be directed by the engineer in charge.

11.4 No excavated earth shall be removed from the campus unless suggested otherwise by Engineer in Charge. All subsoil shall be reused in backfilling/landscape, etc as per the instructions of the Engineer in Charge. The surplus excavated earth shall be disposed of by the contractor as per the direction of the engineer in charge at his own cost for reuse. A certificate of reuse as required by the Engineer-in-Charge shall be submitted by the contractor.

11.5 The contractor shall not change the natural gradient of the ground unless specifically instructed by the Engineer in Charge. This shall cover all natural features like water bodies, drainage gullies, slopes, mounds, depressions, etc. Existing drainage patterns through or into any preservation area shall not be modified unless specifically directed by the Engineer-in-Charge.

11.6 The contractor shall not carry out any work which results in the blockage of natural drainage. The contractor shall ensure that existing grades of soil shall be maintained around existing vegetation and lowering or raising the levels around the vegetation is not allowed unless specifically directed by the Engineer-in-Charge.

11.7 Contractor shall reduce pollution and land development impacts from automobiles use during construction.

11.8 Overloading of trucks is unlawful and creates the erosion and sedimentation problems, especially when loose materials like stone dust, excavated earth, sand etc. are moved. Proper covering shall be used by the contractor. Also, no overloading shall be permitted.

12. CONSTRUCTION PHASE AND WORKER FACILITIES

12.1. The contractor shall specify and limit construction activity in pre¬- planned/designated areas and shall start construction work after securing the approval for the same from the Engineer in Charge. This shall include areas of construction, storage of materials, and material and personnel movement.

12.2 Preserve and Protect Landscape during Construction

12.3 The contractor shall ensure that no trees, existing or otherwise, shall be harmed and damage to roots. These shall be prevented during trenching, placing backfill, driving or parking heavy equipment, dumping of trash and protected from oil, paint, and other materials detrimental to plant health. These activities shall be restricted to the areas outside of the canopy of the tree, or, from a safe distance from the tree/plant by means of barricading. Trees will not be used for support; their trunks shall not be damaged by cutting and carving or by nailing posters, advertisements or other material. Lighting of fires or carrying out heat or gas emitting construction activity within the ground, covered by canopy of the tree is not at all permitted.

12.4 The contractor shall take steps to protect trees or saplings if any identified for preservation within the construction site using tree guards of approved specification.

12.5 Contractor should limit all construction activity within the specified area as per the Construction Management Plan (CMP) approved by Engineer in Charge.

12.6 The contractor shall avoid cut and fill in the root zones, through delineating and fencing the drip line (the spread limit of a canopy projected on the ground) of all the trees or group of trees. The zones of movement of heavy equipment, parking, or excessive foot traffic shall be separated from the fenced plant protection zones.

12.7 The contractor shall ensure that maintenance activities during construction period shall be performed as needed to ensure that the vegetation remains healthy.

12.8 Contractor shall be required to develop and implement a waste management plan, quantifying material diversion goals. He shall establish goals for diversion from disposal in landfills and incinerators, if required, and adopt a construction waste management plan to achieve these goals. A project wide policy of "Nothing leaves the Site" shall be followed. The Contractor's ingenuity is especially called towards meeting this pre requisite/ credit (as per IGBC LEED India, New Construction v1.0 & GRIHA, MNRE) and many consider recycling cardboard, metal, brick, acoustical tile, concrete, plastic, clean wood, glass, gypsum wallboard, carpet and insulation, designating a specific area(s) on the construction site for segregated or commingled collection of recyclable material, and track recycling efforts throughout the construction process, identifying construction haulers and recyclers to handle the designed materials at his cost. The diversion may include donation of materials to charitable organizations and salvage of materials on site.

12.9 Contractor shall collect all construction waste generated on site. He may consider at segregating wastes based on their utility and examine means of sending such waste to manufacturing units which use them as raw material or other site which require it for specific purpose. Typical construction debris could be broken bricks, steel bars, broken tiles, spilled concrete and mortar etc.

12.10 The contractor shall provide potable water and other amenities for all workers as per the contract.

12.11 The contractor shall provide the minimum level of sanitation and safety facilities for the workers at site as described in Oulgaret Municipality General Conditions of contract. The contractor shall ensure cleanliness of workplace with regard to the disposal of waste and effluent; provide clean drinking water and latrines and urinals as per applicable provisions. Adequate toilet facilities shall be provided for the workmen within easy access of their place of work. The total no. to be provided shall not be less than 1per 30 employees in any one shift. Toilet facilities shall be provided from the start of building operations, connection to a sewer shall be made as soon as practicable. Every toilet shall be so constructed that the occupant is sheltered from view and protected from the weather and falling objects. Toilet facilities shall be maintained in a sanitary condition. A sufficient quantity of disinfectant shall be provided and natural or artificial illumination shall also be provided.

12.12 The contractor shall ensure that air pollution due to dust/generators is kept to a minimum, preventing any adverse effects on the workers and other people in and around the site. The contractor shall ensure proper screening, covering stockpiles, covering brick and loads of dusty materials, wheel-washing facility, gravel pit, and water spraying. Contractor shall also ensure the following activities to prevent air pollution during construction:

12.13 Clear vegetation only from areas where work will start right away

12.14 Vegetate / mulch areas where vehicles do not ply.

12.15 Apply gravel / landscaping rock to the areas where mulching / paving is impractical

12.16 Identify roads on-site if applicable that would be used for vehicular traffic. Upgrade vehicular roads (if these are unpaved) by increasing the surface strength by improving particle size, shape and mineral types that make up the surface & base and add surface gravel to reduce source of dust emission to limit amount of fine particles (smaller than 0.075mm) to 10 – 20%

12.17 Water spray, through a simple hose for small projects, to keep dust under control. Fine mists should be used to control fine particulate. However, this should be done with care so as not to waste water. Heavy watering can also create mud, which when tracked onto paved public roadways, must be promptly removed. Also, there must be an adequate supply of clean water nearby to ensure that spray nozzles don't get plugged.

12.18 Water spraying shall be done on: Any dusty materials before transferring, loading and unloading Area where demolition work is being carried out Any un-paved main haul road Areas where excavation or earth moving activities are to be carried out

12.19 The contractor shall ensure that the speed of vehicles within the site is limited to 10 km/hr.

12.20 All material storages should be adequately covered and contained so that they are not exposed to situations where winds on site could lead to dust / particulate emissions.

12.21 Spills of dirt or dusty materials will be cleaned up promptly so the spilled material does not become a source of fugitive dust and also to prevent of seepage of pollutant laden water into the ground aquifers. When cleaning up the spill, ensure that the clean-up process does not generate additional dust. Similarly, spilled concrete slurries or liquid wastes should be contained / cleaned up immediately before they can infiltrate into the soil / ground or runoff in nearby areas

12.22 Provide hoardings of not less than 3m high along the site boundary, next to a road or other public area at his cost.

12.23 Provide dust screens, sheeting or netting to scaffold along the perimeter of the building at his cost

12.24 Cover stockpiles of dusty material with impervious sheeting at his cost.

12.25 Cover dusty load on vehicles by impervious sheeting before they leave the site at his cost.

12.26 Contractor shall be required to provide an easily accessible area that serves the entire building and is dedicated to the separation, collection and storage of materials for recycling including (at a minimum) paper, corrugated cardboard, glass, plastics, and metals. He shall coordinate the size and functionality of the recycling areas with the anticipated collections services for glass, plastic, office paper, newspaper, cardboard, and organic wastes to maximize the effectiveness of the dedicated areas. Consider employing cardboard balers, aluminum can crushers, recycling chutes, and collection bins at individual workstations to further enhance the recycling program.

12.27 The contractor shall ensure that no construction leachate (e.g. cement slurry etc.), is allowed to percolate into the ground. Adequate precautions will be taken to safeguard against this including reduction of wasteful curing processes, collection, basic filtering and reuse. The contractor shall follow requisite measures for collecting drainage water run-off from construction areas and material storage sites and diverting water flow away from such polluted areas. Temporary drainage channels, perimeter dike/swale, etc. shall be constructed to carry the pollutant-laden water directly to the treatment device or facility (municipal sewer line).

12.28 Staging (dividing a construction area into two or more areas to minimize the area of soil that will be exposed at any given time) should be done to separate undisturbed land from land disturbed by construction activity and material storage.

12.29 The contractor shall comply with the safety procedures, norms and guidelines (as applicable) as outlined in the document Part 7 Constructional practices and safety, 2005, National Building code of India, Bureau of Indian Standards. A copy of all pertinent regulations and notices concerning accidents, injury and first- aid shall be prominently exhibited at the work site. Depending upon the scope & nature of work, a person qualified in first-aid shall be available at work site to render and direct first-aid to causalities. A telephone may be provided to first-aid assistant with telephone numbers of the hospitals displayed. Complete reports of all accidents and action taken thereon shall be forwarded to the competent authorities.

12.30 The contractor shall ensure the following activities for construction workers safety, among other measures at his cost.

12.31 Guarding all parts of dangerous machinery.

12.32 Precautionary signs for working on machinery.

12.33 Maintaining hoists and lifts, lifting machines, chains, ropes, and other lifting tackles in good condition.

12.34 Durable and reusable formwork systems to replace timber formwork and ensure that formwork where used is properly maintained.

12.35 Ensuring that walking surfaces or boards at height are of sound construction and are provided with safety rails or belts.

12.36 Provide protective equipment; helmets etc.

12.37 Provide measures to prevent fires. Fire extinguishers and buckets of and to be provided in the fire-prone area and elsewhere.

12.38 Provide sufficient and suitable light for working during night time.

12.39 The storage of material shall be as per standard good practices as specified in Part 7, Section 2 - Storage, Stacking and Handling practices, NBC 2005 and shall be to the satisfaction of the Engineer in Charge to ensure minimum wastage and to prevent any misuse, damage, inconvenience or accident. Watch and ward of the Contractor's materials shall be his own responsibility. There should be a proper planning of the layout for stacking and storage of different materials, components and equipment's with proper access and proper maneuverability of the vehicles carrying the materials. While planning the layout, the requirements of various materials, components and equipment's at different stages of construction shall be considered.

12.40 The contractor shall provide for adequate number of garbage bins around the construction site and the workers facilities and will be responsible for the proper utilization of these bins for any solid waste generated during the construction. The contractor shall ensure that the site and the workers facilities are kept litter free. Separate bins should be provided for plastic, glass, metal, biological and paper waste and labeled in both Hindi and English with suitable symbols.

12.41 The contractor shall prepare and submit 'Spill prevention and control plans' before the start of construction, clearly stating measures to stop the source of the spill, to contain the spill, to dispose the contaminated material and hazardous wastes, and stating designation of personnel trained to prevent and control spills. Hazardous wastes include pesticides, paints, cleaners, and petroleum products.

12.42 Contractor shall collect & submit the relevant material certificates for materials if directed by the Engineer in charge with high recycled (both post- industrial and post-consumer) content, including materials like RMC mix with fly- ash, glass with recycled content, calcium silicate boards etc.

12.43 Contractor shall collect the relevant material certificates for rapidly renewable materials such as bamboo, wool, cotton insulation, fiber, linoleum, wheat board, strawboard and cork etc.

12.44 Where possible, the contractor shall select materials / vendors, harvested and manufactured regionally, within 800-km radius of the project site.

12.45 Contractor shall adopt an IAQ (Indoor Air Quality) management plan to protect the HVAC system during construction, control pollutant sources, and interrupt pathways for contamination. He shall sequence installation of materials to avoid contamination of absorptive materials such as insulation, carpeting, ceiling tile, and gypsum wallboard. He shall also protect stored on- site or installed absorptive materials from moisture damage.

12.46 The contractor shall ensure that a flush out of all internal spaces is conducted prior to handover. This shall comprise an opening of all doors and windows for 14 days to vent out any toxic fumes due to paints, varnishes, polishes, etc.

12.47 Contractor shall make efforts to reduce the quantity of indoor air contaminants that are odorous or potentially irritating harmful to the comfort and well- being of installer and building occupants. Contractor shall ensure that the VOC (Volatile Organic Compounds) content of paints, coatings and primers used must not exceed the VOC content limits mentioned below in case items of such paints are/is available in schedule of quantities.

12.48 Paints Non-flat - 150 g/L, Flat (Mat) - 50, g/L, Anti corrosive/ anti rust - 250 g/L

12.49. Coatings / Clear wood finishes Varnish - 350 g/L , Lacquer - 550 g/L, Floor coatings - 100g/L, Stains - 250 g/L

12.50 Sealers Waterproofing sealer - 250 g/L, Sanding sealer - 275 g/L, Other sealers - 200 g/L

12.51 The VOC (Volatile Organic Compounds) content of adhesives and sealants used if prescribed in the schedule of quantities must be less than VOC content limits mentioned: Architectural Applications VOC Limit (g/l less water)Indoor Carpet adhesives - 50 g/L, Carpet Pad Adhesives - 50 g/L, Wood Flooring Adhesive - 100 g/L, Rubber Floor Adhesives - 60 g/L, Sub Floor Adhesives – 50 g/L, Ceramic Tile Adhesives - 65 g/L, VCT and Asphalt Tile adhesives - 50 g/L, Dry Wall and Panel Adhesives - 50 g/L, Structural Glazing Adhesives - 100 g/L, Multipurpose Construction Adhesives – 70 g/L, Substrate Specific Application VOC Limit (g/l less water), Metal to Metal - 30 g/L, Plastic Foams - 50 g/L, Porous material (except wood) - 50 g/L, Wood - 30 g/L, Fiber SS Glass – 80 g/L.

12.52 Wherever required, Contractor shall meet and carry out documentation of all activities on site, supplementation of information, and submittals in accordance with IGBC LEED India New Construction v1.0 or GRIHA program standards and guidelines. Towards meeting the aforementioned building environmental rating Standard(s) expert assistance shall be provided to him up on request.

12.53 Water Use during Construction Contractor should spray curing water on concrete structure and shall not allow free flow of water. Concrete structures should be kept covered with thick cloth / gunny bags and water should be sprayed on them. Contractor shall do water ponding on all sunken slabs using cement and sand mortar.

12.54 The Contractor shall remove from site all rubbish and debris generated by the Works and keep Works clean and tidy throughout the Contract Period. All the serviceable and non-serviceable (malba) material shall be segregated and stored separately. The malba obtained during construction shall be collected in well formed heaps at properly selected places, keeping in a view safe condition for workmen in the area. Materials which are likely to cause dust nuisance or undue environmental pollution in any other way, shall be removed from the site at the earliest and till then they shall be suitable covered. Glass & steel should be dumped or buried separately to prevent injury. The work of removal of debris should be carried out during day. In case of poor visibility artificial light may be provided.

12.55 The contractor shall provide O & M Manuals wherever applicable.

12.56 The contractor shall make himself conversant with the Site Management Program Manual and actively contribute to its compilation by estimating the nature and volume of waste generated by the process/installation in question.

12.57 Materials & Fixtures for the project:

12.58 Contractor will produce wherever feasible certificate regarding distance of the source of the relevant material.

12.59 Unless otherwise stated cement used at site for reinforced concrete, precast members, mortar, plaster, building blocks, etc shall be PPC (Portland Puzzolana Cement). The PPC must meet the requirements of IS 1489 (Part I) as regards to fly ash content in cement The contractor shall obtain from the PPC manufacturer the certificate regarding fly ash content in the PPC in each batch of signment.

12.60 The contractor has to comply as per MoEF issued notification 8.0.763(E) dated 14th Sept.1999 containing directive for greater fly ash utilization. Every construction agency engaged in the construction of buildings within a radius of 50 km radius of a Thermal Power Plant, have to use of 100% fly ash based bricks/blocks in their construction.

12.61 The contractor shall ensure that all paints, polishes, adhesives and sealants used both internally and externally, on any surface, shall be Low VOC products. The contractor shall get prior approval from the Engineer in Charge before the application of any such material.

12.62 All plumbing and sanitary fixtures installed shall be as per the prescription of the Engineer in Charge and shall adhere to the minimum LPM (litres per minute) and LPF (litres per flush) mentioned. The contractor shall employ 100% zero ODP (ozone depletion potential) insulation; HCFC (hydro- chlorofluorocarbon)/and CFC (chlorofluorocarbon) free HVAC and refrigeration equipment's and / halon-free fire suppression and fire extinguishing systems.

12.63 The contractor shall ensure that all composite wood products/agro- fibre products used for cabinet work, etc do not contain any added urea formaldehyde resin.

12.63.1 Resources Consumed During Construction:

12.63.2 The contractor shall ensure that the water and electricity is not wasted during construction. The Engineer in Charge can bring to the attention any such wastage and the contractor will have to ensure that such bad practices are corrected.

12.63.2 The contractor shall install necessary meters and measuring devices to record the consumption of water, electricity and diesel on a monthly basis for the entire tenure of the project.

12.63.3 The contractor shall ensure that all run-off water from the site, during construction is collected and reused to the maximum.

12.63.5 The contractor shall use treated recycled water of appropriate quality standards for construction, if available.

12.63.6 No lights shall be turned on during the period between 6:00 AM to 6:00 PM, without the permission of the Engineer in Charge

12.64 Construction Waste:

12.64.1 Contractor shall ensure that wastage of construction material is within 3%.

12.64.2 All construction debris generated during construction shall be carefully segregated and stored in a demarcated waste yard. Clear, identifiable areas shall

be provided for each waste type and measures employed to segregate the waste on site into inert, chemical, or hazardous wastes.

12.64.3 All construction debris shall be used for road preparation, back filling, etc, used if described in the schedule of quantities and as per the instructions of the Engineer in Charge, with necessary activities of sorting, crushing, etc.

12.64.4 No construction debris shall be taken away from the site, without the prior approval of the Engineer in Charge.

12.64.5 The contractor shall recycle the unused chemical/hazardous wastes such as oil, paint, batteries, and asbestos.

12.64.6 If and when construction debris is taken out of the site, after prior permissions from the Engineer in Charge, then the contractor shall ensure the safe disposal of all wastes and will only dispose of any such construction waste in approved dumping sites.

12.65 Documentation

12.65.1 The contractor shall, during the entire tenure of the construction phase, submit the following records to the Engineer in Charge on a monthly basis:

- Water consumption in litres
- Electricity consumption in 'kwh' units
- Diesel consumption in litres
- Quantum of waste (volumetric/weight basis) generated at site and the segregated waste types divided into inert, chemical and hazardous wastes.
- Digital photo documentation to demonstrate compliance of safety guidelines as specified here and in the Appendix on Safety Conditions.

12.65.2 The contractor shall, during the entire tenure of the construction phase, submit the following records to the Engineer in Charge on a fortnightly basis:

- Quantities of material brought into the site, including the material issued to the contractor by the Engineer in charge.
- Quantities of construction debris (if at all) taken out of the site Digital photographs of the works at site, the workers facilities, the waste and other material storage yards, pre-fabrication and block making works, etc. as guided by the Engineer in Charge.

12.65.3. The contractor shall submit a document after construction of the buildings, a brief description along with photographic records to show that other areas have not been disturbed during construction. The document should also include brief explanation and photographic records to show erosion and sedimentation control measures adopted. (Document CAD drawing showing site plan details of existing vegetation, existing buildings, existing slopes and site drainage pattern, staging and spill prevention measures, erosion and sedimentation control measures and measures adopted for top soil preservation during construction

12.65.4 The contractor shall submit to the Engineer in Charge after construction of the buildings, a detailed as built quantification of the following:

a. Total materials used,
b. Total top soil stacked and total reused
c. Total earth excavated
d. Total waste generated,
e. Total waste reused,
f. Total water used,
g. Total electricity, and
h. Total diesel consumed.

12.65.5 The contractor shall submit to the Engineer in Charge, before the start of construction, a site plan along with a narrative to demarcate areas on site from which top soil has to be gathered, designate area where it will be stored, measures adopted for top soil preservation and indicate areas where it will be reapplied after construction is complete.

12.65.6 The contractor shall submit to the Engineer in Charge, a detailed narrative (not more than 250 words) on provision for safe drinking water and sanitation facility for construction workers and site personnel.

12.65.7. Provide supporting document from the manufacturer of the cement specifying the fly-ash content in PPC used in reinforced concrete.

12.65.8 Provide supporting document from the manufacturer of the pre-cast building blocks specifying the fly ash content of the blocks used in an infill wall system.

12.65.9 The contractor shall, at the end of construction of the buildings, submit to the Engineer in Charge, submit following information, for all material brought to site for construction purposes, including manufacturer's certifications, verifying information, and test data, where Specifications sections require data relating to environmental issues including but not limited to:

- Source of products: Supplier details and location of the supplier.

- Project Recyclability: Submit information to assist Owner and Contractor in recycling materials involved in shipping, handling, and delivery, and for temporary materials necessary for installation of products.
- Recycled Content: Submit information regarding product post industrial recycled and post consumer recycled content. Use the “Recycled Content Certification Form”, to be provided by the Commissioning Authority appointed for the Project.
- Product Recyclability: Submit information regarding product and product’s component’s recyclability including potential sources accepting recyclable materials where ever applicable.

12.65.10 Provide final certification of well-managed forest of origin to provide final documentation of certified sustainably harvested status: Acceptable wood “certified sustainably harvested” certifications shall include:

- Wood suppliers’ certificate issued by one of the Forest Stewardship Council- accredited certifying agencies;
- Suppliers’ invoice detailing the quantities of certified wood products for project;
- Letter from one of a certifying agency corroborating that the products on the wood supplier’s invoice originate from certified well-managed forests.

12.65.11 Clean tech: Provide pollution clearance certificates from all manufacturers of materials

12.65.12 Indoor Air quality and Environmental Issues: Submit emission test data, sourced from the manufacturers, produced by acceptable testing laboratory listed in Quality Assurance Article for materials as required in each specific Specification section.

- Certifications from manufacturers of Low VOC paints, adhesives, sealant and polishes used at this particular project site.
- Certification from manufacturers of composite wood products/agro fibre products on the absence of added urea formaldehyde resin in the products supplied to them to this particular site.
- Submit environmental and pollution clearance certificates for all diesel generators installed as part of this project.

Provide total support to Engineer in Charge and Green Building Consultants appointed by the Engineer- in- Charge in completing all Green Building Rating related formalities, including signing of forms, providing signed letters in the contractor’s letterhead whenever required.

12.66 Equipment:

12.66.1 To ensure energy efficiency during and post construction all pumps, motors and engines used during construction or installed, shall be subject to approval and as per the specifications of the Engineer in Charge.

12.66.2 All lighting installed by the contractor around the site and at the labour quarters during construction shall be CFL bulbs of the appropriate illumination levels. This condition is a must, unless specifically prescribed.

12.66.3 The contractor is expected to go through all other conditions of the LEED & GRIHA rating stipulation.

12.66.4 Failure to adhere to any of the above mentioned items, without approval of the Engineer in Charge, shall be deemed as a violation of contract and the contractor shall be held liable for penalty as per terms of the agreement.

13. CONDITIONS FOR READYMIX CONCRETE :-

13.1 The contractor can use concrete from RMC plants also with prior approval of the Engineer-in-charge, instead of preparing the same in central batching plant at site within agreement item of Batch Mix Plant without any extra cost, looking to expedite the progress and need of work. However for procuring RMC from approved plant the contractor shall follow the following conditions. Nothing extra shall be payable to the contractor for procuring RMC from the external plant.

13.2 For procurement of ready mix concrete from approved RMC plants, the contractor shall, within a 15 days of award of the work, submit list of at least three RMC plant companies of repute along with details of transit mixer and pumps etc. to be deployed indicating name of owner / company, its location capacity, technical establishment, past experience and text of MOU proposed to be entered between purchaser (the contractor) and supplier (RMC Plant). The Engineer – in – Charge shall give approval in writing(subject to draw of MOU). 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. 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.

13.3 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. Including the following controls.

13.3.1 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.

13.3.2 Calibration checks of the RMC.

13.3.3 Weight and quantity check on the ingredients, water and admixtures added for batch mixing.

13.3.4 Time of mixing of concrete.

13.3.5 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.

For exercising such control, the Engineer-in-charge (if required) shall periodically pute his authorized representative at the RMC plant. It shall be responsibility of the contractor to ensure that all-necessary requirement manpower & facilities are made available to Engineer-in-charge and / or his authorized representative at RMC plant.

13.4 The ready mix concrete should be produced in RMC plant using fully automatic batching plant having capacity to produce 30 cum/hr. The plant should have computerized control and shall give print out of all the ingredients.

13.5 All required relevant records of RMC shall be made available to the Engineer-in-charge or his authorized representative. Engineer-in-charge 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

13.6 43 grade OPC/ PPC as per schedule of the contract (conforming to relevant IS Codes) of brand / make / source as approved by Engineer-in-charge shall only be used for production of concrete.

13.7 The RMC produced concrete be accepted by Engineer-in-Charge at site after receipt of the same after fulfilling all the requirements of mix mentioned in the tender documents.

13.8 The item of design mix cement concrete shall be inclusive of all the ingredients including admixtures if required, labour, machinery, T&P etc. required for a design mix concrete of required strength and workability. The rate quoted by the agency shall be net & nothing extra shall be payable on account of change in quantities of concrete ingredients like cement and aggregates and admixtures etc. as per the approved mix design.

13.9 Ready mix concrete shall be arranged in quality as required at site of work by transportation in a transit mixer. [The general conditions of transit mixer and other requirement shall conform to IS:5892.] Ready mix concrete shall be supplied as per the pre-agreed schedule approved by Engineer-in-charge.

13.10 All other operations in concreting work like Mixing, Slump, transportation, laying/placing of concrete, compaction, curing etc. not mentioned in this particular specification for Design Mix Concrete shall be as per IS : 456-2000 or amended thereafter

13.11 For design mix concrete of RCC other than those specified above, the contractor shall use the Design mix concrete produced by a central batching and mixing plant at his own cost. The contractor, if he so desires, can arrange the design mix concrete also from Ready mix concrete producer after obtaining written approval of the Engineer-in-charge. Nothing extra whatsoever shall be payable on this account.

13.12 Ready mix concrete shall be arranged in quantity as required at site of work. The ready mix concrete shall be supplied as per the pre-agreed schedule approved by Engineer-in- charge. Nothing extra shall be payable on this account.

13.13 The item of design mix cement concrete (produced at site as well as arranged from RMC producer) shall be inclusive of all the ingredients including admixtures if required, labour, machinery, transportation etc. (except reinforcement and shuttering which will be measured & paid as per provision of contract) required for a design mix concrete of required strength and workability. The rate quoted by the agency shall be net & nothing extra shall be payable on account of changes in quantities of concrete ingredients like cement and aggregates and admixtures etc. as per approved mix design except for quantity of extra cement payable as per schedule of quantity. Other operations in concreting work like Mixing, Slump, transportation, laying / placing of concrete, compaction, curing etc. not mentioned in this particular specification for Design Mix of Concrete shall be as per IS : 456-2000.

14. Miscellaneous:

14.1 At curves & bends preparation of sub grade & laying of sub - base, base & wearing course of WBM shall be done in such a manner that change of camber to the required super elevation & increase of road width at curve is gradual.

14.2 If in the opinion of the Engineer in charge, it becomes necessary to save the earthen embankment or any other component of this work or adjoining work from damage due to accumulation of water resulting for rain, floods, springs, etc. the contractor shall have to make suitable arrangement to drain off accumulated water & nothing extra whatsoever shall be paid on this account.

14.3 Log book for recording the hours of daily work for each road roller arranged by the contractor will be maintained by the contractor or his authorized representative and will be attested by the Junior Engineer / Assistant Engineer in charge of the work daily. The attestation of the Junior Engineer / Assistant Engineer shall be final and binding on the contractor.

14.4 The issue rate of bitumen stipulated is inclusive of the cost of bitumen drums. Empty bitumen drums shall therefore be the property of contractor.

Road roller/Power road roller wherever stated shall mean three wheel power roller of 8 to 10 tonnes capacity.

15. PRE-CAST CONCRETE PAVEMENT AND DRAIN

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

15.2 Pre-cast reinforced concrete units shall be of grade or mix as specified. Provision shall be made in the mould to accommodate fixing devices such as hooks etc. and forming of notches and holes. Each unit shall be cast in one operation. A sample of the unit shall be got approved from Engineer-in-charge before taking up the work.

15.3 Pre-cast units shall be clearly marked to indicate the top of member and its location.

15.4 Pre-cast units shall be stored, transported and placed in position in such a manner that these are not damaged.

15.5 The compaction of the concrete shall be done by vibrating, table or external vibrator, as approved by Engineer-in-charge. The rate quoted for the item shall include the element for framework and mechanical vibration.

15.6 Rate for item includes cost of all materials. Labour and all operations involved. Cost of M.S. frames, lugs including their welding, lifting hooks are also included.

15.7 GSB & WMM Design mix for execution should be as per Morth & CPWD Specification (IRC 109 – 1997 & IRC 37 – 2018) to be submitted by agency before execution without any extra payment. The same will be approved by the Engineer-in-charge for execution within 3 days.

15.8 Cement Concrete Pavements shall be carried out as per section 302 of MORTH specification.

15.9 Sub bases and bases and shall be carried out the section 401,406, 408, 409, 410 as per MORTH specification

15.10 Site clearance work carried out as per the section 200 of MORTH specification & C PWD specifications.

15.11 Excavation for road way and drains as per the section of MORTH specification – 301 and E4mbankment construction for 305, 306, 308,311,312 of MORTH specification.

15.12 Precast concrete pavements shall be executed as per CPWD specifications and relevant IS codes and work shall be carried out as per approved pattern and texture all as per the direction of Engineer-in-charge.

15.13 Joint filling with fast-setting grout of M60 grade of approved makes.

15.14 Provision of joint sealing as per relevant IS codes and PWD specifications.

15.15 Traffic signs, marking and other road appurtenances provided at regular intervals as per the section 800 of MORTH specification.

15.16 Dry lean cement concrete sub-base is considered as per the section of 601 MORTH specifications.

16. DE-WATERING

(i) 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.

ii) 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.

SPECIFIC SPECIAL CONDITIONS

Disclaimer

Where any portion of the General Conditions of Contract is repugnant to or at variance with any provisions of the Special Conditions, the provisions of the Special Conditions shall be deemed to over-ride the provisions of the General Conditions of Contract and shall be to the extent of such repugnancy of variations, prevail.

1) The Contractor / firm shall make arrangements for site for labours / materials at his own risk and cost.

2) Piling shall be carried out using pile boring machine (drilling type) without causing damage to adjacent structure.

3) Necessary traffic diversion arrangements shall be carried out by the Contractor / firm at their cost.

4) The contractor should ensure uninterrupted flow in the channel during the entire work execution period.

5) The Clause 25 of GCC (ARBITRATION CLAUSE) is not applicable.

6) Insurance policy Clause:

"Before commencing the execution of work, the contractor shall, without in anyway limiting his obligations and liabilities, insure at his own cost and expense against any damage or loss or injury, which may be caused to any person or property, at site of work. The contractor shall obtain and submits to the Engineer-in-Charge proper contractor All Risk Insurance Policy for an amount equivalent to contract value for this work, with Engineer-in- Charge as the first beneficiary. The insurance shall be obtained in joint names of Engineer-in-Charge and the Contractor (who shall be second beneficiary). Also, he shall indemnify the department from any liability during the execution of the work.

Further, he shall obtain and submit to the Engineer-in- Charge, a third party insurance policy for maximum Rs.10 lakh for each accident, with the Engineer-in-Charge as the first beneficiary.

The insurance shall be obtained in joint name of Engineer-in-Charge and the Contractor (who shall be second beneficiary). The contractor shall, from time to time, provide documentary evidence as regards payment of premium for all the Insurance Policies for keeping them valid till the

completion of the work. The contractor shall ensure that insurance Policies are also taken for the workers of his Sub- contractors/specialized agencies also. Without prejudice to any of its obligations and responsibilities specified above, the contractor shall within 10 days from the date of letter of acceptance of the bid and thereafter at the end of each quarter submit a report to the department giving details of the Insurance Policies along with certificate of these insurance policies being valid, along with documentary evidences as required by the Engineer-in-Charge. No work shall be commenced by the contractor unless he obtains the Insurance Policies as mentioned above. Also, no payment shall be made to the Contractor on expiry of insurance policies unless renewed by the contractor. Nothing extra shall be payable on this account. No claim of hindrance (or any other claim) shall be entertained from the contractor on these accounts."

7. EXISTING SERVICES

7.1 Drains, pipes, cables, overhead-wires and similar services encountered in the course of the work shall be guarded from injury by the contractor at his own cost so that may continue in full and uninterrupted use to the satisfaction of the owners thereof or otherwise occupy any part of the site in a manner likely to hinder the operation of such services.

7.2 Should any damage be done by the contractor to any mains pipes, cables or lines (whether above or below ground), whether or not & shown on the drawings, the contractor must make good or bear the cost of making good the same without delay to the satisfaction of the Engineer-in-Charge.

8. 10C is applicable in contract when the stipulated period of completion is less than 12 months.

9. 10CC is applicable in contract when the stipulated period of completion is more than 12 months (No increase in material upto 12 months is allowed)

10. 10CA is deleted in latest NIT

11. No claim for idle establishment and labour, machinery and equipment's, tools and plants and the like, for any reason whatsoever, shall be admissible during the execution of the work as well as after its completion.

12. A simple interest @ 5% per annum shall be paid as per Clause 7 of GCC to the contractor from the date of expiry of prescribed time limit for the delay in payment of part bills instead of 7.5% provided in the Clause 7 of the existing NIT.

13. All basic items are covered in the NIT.

GENERAL CONDITIONS

(1) The work should be carried out in accordance with CPWD Specification for Works 2019 with correction slips issued from time to time. If the said specifications differ from those given in the description of any particular item in the schedule of quantities and specifications stipulated herein, the latter shall prevail.

(2) If the detailed description of any particular item in the schedule of quantities and specifications finally accepted by the Oulgaret Municipality differs from the particular specifications given hereunder, the former shall prevail to the extent applicable.

(3) If the particular specification given hereunder differs from I.S. code provisions, in any respect, the former shall prevail.

(4) Wherever any reference to any Indian standard specification occurs in the documents relating to this contract the same should be inclusive of all amendments issued thereto or revision thereof if any, upto the date of receipt of tenders.

(5) Conditions involving any financial implications other than those covered in the schedule of quantities will not be entertained and such tenders are also liable to be rejected.

(6) When working near existing structures, care shall be taken to avoid any damage to such structures, any such damage caused intentionally or unintentionally shall be restored to original and or acceptable condition and to the satisfaction of the Engineer-in-charge.

(7) The contractor shall given to the Municipality, Police and other authorities all notices etc., that may be required to be given as per law and obtain all requisite licenses for temporary obstructions, enclosures and pay all fees, taxes and charges which may be leviable on account of the operations during the execution of the contract. No extra claim of the contractor will be entertained by the department on this account.

(8) Other agencies doing works related to this project may also simultaneously execute the works and the contractor shall co-ordinate and co-operate with them as found to be necessary at no extra cost.

(9) Any cement slurry or lime mortar or any combination thereof or water proofing material required for continuation from old work is demand to have been in built in the relevant items themselves and nothing extra shall be paid for the same.

(10) The rate 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 as rains, flood, and subsoil water table being high due to any other cause whatsoever.

11. The contractor should register/enroll on ‘Call Before U Dig’(CBuD) Mobile App. Activated by the Department of Telecommunications (DoT) and do the digging only after prior intimation through ‘Call Before U Dig’ (CBuD) Mobile App. and as per its terms and conditions.

12. MATERIALS OBTAINED FROM DISMANTLEMENT

12.1. The contractors, in course of their work, should understand that all materials (e.g. stone and the other materials) obtained in the work of dismantling, excavation etc. will be considered Oulgaret Municpality property and issued to the contractor (if they require the same for their own use) at rates approved by Government. If these materials are not required by them, they will dispose of to the best advantage of Government.

13. WATER SUPPLY AND SANITARY WORK

13.1 . The contractor shall engage licensed plumber for the work and get the materials tested by the Oulgaret Municipality authorities whenever required at their own cost. The work shall be carried out according to the Oulgaret Municipality Bye-laws and the contractor shall produce necessary certificate from Oulgaret Municipality authorities after completion of work.

13.2 The contractor shall have to deposit water proofing compound as per the actual requirements for the water proofing job with the Engineer-in-charge at his Oulgaret Municipal Stores at the site of work.

13.3 The water proofing compound will be issued to the contractor from time to time according to his requirements for the work in the same manner as the issue of the materials stipulated to be issued Oulgaret Municipality.

14. INCONVENIENCE TO PUBLIC

14.1 The contractor shall not deposit materials on any site, which will seriously inconvenience the public. The Engineer-in-charge may require the contractor to remove any materials, which are considered by him to be a danger or inconvenience to the public or cause them to be removed at the contractor's cost.

14.2 Any damage to work resulting from rains or from any other cause until the work is taken over by the Oulgaret Municipality after completion will be made good by the contractor at his own cost.

14.3 The contractor shall deposit royalty and obtain necessary permit for supply of sand, HBG metal, red earth, etc. from local authorities.

14.4 The contractor shall get himself acquainted with the nature and extent of the work and satisfy himself about the availability of quarry and of kiln for collection and conveyance of materials required for the construction. The contractor's quoted rate should take into account all these factors and will not be allowed for extra lead for collection and conveyance of materials for any reason whatsoever.

14.5. The contractor will be permitted to set up labour camp only before a week from the commencement of work and not exceeding fifteen days after the completion of the work.

14.6 The contractor shall conform to the provision of any Oulgaret Municipal Acts which relate to works and to the regulations and bye-laws of any local authorities. The contractors shall give all notices required by the said acts or laws etc., pay all fees payable to such authorities and allow for these contingencies in his tendered rates including fees for encroachments, costs of restoration etc., and all other fees payable to the local authorities.

14.7. Where surplus earth of a suitable quality exists at the site of work, the contractor shall be allowed to use same free of cost making mud mortar for masonry and for laying mud terracing over the roof. The Engineer-in-charge shall be the final authority to decide whether the earth obtained from excavation is surplus or not.

14.8 The surplus earth excavated which is beyond the requirement of Oulgaret Municipality works, may be allowed by the Executive Engineer to be disposed of by the contractor on his own or to sell the surplus earth to private parties at his discretion, but nothing extra will be paid for carriage or disposal of the surplus earth, if the same is not required for Municipal works.

14.9 The debris should be removed from the site on day to day basis without affecting the public in general.

14.10 The mixing of concrete should be done at a separate site avoiding stacking of material at road side.

14.11 Wherever fine sand has been mentioned in the schedule of quantities, it should be conforming to the grading Zone-IV or Zone-V as mentioned in the C.P.W.D. specifications.

14.12 Concrete will be mixed with mixers either operated by hand or mechanical.

14.13 The contractor shall not employ women and men below the age of 18 on the work of painting with products lead, in any form wherever men above the age of 18 are employed on the work of lead painting, the following principles must be observed for such use:

a) White lead sulphate or lead, of products containing these pigments shall not be in painting operation except in the form of paste or of paint ready for use.

b) Measure shall be taken in order to prevent danger arising from application of paint in the form of spray.

c) Measure shall be taken wherever practicable against danger arising from dust caused by dry rubbing down and scraping.

d) Adequate facilities shall be provided to enable working painters to wash during and on cessation of work.

e) Overalls shall be worn by working painters during whole of the working period.

f) Suitable arrangements shall be made to prevent clothing put off during working hours being soiled by painting materials.

g) Cases of lead poisoning and suspected lead poisoning shall be subsequently verified by a medical team appointed by the competent authority.

h) The Oulgaret Municipality may require when necessary medical examination of workers.

i) Instructions with regard to the special hygienic precautions to be taken in the painting trade shall be distributed to working painter.

15. The rate for all items of works shall unless clearly specified otherwise include cost of all labour, materials and others inputs involved in the execution of item.

16. a) For the purpose of recording measurements and preparing running account bill the abbreviated nomenclature enclosed with the standard form shall be adopted .The abbreviated nomenclature shall be taken to cover all the materials and operations as per the complete nomenclature of the relevant items in the agreement and other relevant specifications.

    b) In case of extra and substituted items of work for which abbreviated nomenclature is not provided in the agreements, the full nomenclature of items shall be reproduced in the measurement books and bill forms for running account bills.

17. For all doors and windows whether factory made or otherwise, cleats and rubber buffers 30mm dia. shall be provided as directed by the Engineer-in-charge and the rate for the shutter item shall include the cost of providing such wooden cleats and buffers.

18. For those doors where hydraulic door closer is provided only wooden cleats need not be provided and no reduction in rate shall be made for the same.

19. The particle board shutter shall be provided, with teak wood lipping (beading) at the edge to which hinges are fixed, without any extra cost.

20. For works where items of aluminium doors, windows etc., are specified, the grade of anodic coating to be provided in accordance with table I of IS: 1868-1968 together with reference to IS: 5523-1969.

21 Where hydrated lime is available, this can be used on the works and the places where hydrated lime is not available, lime concrete will be prepared by the traditional method of slaking the lime preparing the lime putty etc.

22. (a) Tendered rates are inclusive of all taxes and levies payable under the respective status. However pursuant to the constitution (46th Amendment) Act 1982, if any further tax or levy is imposed by the statute after the date of receipt of tenders and the contractor thereupon necessarily and properly pays such taxes/levies, the contractors shall be reimbursed the amount so paid provided such payment, if, any, is not, in the opinion of the Engineer-in-Charge (whose decision shall be final and binding) attributable to delay in execution of work within the control of the contractor.

(b) The contractor shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary and shall allow inspection of the same by a duly authorized representative of Oulgaret Municipality and further shall furnish such other information/document as the Engineer-in-Charge may require.

(c) The contractor shall within a period of 30 days of imposition of any further tax or levy pursuant to the Constitution (46th Amendment) Act, 1982 give a written notice thereof to the Engineer-in-Charge pursuant to this condition, together with all necessary information relating therein.

23 While execution of the work, the contractor shall organise his work in such a way that the normal functioning of the premises is not disturbed.

24 Any damage done to the existing structure while dismantling execution of the work shall be made good by the contractor at claim shall be made good by the contractor at his own cost and no extra claim shall be entertained on this account.

25. The contractor must see the site before participating the tender and his viability for executing the work.

26. The item of Anti-termite treatment shall be executed through a specialized firm.

27. Rates should also be quoted inclusive of testing charges of all construction materials both at laboratory and in the field. No payment will be made for material testing.

28. The contractor should arrange for shifting of construction materials / concrete etc., near to the work site at his own cost. No extra rate shall be considered for shifting of materials etc.

29. For construction of Buildings /drains/canals/channels/bridges and culverts etc., rates should be quoted inclusive of de-watering and pumping out any type of water encountered during execution. No separate claim/ cost (like Extra/Substituted/Deviated items) will be admitted towards the dewatering etc. or any form of claim at any stage during the execution of work. No extra claim will be admitted for working under foul condition encountered during execution.

30. The Contractors themselves have to identify the place of disposal of un-serviceable materials like debris, waste mud, etc arises in the site. No extra lead and lift shall be considered for such disposal.

31. The Contractor must do their own arrangements at their own cost for signage/barricading etc. for the safety of Public during construction in the construction site of building/road/drain/canal/bridge/culverts etc. No separate claim will be admitted in this regard.

32. The contractor shall make his own arrangements to provide the bitumen required for the work from approved public sector, refineries such as IOC, BP, HPL etc., and produce the paid voucher to the Engineer-in-Charge. The materials so procured shall be got tested before use.

33. Necessary test certificates should be produced from the approved laboratory for the quality of materials.

34. Defective materials will be rejected and the same have to be replaced by the contractor at his own cost.

35. Original purchase vouchers should be produced at the time of receipt of materials and at the time of verification by the Engineer-in-Charge. The name of contractor, name of work and agreement number should be clearly noted in the original vouchers.

36. The test specimens shall be provided at free of cost by the contractor.

37. The test for cement has to be conducted for every 1000 bags or part. The test for steel has to be conducted for every consignment of 20 tonne or part thereof for each size/dia.

38. Payment for the item of laying Semi Dense Bituminous Concrete shall be made after conducting the density / compaction measurement test and also the surface roughness measured with Bump Integrator, by the Highways Research Station, Chennai and ensuring that

    a) In respect of density /compaction, the test result conforms to the density prescribed in the mix design and,

    b) In respect of surface roughness measured with Bump Integrator the result shall conform to the values prescribed in Table – 3 of IRC – SP-16-200439.

39. The Puducherry Schedule of Rates Abbreviated Nomenclature for buildings and road works shall be adopted in recording of measurements and preparation of running accounts bills, etc., wherever applicable as per CPWD Works Manual 2022.

40. The work executed shall be measured as per metric dimensions given in the schedule of quantities. The FPS units wherever indicated in the drawings are for guidance only.
41. Unless otherwise specified, all the rates quoted by the contractor shall be for items of work at all levels and heights of the building.
42. The work shall be executed as per the C.P.W.D. specifications 2019 (with correction slips and subsequent publications). In case of discrepancies between the specifications of a particular item as indicated in the C.P.W.D. specifications mentioned above and as indicated in the nomenclature of the item the latter shall prevail.
43. All stone aggregate, sand etc., shall be obtained only from approved quarries. All the materials shall be got approved by the Engineer-in-Charge before they are actually procured and used at site.
44. The grading of sand to be used for mortars and concrete shall be determined at the site of work by the Engineer-in-Charge and sand conforming to these gradings only shall be used on the work.
45. Necessary washing, screening, etc., of metal and sand shall be done at site as per requirements of the Engineer-in-Charge.
46. Bricks shall have crushing strength of class designation.
47. The work of water supply and internal sanitary installations and drainage shall be carried out as per bye-laws of the local Municipal body.
48. All manufactured materials used in the work shall have ISI/BIS mark. In case of materials for which no manufacturer has been licensed to manufacture the materials with ISI marking, the materials shall conform to the provisions of C.P.W.D./MORTH/IRC/CPHEEO specifications or the ISI code (in the absence of C.P.W.D. specifications or other specification mentioned above for any particular material). In the case of all materials, tests shall be conducted to ensure that they conform to the specifications of codes mentioned above.
49. All materials, which are to be tested before use on the work should be procured at least 2 months before use on the work so that enough time is available for testing them before they are actually used.
50. The cost of samples and all other incidental charges such as packing, transportation to the laboratory etc., shall be borne by the contractor.
51. The architectural drawings Nos. based on which the work is to be executed are available with the Engineer-in-Charge and can be inspected by the prospective tenderers up to the date of submission of tenders at his office during working hours.

    Use and testing of all the manufactured materials used in the work shall be regulated as per specifications 2019.

52. Before receiving final payment for the work, contractor shall give an undertaking to the effect that at his own cost he will rectify the defects in walls, roof like leakage, cracks etc. Which may come to light during the first monsoon after the completion of work and for this purpose part of the security deposit which may be deemed reasonable by the Engineer-in-Charge shall be retained till the first monsoon is over as security against the contractor's failure to act upon the undertaking. This undertaking and consequent retention of part of the security deposit shall not invalidate the contract.

53. The top surface of the RCC roof slab shall be screeded to be uniform when the concrete is green, so as to have a proper bond with the roof treatment. Nothing extra shall be paid on this account.

54. For aluminium doors, fixed glazing, fixed windows, sliding windows, louvered type ventilators and partitions etc. all aluminium sections shall be to the required size, thickness and weight as shown in the relevant Architect's Drawings.

55. In case, if any descriptions are missing in the scope of work or specifications in the bidding documents, it shall be executed as given in the CPWD Specifications, relevant IS Codes of latest edition and CPHEEO Manual or according to Good Engineering Practices so as to complete the work fully. No claim whatsoever maybe entertained at later stage.

SPECIAL CONDITIONS APPLICABLE FOR

ROAD WORKS/ BRIDGE WORKS / SCHEME / NABARD WORKS

(1) Construction Equipment:

1.1 The methodology and equipment to be used on the project shall be furnished by the Contractor to the Engineer well in advance of commencement of work and approval of the Engineer obtained prior to its adoption and use.

1.2 The Contractor shall give a trial run of the equipment for establishing its capability to achieve the laid down specification and tolerance to the satisfaction of the Engineer before commencement of work, if so desired by the Engineer.

1.3 All equipment provided shall be proven efficiency and shall be operated and maintained at all times in a manner acceptable to the Engineer.

1.4 No equipment or personnel will be removed from site without permission of the Engineer.

(2) Work Program and Methodology of Construction:

2.1 The Contractor shall furnish his program of construction for execution of the work within the stipulated time schedule together with methodology of construction each item of work and obtain the approval of the engineer prior to actual commencement of work.

(3) Revised Programme of Work in case of Slippage:

In case of slippage from the approved work programme at any stage, the Contractor shall furnish revised programme to make up the slippage within the stipulated time schedule and obtain the approval of the Engineer to the revised programme.

(4) Action in case of Disproportionate Progress:

In case of extremely poor progress of the work or any item at any stage of work which in the opinion or the Engineer cannot be made good by the Contractor considering his available resources, the Engineer will get it accelerated to make up the lost time through any other agency and recover the additional cost incurred, if any, in getting the work done from the Contractor after informing him in writing about the action envisaged by him.

(5) Setting out:

Setting out the work as spelt out in clause 109 of Ministry's Specifications for Road and Bridge Works 5th Revision will be carried out by the Contractor.

(6) Public Utilities:

Action respect of public utilities will be taken by the contractor as envisaged in Clause 110 of Ministry's Specifications for Road and Bridge Works 5th Revision.

(7) Arrangement for traffic during construction :

Action for arrangement for traffic during construction will be taken by the contractor as envisaged in the contract documents and spelt out in clause 112 of Ministry's Specifications for Road and Bridge Works 5th Revision.

(8) Quality Control :

The onus of achieving quality of work will be on the contractor who will take action as stipulated in the Ministry's for Road and Bridge Works 5th Revision.

(9) Ministry's specification for Road and Bridge Works (5th Revision):

Ministry's specification for Road and Bridge Works 5th Revision will form part of the contract documents and the contractor will be legally bound to the various stipulations made therein unless and otherwise specifically relaxed or waived wholly or partly through a special clause in the contract document.

(10) Documentation:

The Contractor will prepare drawing (s) of the work as constructed and will supply original with three copies to the Engineer who will verify and certify these drawings. Final as constructed drawing(s) shall then be prepared by the Contractor and supplied in triplicate along with a micro film of the same to the Engineer for record and reference purposes.

(11) The contractor shall make his own arrangement to provide the bitumen required for the work from approved public sector, refineries such as IOC, BP, HPL, etc. and produce the paid voucher to the Engineer-in-charge. The materials so procured shall be got tested before use.

(12) The use of rubber modified bitumen shall be as per the guide lines of "IRC SP 53-99"

(13) The Contractor shall use "Hydrostatic paver with sensor control" for this work.

(14) The Pile shall be terminated at a depth as per the direction of Engineer-in- charge.

(15) The payment for the quantity of Road Work such as Bituminous Macadam (BM/DBM), Bituminous Concrete / Semi Dense Bituminous Concrete, Wearing Course shall be made based on the physical measurement of finished work in position in cum. or sqm. at a specified thickness or based on level measurements, whichever is less.

16)(a) The Defect Liability Period (DLP) for the structural works and structure involved road works of Minor bridge, Major bridge, Culvert, Retaining wall, Drain works and works like Formation / Strengthening / Improvements of road including metalling and black topping, (NABARD WORKS) shall be **1 year (One Year)** after the completion of the work. Contractor shall be responsible to make good and remedy at his own cost any defect which may develop or may be noticed and intimation of which has been sent to the

contractor by a Notice being issued by the Engineer-in-charge during the Defect Liability Period, sent by hand delivery or by registered post or by email, within the time specified in the said notice.

(b) During the Defect Liability Period of **1 year (One year)**, the contractor is fully responsible for any loss or expenditure incurred to rectify any defect noticed due to faulty workmanship by the contractor or substandard materials used by the contractor shall be repaired / restored at the cost of the contractor within the time specified in the Notice being issued by the Engineer-in-charge. If the contractor fails to comply with the notice, the Engineer-in-charge the right to carry out the repairs / restoration by employing other agencies and any expenditure incurred to rectify / restore, shall be set off from the deposit and / or any money due to the contractor.

(c) In the event of the contractor failing to rectify the defect or damages within the period specified by the Engineer-in-charge, in his notice aforesaid, the Engineer- in-charge may rectify or remove and re-execute the work and / or remove and replace with other materials or articles complained of, as the case may be, by or other means at the risk and cost of the contractor and the same will be reflected in the performance rating of the contractor.

(d) After completion of main work, necessary certificates shall be issued with necessary photographic evidences for Defect Liability Period as per Annexure-A for every Half year by the Engineer-in-charge, after verification at work site, after obtaining necessary approval of the concerned Superintending Engineer.

(e) After obtaining approval of the concerned Superintending Engineer, the Security Deposit available with the Department may be refunded year wise proportionately at the rate of 50% and 50% of security Deposit amount respectively.

1	1st Half year	Certificate for DLP
2	2nd Half year	Certificate for DLP
3	3rd Half year	Certificate for DLP
4	4th Half year	Certificate for DLP
5	5th Half year	Certificate for DLP
6	6th Half year	Certificate for DLP

CERTIFICATE

NIL DEFECTS CERTIFICATE SHOULD BE FROM THE EXECUTIVE ENGINEER

ANNEXURE – A

CERTIFICATE TO BE FURNISHED DURING THE DEFECT LIABILITY PERIOD

Name of work :

Half Year :

It is certified that NIL defects found in the work in the..... half year as on this day of……

EXECUTIVE ENGINEER
OULGARET MUNICIPALITY

GUARANTEE TO BE EXECUTED BY CONTRACTORS FOR REMOVAL OFDEFECTSAFTER COMPLETION IN RESPECT OF CONCRETE PAVERS/ REPAIRS FOR CONCRETE PAVERS

The Agreement made this……day of ……..Two thousand and …….. between ……son of.....of hereinafter called the Guarantor of the one part) and the Oulgaret Municipal Council (hereinafter called Municipal Council of the other part).

WHEREAS THIS agreement is supplementary to a contract (hereinafter called the contract) dated ……and made between the GUARANTOR OF THE ONE part and the Municipal Council of the other part, whereby the Contractor, inter alia, undertook to render the buildings and structures in the said contract recited completely. AND WHEREAS GUARANTOR agreed to give a guarantee to the effect that the said the part of structures will remain intact for THREE years from the date of completion of repair / retrofitting to PRECAST RCC ELEMENT (ROAD PAVEMENT AND DRAIN).

NOW THE GUARANTOR hereby guarantees that repairs/ retrofitting given by him will render the structures completely leak-proof and the minimum life of such retrofitting/ repair to Precast RCC Element (Road Pavement and Drain) works shall be three years to be reckoned from the date after the maintenance period prescribed in the contract. Provided that the guarantor will not be responsible for damages caused by earthquake or structural defects or misuse of roof or alteration and for such purpose: The decision of the Engineer-in-charge with regard to damages shall be final. During this period of guarantee the guarantor shall make good all defects and in case of any defect being found render the building to the satisfaction of the Engineer-in-charge at his cost and shall commence the work for such rectification within seven days from the date of issue of the notice from the Engineer-in-charge calling upon him to rectify the defects failing which the work shall be got done by the Department by some other contractor at the GUARANTOR ‘S cost and risk. The decision of the Engineer-in-charge as to the cost, payable by the guarantor shall be final and binding. That if Guarantor fails to execute the repair and rehabilitation or commits breach there under then the Guarantor will indemnify the Principal and his successors against all loss, damage, cost, expense or otherwise which may be incurred by him by reason of any default on the part of the GUARANTOR in performance and observance of this supplementary agreement. As to the amount of loss and / or damage and / or cost incurred by the Municipal Council the decision of the Engineer-in-charge will be final and binding on the parties.

IN WITNESS W H E R E O F these present have been executed by the Obligor ……..and by..... and for and on behalf of the Oulgaret Municipal Council on the day, month and year first above written.

SIGNED, SEALED and delivered by OBLIGOR in the presence of –1.

2.

SIGNED for and on behalf of Oulgaret Municipal Council by …….. in the presence of-

LIST OF APPROVED MATERIALS
PREFERRED MAKE OF MATERIALS (FOR CIVIL WORKS)

Unless otherwise specified, the brand / make of the material as specified in the item nomenclature, in the particular specifications and in the list of preferred make attached in the tender, shall be used in the work. In case of non-availability of the brand specified in the contract the contractor shall be allowed to use alternate equivalent brand of the material subject to submission of documentary evidence of non- availability of the specified brand and prior approval of Engineer- in-Charge.

Sample/Make of all the materials will be used only after approval of the Engineer- in- Charge

	LIST OF APPROVED MATERIALS		
SL. NO.	MATERIAL DESCRIPTION	MATERIAL	
		BRAND	MAKE
1	Chloropyriphos	PIRAMID	AMVAC AGRI RASAYAN PVT. LTD.
		NOBAN	CHEMTTS WETS & FLOWS PVT LTD.
		DURSBANTCT	DE-NOCIL LTD.
		PREMISE AGENDA	BAYER LTD.
		HILBAN	HINDUSTAN INSECTICIDES LTD.
		SARUPS PEST CONTROL	SARUPS PEST CONTROL LTD.
2	43 Grade ordinary Portland Cement / Portland Pozzolana Cement / Slag Cement (strikeout the cement not required)	ACC	ACC CEMENTS LTD.
		ULTRA TECH	ULTRA TECH CEMENT LTD.
		COROMANDAL	INDIA CEMENTS LTD.
		BIRLA	BIRLA CORPORATION LTD.
		CHETTINADU	CHETTINADU CEMENTS CORPORATION LTD.
		BHARATHI	BHARATHI CEMENT CORPORATION LTD.
		DALMIA	DALMIA CEMENT BHARAT LTD.
		ZUARI	ZUARI CEMENT LTD.
		JAYPAEE CEMENT	JAYPEE CEMENT LTD.
		MAHA CEMENT	MY HOME INDUSTRIESPVT. LTD
		J.K. CEMENT	J.K. CEMENT PVT. LTD
		AMBUJA CEMENT	AMBUJA CEMENTS LTD
		PENNA CEMENT	PENNA CEMENTINDUSTRIES LTD
		KONARK CEMENT	KONARK CEMENT
		CENTURY CEMENT	BIRLA GOLD CEMENT
		SHREE CEMENT	SHREE CEMENT

		RAMCO CEMENT	RAMCO CEMENTS LTD
		SAGAR CEMENT	SAGAR CEMENTS LTD
		EMAMI CEMENT	EMAMI CEMENTS LTD
3	Damp Proof Material	MAPEI	MAPEI CONSTRUCTIONS PRODUCTS INDIA P LTD
		FERROUS CRETE	FERROUS CRETE (INDIA) PVT.LTD
		IMPERMO	SNOWCEM PAINTS
		DURASEAL	APURVA INDIA PVT LTD
		ACCO PROOF	ACC CEMENTS 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.
		ASIAN PAINTS SMARTCARE DAMPROOF	ASIAN PAINTS LTD
		WEATHER COAT ROOFGUARD	BERGER PAINTS
		POLYTANCRETEIWI	SUNANDA SPECIALITY COATINGS PVT LTD.
		WALLSHIELD 2K	BERGER PAINTS
4	TMT Bars Fe-500 D PWD circular No.2735/PW/CE/EE(P)-I/F.No.Tech.Cr/2025-26, dt.30/09/2025	SAIL	STEEL AUTHORITY OF INDIA LTD.
		TISCO	TATA STEEL LTD.
		VIZAG	RASTRIYA ISPAT NIGAM LTD.
		JSW	JSW STEEL LTD.
		JINDAL	JINDAL STEEL & POWER LIMITED
		Shyam steel	M/s. Shyam steel Industries Ltd.,
5	Plasticiser & Super Plasticiser	CONTRAMENT, POWER FLOW	MC BAUCHEMIE (INDIA) PVT LTD.
		SUNANDA CHEMICALS	SUNANDA CHEMICALSLTD
		MYK SCHOMBURG	MYK ARMENTS RANGE OF PRODUCTS
		PLASTIMENT, SIKAMENT	SIKA INDIA PVT LTD.

		CONPLAST SP430	FOSROC INDIA
		CHRYSO - HP / DELTA / OPTIMA	CHRYSO INDIA PVT LTD
		BASF	BASF INDIA LTD.
		CICO	CICO INDUSTRIES
		SMART CARE TECHNO PLAST /SMART CARE MAXIMO PLAST	ASIAN PAINTS LTD
		ENDURA	H.R. JHONSONS.
6	Expansion Joint Bitumen Board	DURA BOARD HD 100	SUPREME INDUSTRIES
		STP	SHALIMAR TAR PRODUCTS
		DURAFILL	SUPREME INDUSTRIES
7	Post Tensioning System	CRUX	CRUX PROCESSING SYSTEMS PVT LTD
		VSL	VSL INDIA LTD
		ULTRACON	ULTRACON STRUCTURAL SYSTEMS PVT LTD
		BBR	BBR (INDIA) PVT LTD.
8	PT Strands	DP WIRES	DP WIRES LTD.
		TATA WIRON	TATA STEEL LTD.
		USHA MARTIN	USHA MARTIN LTD
9	Adhesive	DUNLOP	INDIA TYRES & RUBBERCO (INDIA) LTD.
		VAMORGANIC	VAMORGANIC LTD.
		SIKA	SIKA INDIA PVT LTD.
		FEVICOL	PIDILITE INDUSTRIES
		CICO	CICO INDUSTRIES
		PROOFEX OF ADHESIVE	FOSROC INDIA LTD.
		KERABOND PLUS	MAPEI CONSTRUCTION PRODUCTS INDIA P LTD.
		ASIAN PAINTS	ASIAN PAINTS 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	KEROKOLL INDIA PVT LTD.
		DR.FIXIT	PIDILITE INDUSTRIES
		KERAPOXY	MAPEI CONSTRUCTION PRODUCTS INDIA P LTD.
		WEBER	SAINT GOBIN INDIA PVT LTD.
		TEEMAX GROUT-TP-1	M/S TEEMAGE BUILDERS (P) LTD
11	Ready Mix Concrete	ULTRATECH	ULTRATECH CONCRETE
		ACC	ACC LTD
		RMC(INDIA)	RMC (INDIA) PVT. LTD
		LAFARGE	LAFARGE INDIA PVT. LTD
12	AAC Blocks	XTRALITE	ULTRA TECH CONCRETE LTD.
		AREOCON	HIL
		SIPOREX	SIPOREX
		NUCON	GREEN WAY BUILDING MATERIALS INDIA PVT.LTD
		NCL	NCL VEKA LTD.
		RENACON	RENAATUS PROCON PVT LTD.
13	Wooden Flush Door Shutters	JAYNA FLUSH DOORS	JAIN WOOD INDUSTRIES
		RAAVELLA DOOR	RAAVELLA INDUSTRIALS (P) LTD
		KAILASH	KAILASH HITECH TIMBER INDUSTRIES PVT.LTD
		INDIAN TIMBER PRODUCTS	INDIAN TIMBERPRODUCTS
		SHAKTHI	SHREE SHAKTHI MODERN FLUSH DOORS
		GREENLAM	GREENLAMLY INDUSTRIES LTD.
		MAYUR	MAYUR PLY INDUSTRIES
		MP PLYWOOD PRODUCTS	MP WOOD PRODUCTS
		KITPLY	KITPLY INDUSTRIES LTD.
		DURO FLUSHDOORS	DURO PLY INDUSTRIESLTD.
		KENWOOD	KENWOOD PLY & BOARD
		CENTURY	CENTURY FLUSH DOORS
		DEC	DEC I & P INDIA PVT LTD.
		JAIN DOORS	JAIN DOOR PVT LTD
		A-1 TEAK PRODUCTS	A-1TEAK PRODUCTS PVT LTD

14	Water Proof Ply wood Commercial Ply, Fire Retardant Ply and Block board	JAYNA PLY	JAIN WOOD INDUSTRIES
		GREENPLY	GREENPLY INDUSTRIES LTD
		KITPLY	KITPLY INDUSTRIES LTD.
		DUROPLY	DURO PLY INDUSTRIES LTD
		ARCHIDPLY	ARCHID PLY INDUSTRIES LTD
		CENTURY PLY	CENTURY FLUSH DOORS
		WUUDPLY	M/S.PRIME VENEERS LTD
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 TOUCHELAMINATES
		KITMICA	KITPLY INDUSTRIES LTD.
		SUNMICA	SUNMICA INDUSTRIES
		VIDYA PLY	VIDYA PLY & BOARD PVT LTD.
		FORMICA	FORMICALAMINATES(INDIA) PVT LTD.
		DECOLAM	DECOLAM INDIA PVT.LTD
16	Prelaminated Particle board Exterior Grade	MERINO	MARINO LAMINATES
		KITLAM	KIT PLY INDUSTRIES LTD.
		TESA ACTION Co.	TESA ACTION Co.
		ECOBOARD	ECOBOARD INDUSTRIES LTD
		ASSOCIATE	ASSOCIATE DÉCOR LIMITED
		ARCHID PLY	ARCHID PLY INDUSTRIES LTD.
		CENTUARY	CENTUARY MDF
		GREEN LAM	GREENLAMINDUSTRIESLTD
17	High Density (HDF) Prelaminated Board	PERGO	RED FLOOR INDIA
		GREEN PLY	GREEN PLY INDUSTRIES LTD.
18	Gypsum Board	GYPROC SAINT GOBIAN	SAINT GOBINGYPROCK INDIA LTD.
		LAFARGE	LAFARGE INDIA PVT. LTD
		USG BORAL BOARD	USG BOARD INDIAPVT.LTD
		ARMSTRONG	ARMSTRONG WORLD INDUSTRIES

19	Glass Door Hardware	DORMA	DORMAKABA INDIA PVT LTD
		KICH	KICH ARCHITECTURAL PRODUCTS LTD.
		CLASSIC	CLASSIC HARDWARE
		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	DORMAKABA INDIA PVT LTD
		EVERITE	EVERITE AGENCIES
		DORSET	DORSET INDUSTRIES PVT LTD
		GEZE	GEZE GMBH
21	Locks & Latches	DORSET	DORSET INDUSTRIES PVT LTD
		GODREJ	GODREJLOCKINGSOLUTION & SYSTEMS
		HITECH	GLOBE LOCKS INDIA
		HAFELE	HAFELE INDIA PVT LTD
		HARRISON	HARRISON LOCKS
		PLAZA	BHARAT LOCK HOUSE
		YALE	ASSA ABLOY INDIA (PVT) LTD
		LINK	LINK LOCKS
		GEZE	GEZE GMBH
		GARG	D.P.GARG & CO.
22	Metalic / Steel Fire Door	SHAKTHI HORMANN	SHAKTHI HORMANN PVT LTD
		PROMOT	PROMOT FIRE &INSULATION (P) LTD.
		MPP SCHODDERS	MPP TECHNOLOGY PVTLTD.
		NAVAIR	NAVAIR INTERNATIONAL PVT LTD.

		SIGNUMFIRE PROTECTION	SIGNUMFIRE PROTECTION PVT LTD.
		SUKRI	SUKRI FIRE DOORS PVTLTD
		KENWOOD	KENWOOD PLY & BOARD
		GODREJ	GODREJ SECURITY SOLUTION
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	DORMAKABA INDIA PVTLTD.
		INGERSOLRAND	INGERSOLRAND(INDIA)LTD
		DORSET	DORSET INDUSTRIES PVT LTD
		BACKERS FS	BACKERS FS
		GEZE	GEZE GMBH
25	Non Metallic Fire door	NAVAIR	NAVAIR INTERNATIONAL PVT LTD.
		PROMAT	PROMAT FIRE &INSULATION (P) LTD
		GODREJ	GODREJ SECURITY SOLUTIONS
		KENWOOD	KENWOOD PLY & BOARD
26	Stainless Steel Screws	KUNDAN	KUNDAN INDUSTRIES LTD
		ALLOY	ALLOY LTD
		GKW	GKW LIMITED
		NETTLEFOLD	NETTLEFOLD SCREWS
		POOJA	POOJA STEEL CORPORATION
		ATUL	ATUL FASTENERS LTD
27	Butt Hinges Openable Window Shutters	HAFELA	HAFELE INDIA PVT LTD.
		EARLT BIHARI	EARLT BIHARI INDIA PVT LTD
		DORMA	DORMAKABA INDIA PVT LTD.
		DORSET	DORSET INDUSTRIES PVT LTD
		ALU ALPHA	ALU ALPHA INDIA

28	Mild Steel Butt Hinges / Piano Hinges	JOLLY	JOLLY ENGINEERINGWORKS
		SUPREME	SUPREME
		SASWAT	SASWAT
		DEEPAK	DEEPAK
		SWIFT	SWIFT SCREWS
		GARG	D.P. GARG & COMPANY
		AMIT	LOVELY METALINDUSTRIES PVT LTD.
		JYOTI	JYOTI ARCHITECTURALPVT LTD.
29	Stainless Steel Butt Hinges	PRAYAG	PRAYAG POLYMERS (P)LTD.
		OZONE	OZONE HARDWARE
		DORMA	DORMAKABA INDIA PVT LTD.
		GEZE	GEZE GMBH
		GARG	D.P.GARG & CO.
30	Concealed Tower Bolt	DORMA	DORMAKABA INDIA PVT LTD.
		INGERSOLRAND	INGERSOLRAND(INDIA) LTD
		DORSET	DORSET INDUSTRIES PVT LTD
		ALU ALPHA	ALU ALPHA INDIA
31	UPVC Doors, Door Frames and Windows	FENESTA	FENASTA DCM SHRIMAN
		ENCRAFT	ENCRAFT INDIA PVT LTD.
		LG	LG INDIA PVT LTD.
		REHAU	REHAU UNLIMITED POLYMER SOLUTIONS
		ALUPLAST	ALU ALPHA INDIA
		KOMARLING	PROFILE INDIA WINDOW TECHNOLOGY PVT LTD.
		DUROPLAST	DURO PLAST EXTRUSION PVT LTD.
		QUTE	QUTE EXTRUSIONS PVT LTD.
		NCL VEKA	NCLS VEKA LTD.
32	PVC Doors and Frames	ACCUCEL	ACCURA POLYTECH PVT LTD
		DUROPLAST	DUROPLAST EXTRUSIONPVT LTD

		POLYLINE	POLYLINE EXTRUSIONPVT LTD
		RAJSHRI	RAJSHRI PRODUCTIONSPVT LTD
		QUTE	QUTE EXTRUSIONS PVT LTD
33	Stainless Friction Hinges	HETICH	HETICH INDIA PVT.LTD
		HAFFLE	HAFELE INDIA PVT LTD.
		SECURISTYLE	SECURISTYLE INDIA PVT LTD.
		EARL BIHARI	EARLT BIHARI INDIA PVT LTD
		EBCO	EBCO
		ROTO	ROTO FRANK ASIA
34	Float Glass	SAINT GOBAIN	SAINT GOBIN INDIA PVT LTD
		ASAHI	ASAHI INDIA GLASS LTD
		PILKINTON	PILKINTON INDIA PVT LTD.
		MODIGUARD	GUJARAT GUARDIAN LTD
35	Reflective Glass	SAINT GOBAIN	SAINT GOBIN 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 GOBIN INDIA PVT LTD
		FUSO	FUSO GLASS INDIA PVT LTD
		GURIND	GURIND INDIA
		ASAHI	ASAHI INDIA GLASS LTD
		MODIGUARD	GUJARAT GUARDIAN LTD
		IMPACT SAFETY	IMPACT SAFETY GLASS WORKS PVT LTD.
37	Fire rated glass	CONTRA FLAM / PYROSWISS OF SAINT GOBAIN	SAINT GOBIN INDIA PVT LTD
		PROMAT	PROMAT FIRE & INSULATION (P) LTD
		PYRAN OF SCHOTT	SCHOTT GLASS INDIA PVT LTD
		PILKINTON	PILKINTON INDIA

38	Anchor / SS Stone Cladding Clamps / Dash Fastners	HILTI	HILTI INDIA PVT LTD
		FISCHER	FISCHER INDIA
		ANCHOR	ANCHOR LTD
		NUTECH	NUTECH CONSTRUCTION CHEMICALS
		CANON	CANNON
		WURTH	WUERTH INDIA PVT LTD.
		TRIXEL	AXEL INDIA PVT LTD.
		HELFEN	HELFEN ANCHORING SYSTEM
		BOSCH	BOSCH LTD
39	Structural Steel	SAIL	SAIL
		TISCO	TATA STEEL
		VIZAG	RINL
		JSW	JSW
		APOLLO	APL APOLLO
40	M.S Pipe Tubes	SAIL	SAIL
		TISCO	TATA STEEL
		APOLLO	APL APPOLLO
		KALINGA	KALINGA TUBES
		JINDAL	JSW
		NEZONE	NEZONE TUBES LIMITED
41	Stainless Steel	SALEM	SAIL
		CONNECT	CONNECT LTD
		ARK PRODUCT PVT.LTD	ARK PRODUCT PVT LTD.
		JINDAL	JSW
		SAIL	SAIL
		KINGSTON	KINGSTON BRASS
42	Stainless Steel bolts, washers, nuts	KUNDAN	KUNDAN INDUSTRIES LTD
		POOJA	POOJA STEEL CORPORATION
		ATUL	ATUL FASTNERS LTD
		HILTI	HILTI INDIA PVT LTD

43	Stainless steel pressure plate screws	KUNDAN	KUNDAN INDUSTRIES LTD
		POOJA	POOJA STEELCORPORATION
		ATUL	ATUL FASTNERS 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 LIMITED
		MARBITO	MARBITO TILES
		NITCO	NITCO LTD.
		RAK	RAK CERAMIC INDIA PVT LTD
		RESTILE	RESTILE CERAMIC LTD
		KAJARIA	KAJARIA CERAMIC LTD
		SOMANY	SOMANY CERAMIC LTD
		JHONSON	PRISM JOHNSON LTD
		VARMORA GRANITO	VARMORA GRANITO GRANITE PVT LTD
		NAVEEN	MURUDESHWARCERAMICS LTD
		VIERO	APARNA TILES
		APARNA VITERO	APARNA ENTERPRISESLTD
48	Glazed Ceramic Tiles (also wall tiles)	AGL	ASIAN GRANITE INDIA LIMITED
		NITCO	NITCO LTD.
		RAK	RAK CERAMIC INDIA PVT LTD
		KAJARIA	KAJARIA CERAMIC LTD
		SOMANY	SOMANY CERAMIC LTD
		JHONSON	PRISM JOHNSON LTD
		VARMORA GRANITO	VARMORA GRANITO GRANITE PVT LTD
		NAVEEN	MURUDESHWARCERAMICS LTD

49	Synthetic Sports Flooring	ARMSTRONG	ARMSTRONG FLOORING
		LG	LG HAUSYS INDIA
		WONDORFLOOR	RMG POLYVINYL INDIALTD
50	Linoleum Sports Flooring	ARMSTRONG	ARMSTRONG FLOORING INDIA LTD
		FORBO	FORBO FLOORING INDIA PVT LTD
		GERFLOR	GERFLOR FLOORING
51	False Floor	HEWETSON	HEWETSON INDIA
		ACCESS FLOOR SYSTEM	ACCESS FLOOR SYSTEM
		UNIFLOOR	UNIFLOOR INDIA 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	WERNER FLOORS
		PERGO	REDFLOOR INDIA
53	Floor Spring (For non DSR Items)	DORMA	DORMAKABA INDIA PVT LTD
		INGERSOLRAND	INGERSOLRAND INDIAPVT LTD.
		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 CARPET 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 WHITE	BIRLA CORPORATIONLTD.
		JK WHITE	JK CEMENT LTD
		PAVIT (ECO TILE)	PAVITCERAMICS PVTLTD.
58	Thermal Insulation Treatment	PIDILITE	PIDILITE INDUSTRIES
		ELASTOSPRAY	BASF
		ROCK INDIA PVT LTD.	ROCK INDIA PVT LTD
		WEATHER KOOL & SEAL	BERGER PAINTS
59	Acoustic Insulation	TWINGERINSUL	U.P. TWIGA FIBER GLASS LTD
		LLOYD INSULATION	LLOYD NSULATION(INDIA) LTD.
		SAINT GOBAIN GYPROC	SAINT GOBIN GYPROCINDIA
		HIMALAYAN ACOUSTICS	HIMALAYAN ACOUSTICS
		KNAUF	KNAUF GYPSUM INDIA PVT.LTD
		ANUTONE	ANUTONE ACOUSTICSLTD.
60	UPVC Pipes and Fittings (Rain Water Pipes)	SUPREME	SUPREME INDUSTRIESLTD
		PRINCE	PRINCE PIPES ANDFITTINGS LTD
		FINOLEX	FINOLEX INDUSTRIES LTD
		PREPOLY	PREMIER PVC INDUSTRY
		ASTRAL	ASTRAL POLYTECHNIKLTD
		ASHIRWAD	ASHIRWAD PVC PIPES
		FLOWGUARD	FLOWGUARD
		TRUFLOW	HSIL LTD OF HINDWARE

61	Sandwich UF panelled roofing sheets	LLOYD INSULATION	LLOYD INSULATION(INDIA) LTD.
		JINDAL MECTEC / JINDAL	MECTEC PVT LTD
		DANPALON	DANAPAL LIGHT ARCHITECTURE
		GE PLASTIC	GE SILICONS
		LEXAN	LEXAN LTD
62	Polycarbonate Sheet	MG POLYPLAST	MG POLYPAS
		GE LEXON	GE SILICONS
		DANPALON	DANAPAL LIGHT ARCHITECTURE
		ALCOX	HINDEGGAN ALCOX LTD.
		POLYGAL	POLYGAL INDIA PVT LTD.
63	False Ceilings	AEROLITE	ANDHRA POLYMERS PVTLTD /AEROLITE INDUSTRIES PVT LTD.
		ANUTONE	ANUTONE ACOUSTICS LTD
		ARMSTRONG	ARMSTRONG WORLD INDUSTRIES
		GRIDSQUARE	GRIDSQUARE CEILINGS
		KNAUF	KNAUF GYPSUM INDIA PVT. LTD
		USG BORAL	USG BORAL
		HUNTER DOUGALS	HUNTER DOUGALS
		SAINT GOIBAIN GYPROC	SAINT GOBIN GYPROCINDIA
64	False Ceiling Members (perimeter, Ceiling Section, Intermediates,angles etc)	ARMSTRONG	ARMSTRONG WORLD INDUSTRIES
		AEROLITE	ANDHRA POLYMERS PVT LTD./AEROLITEINDUSTRIES PVT LTD.
		GRIDSQUARE	GRIDSQUARE CEILINGS
		GYPFRAME STEEL	BRITISH GYPSUM
		KNAUF	KNAUF GYPSUM INDIA PVT.LTD
		LLOYD	LLOYD INSULATION(INDIA) LTD.
		SAINT GOBAIN	SAINT GOBAIN GYPROC

65	Synthetic Enamel Paint	PREMIUM GLOSS ENAMEL	ASIAN PAINT LTD
		DULEX	ICI DULEX LTD
		NEROLAC	NEROLAC PAINTS LTD
		BERGER	BERGER PAINTS
		NIPPON	NIPPON PAINT INDIA LTD
66	Pink Primer	WOOD PRIMER	ASIAN PAINT
		DULEX	ICI DULEX
		NEROLAC	NEROLAC KANSIANEROLAC PAINTS LTD
		BERGER	BERGER PAINTS
		NIPPON	NIPPON
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
		MG POLYPLAST	NEROLAC
		BERGER (BISM)	BERGER PAINTS
69	Acrylic Emulsion	PREMIUM EMULSION	ASIAN PAINT
		DULUX (SUPER COVER)	ICI DULUX
		NEROLOC (BEAUTY GOLD)	NEROLAC
		BERGER (BISM)	BERGER PAINTS
70	Water Proof Cement Paint	ASIAN EXTERIAL WALL PRIMER	ASIAN PAINT
		BERGER	BERGER PAINTS
		SURFA	SURFACOATS (INDIA) PVT. LTD
		ICI DULUX	ICI DULUX
		CEM COLOUR	SNOWCEM PAINTS

71	Acrylic Smooth Exteriorpaint	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
		SURFEX RAIN SHIELD	SURFACOATS
73	Cement Based Wall Putty	J.K. WALL PUTTY	J.K. CEMENTS LTD.
		BIRLA WALL CARE	BIRLA CEMENTS LTD.
		ASIAN PAINTS	ASIAN PAINTS LTD.
		ALTEK	NCL ALLTEK & SECCOLD LTD.
		BERGER	BERGER
		ARDEX ENDURA	ARDEX ENDURA INDIA PVT LTD.
		FERROUS CRETE	FERROUS CRETE (INDIA) PVT.LTD
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	READI PLAST	ULTRATECH CEMENTSLTD
		GYPROC PLASTERS	SAINT GOBAIN GYPROC 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	POLYCURE MALAYSIA

77	Fire Retardant Paint	JOTUN	JOTUN PAINTS
		HILTI	HILTI INDIA
		AKZONOBEL	DULEX AKZONOBELPAINTS
		ASIAN PAINTS	ASIAN PAINTS
		STPL LTD	STPL LTD
78	Anticorrosive bitumastic paint	BERGER	BERGER PAINTS INDIALTD.
		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
		STPL LTD	SHALIMAR TAR PRODUCTS
		ARDEX ENDURA	ARDEX ENDURA INDIA PVT LTD.
		MAPECOAT L24	MAPEI CONSTRUCTION PRODUCTS INDIA P LTD.
		NEROLAC	NEROLAC
		SUN EPOXY PAINT	SUNANDA SPECIALITY COATINGS PVT LTD.
81	Epoxy Coating	BASF	BASF INDIA LTD.
		FOSROC	FOSROC LTD
		LATICRETE	MYK LATICRETE INDIA
		ARDEX ENDURA	ARDEX ENDURA INDIA PVT LTD.
		MAPECOAT DW25	MAPEI CONSTRUCTION PRODUCTS INDIA P LTD.
		FERROUS CRETE	FERROUS CRETE (INDIA) PVT.LTD
		SUN EPOXY PAINT	SUNANDA SPECIALITY COATINGS PVT LTD.

82	Silicon 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 PVT LTD.
		ULTRA	ULTRA TILES PRIVATE 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.
		NIKKALITE	NIPPON CARBIDE INDUSTRIES (USA)
85	Polycarbonate convex mirrors, rubberized road hump	UNIQUESAFETY SOLUTIONS	UNIQUE SAFETYSOLUTIONS
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	ROCABATH ROOM PRODUCTS
		PARRYWARE	ROCA BATH PVT LTD.
		KOHLER	KOHIER WORLD WIDE
		CERA	CERA SANITARY WARE LTD
		JAQUAR	JAQUAR GROUP
		BATHSENSE	ASIAN PAINTS

88	Flushing Cistern	PARRYWARE	ROCA BATH PVT LTD.
		KOHLER	KOHLER WORLD WIDE
		HINDWARE	HSIL LTD
		CERA	CERA SANITARY WARELTD
		JAQUAR	JAQUAR GROUP
		BATHSENSE / TECE	ASIAN PAINTS LTD
89	SWR PVC Pipes and Fittings	SUPREME	SUPREME INDUSTRIES LTD
		ASTRAL	ASTRAL POLYTECHNIKLTD
		FINOLEX	FINOLEX INDUSTRIES LTD
		FLOWGUARD	ASHIRWAD PVC PIPES
		PRINCE	PRINCE PIPES ANDFITTINGS LTD
		TRUFLOW	HSIL LTD OF HINDWARE
		D.E.C	D.E.CINDUSTRIES PVT LTD
90	Stainless Steel KitchenSink	JHONSON	PRISON JHONSON LTD.
		DIAMOND	PHEONIX APPLIANCES PVT LTD.
		JINDAL	CENTUARY POLYTECH
		NILKANTH	NILKANT
		NIRALI	JYOTI (INDIA) METAL INDUSTRIES PVT LTD
		HINDWARE	HSIL LTD.
		SILVER SHINE	BLUE STONE SANITARY INDUSTRIES PVT LTD.
		JOYNA	JOYNA
		NAVKAR	SHRI NAVKARMETALSLTD.
		FRANKE	FRANKE INDIA LTD.
		FUTURA	FUTURA KITCHEN SINKS INDIA PVT LTD.
91	Centrifugally Caste (Spun) Iron Soil Pipes	NECO	JAYASWAL NECO LTD.
		SKF BRAND	SKF INDUSTRIES
		HEPCO	HEPCO
		BENGAL IRON CORPORATION	BENGAL IRON CORPORATION
		NECO	JAYASWAL NECO LTD.
		RPMF	RAJ PATTERN MAKERS AND FOUNDERS PVT LTD.
		HIF	M/S. BABULAL BAJAJ IRON FOUNDRY

92	PE-AL-PE Composite pipes	KITEC	KITEC INDUSTRIES (INDIA) PVT LTD.
93	GI Pipes	TATA	TATA STEEL LTD.
		ZENITH	ZENITH BIRLA (INDIA) LTD.
		HISSAR	HISSAR
		JINDAL	JINDAL PIPES LTD.
		APOLLO	APL APOLLO
		NEZONE	
		TNT	
94	GI Pipes Fittings	ZOLOTO	ZOLOTO INDUSTRIES
		UNIK	UNIK MALLEABLES
		HB	HB INDUSTRIES
		ICS	SGREE SAMARTH ENGINEERS
		R BRAND	
		UI BRAND	
95	Water Supply Valves	ZOLOTO	ZOLOTO INDUSTRIES
		LEADER	LEADER VALVES LTD.
		ARCO	ARCO VALVES PVT LTD
		NANDA	NANDA MILLER COMPANY
96	CPVC Pipes and Fittings	SUPREME	SUPREME INDUSTRIESLTD
		FINOLEX	FINOLEX INDUSTRIES LTD
		ASTRAL	ASTRAL POLYTECHNIKLTD
		PRINCE	PRINCE PIPES ANDFITTINGS LTD
		TRUFLOW	HISL LTD OF HINDWARE
		BIRLA AEROCON	HIL LTD
		ASHIRWAD	ASHIRWAD PVC PIPES
		FLOWGUARD	FLOWGUARD
		D.E.C	D.E.C INDUSTRIESPRIVATE LTD
		JAIN	JAIN -_____ SYSTEMS LTD
97	PVC/ HDPE Water Storage Tanks	VECTUS	VECTUS INDUSTRIES LTD
		SUPREME	SUPREME INDUSTRIESLTD
98	DI Pipes	ELECTROSTEEL	ELECTROSTEEL
		JINDAL	JINDAL
		TATA DUCTURA	TATA DUCTURA

		KAPILANSH	KAPILANSH
		KESHORAM	KESHORAM
		SRIPIPES	
		ELECTROTHERM	
		JAIBALAJI	
		TATA METALIDES	
		KUBOTO	
99	DI fittings	ELECTROSTEEL	ELECTROSTEEL
		JINDAL	JINDAL
		TATA DUCTURA	TATA DUCTURA
		KAPILANSH	KAPILANSH
		KESHORAM	KESHORAM
		SRIPIPES	
		ELECTROTHERM	
100	Water Supply fixtures like bibcock, showerpanels	JAQUAR	JAQUAR GROUP
		PARRYWARE	ROCA BATHROOM PRODUCTS PVT. LTD
		METRO	METRO SANITATIONSPVT. LTD
		WATERMAN	KEWAL BROTHERS
		SEIKO	SEIKO SANITATIONS
		PRAYAG	PRAYAG POLYMERS PVT LTD.
		KINGSTON	KINGSTON BRASS INDIA
		JOHNSON	PRISM JOHNSON LTD
		MARC	MARK SHOWERS
		HINDWARE	HSIL LTD.
		ESS ESS/BATHSENSE /ROYAL ASIAN PAINTS	ASIAN PAINTS
101	Air Release Valve	KIRLOSKAR	KIRLOSKARBROTHERS LTD.
		RBM	AFS LTD
		KARTAR	KARTAR VALVES PRIVATE LTD.
102	CentrifugallyCaste (Spun) Iron	LANCO / SRIPIPES	ELECTROSTEELCASTINGS LTD.
		JINDAL	JINDAL SAW LTD
		KESHORAM	KESORAM INDUSTRIESLTD
		ELECTROSTEEL	ELECTROSTEEL CASTINGS LTD.

103	Spun Cast Iron Fittings	NECO	JAYASWAL NECO LTD.
		KARTAR	KARTAR VALVES PRIVATE LTD.
		ELECTROSTEEL	ELECTROSTEELCASTINGS LTD.
		KAPILANSH CENTRIFUGAL	KAPILANSH DHATUUDYOG (P) LTD.
		SKF BRAND	SINGHALIRON FOUNDARY PVT LTD
104	CI double flange sluicevalve	KIRLOSKAR	KIRLOSKAR BROTHERSLTD.
		RBM	AFS LTD
		KARTAR	KARTAR VALVES PRIVATE LTD.
		IVS	INDIAN VALVES PRIVATE LTD.
		ZOLOTO	ZOLOTO INDUSTRIES
		BURN	BURN
		LEADER	LEADER VALVES LTD.
105	CI double flanged nonreturn 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, bib cocks, pillar cock, Angle valve, etc.	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	Jayaswal Neco Ltd.
		HEPCO	Binay Udyog Pvt. 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,
		DEC	DEC I & P India Pvt.Ltd.

111	Plastic EncapsulatedFoot 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	Jayaswal Neco Ltd
		Jagannath	Sri Jagannath Iron Foundry Pvt. Ltd.
		Kapilansh Centrifugal	Kapilansh DhatuUdyog (P)Ltd.
		SKF brand	SINGHALIRON FOUNDARY Pvt. Ltd.
113	Aluminium doors/windows sections	Hindalco	Hindalco Industries Ltd.,
		jindal	jindal Aluminum Ltd.,
		Padmavathi Extrusion	Padmavathi Extrusion Private Ltd.
		Hyd	Hydro Extrusion
		Omalco Extrusion	Omalco Extrusion Pvt. Ltd.
		Bhoruka	Bhoruka Aluminum Ltd.,
		Indal	Indian Aluminum Ltd.,
114	Aluminum systems/Anodised aluminum fittings for doors/windows	Define	Define Overseas Pvt. Ltd.
		Schueco	Schueco India Pvt. Ltd.,
		Bhoruka	Bhoruka Aluminium 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.
		KINLONG	Kinlong Industries
116	EPDM Gaskets	Anand	Anand NVH products (P)Ltd.,
		Roop	Roop Polymers Ltd.,
		Bohra	Bohra rubber Pvt Ltd.,
		Hanu	Hanu Industries
		Amee Rubber	Amee 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	Pidilite Industries
		Accoproof	ACC Cements Ltd.
		Ardex Endura	Ardex Endura (India) Ltd
		Alchemica	Alchemica Ltd.
		Smart Care	Asian Paints
		Cementmix Plus/ AdvancedLatex Plus	Berger Paints
		Shaliplast LW+	STP Ltd
		Mapecure AS/Mapecure E30/Mapecure ASE	M/s MAPEI Constructions Product India Pvt. Ltd.
120	Membrane 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	Pidilite Industries
		Alchemica	Alchemica Ltd.
		Ardex Endura	Ardex Endura ltd
		Hydro tech	Hydro tech Ltd
		Mapeplan TU S20/ Planiseal88/Planiseak 288	M/s MAPEI Constructions Product India Pvt. Ltd.
		Elasto roof PU/Sunroof PU/Sunkote	Sunanda Speciality Coatings Pvt.Ltd
121	Chemical water proofing system	BASF	BASF India Ltd.,
		Ferrous Crete	Ferrous Crete (India) Pvt.Ltd.
		MC-Bauchemie	MS-Bauchemie India Ltd.,
		Sika	Sika India
		Sunanda speciality coating	Sunanda speciality coatingPvt Ltd.
		Perma construction Aid	Perma Construction Aid Pvt Ltd

		Fosroc	Fosroc India
		Dr. Fixit	PidiliteIndustires
		Smart Care	Asian Paints
		Latexshield 2K/ TankshieldPW	Berger Paints
122	Water stops	Hydrotite	Sika India
		BASF	BASF India Ltd.,
		Dr. Fixit	PidiliteIndustries
		Ardex Endura	Ardex Endura ltd
		Ferrous Crete	Ferrous Crete (India) Pvt.Ltd.
		Hydroswell	Sika India
		Smart Care	Asian Paints
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
		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 Equipment	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
		Asian paints	Smart Care Sealant
		Fosroc	Fosroc India
		BASF	BASF India Ltd.
127	Poly-sulphide sealant	Dr. Fixit	Pidilite Industries Ltd
		Ferrous Crete	Ferrous Crete (India) Pvt.Ltd.
		MYK Schomburg	MYK Arments range of products
		Pidilite	Pidilite Industeries

		STP Ltd.	Shalimar Tar Products
		Fosroc	Fosroc India
		Techseal	Choksey Chemical Pvt. Ltd,
		Smart Care	Asian Paints
128	Bitumen Impregnated Board	Shalitex	Shalimar Tar Products
129	Polyethylene backer rod	Supreme	Supreme Industries
130	Epoxy	Fosroc	Fosroc India
		Ferrous Crete	Ferrous Crete (India) Pvt. Ltd.
		Shalibons	Shalimar Tar Products
		Asian paints	Asian Paints
		Ardex	Ardex Endura (India) Pvt.Ltd.
131	Weather Silicon makeandgrade	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/ GypsumPlaster	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, SanHarvic, NCL
		San Harvic,	San Harvic
		NCL	NCL Industries
136	PVC Flooring	LG Hausys	LG Hausys
		Ger flor	Gerflor flooring
		Armstrong	Armstrong World Industries
137	Grass Paver	Unistone	Unistone
		Ultra	Ultra Ltd.
138	FRP Door Frames & Shutter	Meena Fibre Glass,	Meena Fibre Glass
		Duroplast	Duroplast extrusion Pvt Ltd
		Cactus	Cactus
		Polyline.	Poluline

		JAYNA	Jain Wood Industries
		JAIN	Jain Doors Pvt Ltd
139	Nom Metalic Floor Surface Hardners	Ironite	Ironite
		Hardonite,	Hardonite
		FOSROC	Fosroc India
		SIKA	SIKa India
		BASF	BASF India Ltd.,
		CICO	CICO Technologies Ltd.,
		Pidilite	Pidilite Industries Ltd,
140	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
141	Rockwool/Glasswool insulation	Twigafiber	Twigaifiber glass Ltd.
		Llyod Insulation	Llyod Insulation Ltd.
		Supreme	Supreme Industries ltd
142	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
		Smart Care	Asian Paints
		Proshield	Berger Paints
		IWL India Limited	IWL India Limited
143	Structural Glazing	Modi,	Modi Guard
		Saint Gobain	Saint Gobain Glass India Ltd.
		Asahi,	Asahi India glass Ltd
		Glaverbel	Glaverbel India
144	Sensor Based Auto Flush Systems	AOS Systems„	AOS Systems
		TOTO	TOTO Ltd
		Parryware,	Parryware
		Hindware,	HSIL Ltd
		Grohe,	Grohe

		Jaquar	Jaquar Group
		Kochier	Kochier
145	Float Valve (Ball Valve)	Prayag,	Prayag Polymers (P) Ltd
		Leader,	Leader valves Ltd.
		Zoloto,	Zolota Industries
		IBP	IBP Industries
		Arco	Arco valves Pvt. Ltd.,
146	Spider Patch Fittings for Structural Glazing	Dorma„	Dormakaba India Pvt. Ltd
		Sevax	Saint Gobain Glass India Ltd.
		Kich	Kich India
		Ozone	Ozone Ltd
		Hafele	Hafele Ltd
147	Multi Walled Poly carbonate Roofing Sheets	Danpalon	Danapal Light architecture
		Lexan GE	GELexan
148	Adhesive for AAC Block/Tiles	Ultratech	Ultratech cements Ltd.
		Ardex Endura/Gold Star	Ardex Endura
		Ferrous Crete	Ferrous Crete (India) Pvt.Ltd.
		Smart Care Tile Adhesive	Asian Paints
		Tile Adhesive Plus	Berger Paints
149	Aluminium Formwork	MFE(MIVAN)	MIVAN
		S-Form	S-Form
		MFS	MFS
150	EPDM Water ProofingMembrane	Smart Care	Asian Paints
		Ferrous Crete	Ferrous Crete (India) Pvt.Ltd.
		Pidilite	Pidilite Industries
		STP	Shalimar Tar Products
		Fosroc	Fosroc India
151	PU Coating (UV Resistant Liquid AppliedCoating)	Smart Care	Asian Paints
		Pidilite	Pidilite Industries
		BASF	BASF
		Fosroc	Fosroc India
		SIKA	SIKA India
		PU Roof koat	Berger Paints

152	Polyurea Ultroh	Smart Care/Ferrous Crete	Asian Paints
		Ferrous Crete	Ferrous Crete (India) Pvt.Ltd.
		BASF	BASF
		SIKA	SIKA India
		Pidilite	Pidilite Industries
153	Modular Kitchen / Wardrobes/Hardware and Accessories	Sleek	Asian Paints
		Godrej	Godrej & Boyce Co.
		Spacewood	Spacewood
		Evoke	Evoke
154	High end Exterior Textures	Allura/Graniza Range	Asian Paints
		SKK Brand	SKK Ltd.
		Berger	Berger paints India Ltd.
155	Acrylic Exterior Textures	Asian paints	Asian Paints
		Berger	Berger paints India Ltd.
		Akzonobel	Akzonobel
		Ebco	Ebco
		Neroloc	Nerolac Paints Ltd
156	Puff Insulations	Smart Care	Asian Paints
		Llyod Insulation	Llyod Insulation (India) Ltd.
		Fosroc	Fosroc India
		BASF	BASF
		Pidilite	Pidilite Industries Ltd.
		Supreme	Supreme ltd
157	GP Grout	Ferrous Crete	Ferrous Crete (India) Pvt.Ltd.
		Asian paints	Smart Care SC GP GroutGrey
		BASF	BASF
		Pidilite	Pidilite Industries Ltd.
		Care	Care
		Mapefill GPIN	MAPEI ConstructionProducts India P Ltd.
		SIKA	SIKA India
		Smart Care SC GP Grout Grey	Asian Paints
		Homeshield Supergrout	Berger Paints
		TEEMAX GROUT TP-1	M/s Teemage Builders (P)Ltd

158	Galvalume sheet for roofing, cladding, Sandwich panel	Llyod Metal Craft	Llyod Insulations.
		Tata Blue Scope	Tata Blue Scope
		Bhushan	Bhushan steel
		JSW	JSW
		Essar	Essar group
159	Mechanical coupler forReinforcement	Dextra	
		Sanfield	Sanfield India Ltd
160	GRP/SMC PANEL Tank(New Product in there Performance is yet tobe established.)	PIPECO Tanks	PIPECO Tanks
		FLOSTO Tanks	Devi Polymer Pvt. Ltd. Chennai
		VIVANTA	VIVANTA Enterprises,Mumbai
		AMITEX	AMITEX Enterprises, Delhi
161	Lifts	OTIS	M/s. OTIS Elevator Company (India) Ltd.
		EMPEROR	M/s. SWIFT Engineering
		JOHNSON & JOHNSON	M/s.Johnson Lifts Pvt Ltd.
		KONE	M/s.KONE Elevator India Pvt. Ltd.
162	UPVC pipes and fittings	FINOLEX	M/s.FINOLEX INDUSTRIES Ltd.
		JAIN	M/s.JAIN -_____ SYSTEM Ltd.,
		SUPREME	M/s.SUPREME INDUSTRIES
		NANDI	M/s.NANDI PIPES
163	Submersible Pumps	TEXMO	M/s.AQUA GROUP (AQUATEX)
		KSB	M/s.KSB PUMPS
		TARO	M/s.TEXMO INDUSTRIES
		KIRLOSKAR	M/s.KIRLOSKAR BROTHERS Ltd
		GRUNDFOS	M/s.GRUNDFOS PUMPS INDIA (P) LTD.
164	Centrifugal Pumps	JYOTHI	M/s.JYOTHI Ltd
		KIRLOSKAR	M/s.KIRLOSKAR BROTHERS Ltd
		BEACON	M/s.BEACON INDUSTRIES Pvt. Ltd
		GRUNDFOS	M/s.GRUNDFOS PUMPS INDIA (P) LTD.

165	Genset	KIRLOSKAR	M/s.KIRLOSKAR OIL ENGINES (KOEL) Ltd
		LEYLAND	M/s.ASHOK LEYLAND
		RUSTON	M/s.RUSTON & HORNS BY ENGINEERING COMPANY
		GREAVES COTTON	M/s.GREAVES COTTON Ltd
		CUMMINS	M/s.CUMMINS INDUSTRIES
166	Water Meter	DASMESH	M/s.DASMESH ENGINEERING WORKS
		DARVESH	M/s.DARVESH ENGINEERING WORKS
		NBESON	M/s.NBESON ENGINEERING WORKS
		AQUAMET	M/s.ZERMER AQUAMET INDIA Pvt. Ltd
		APOLLO	M/s.APOLLO METERS Pvt. Ltd
167	CI Pipe & fittings	ELECTROSTEEL	ELECTOSTEEL CASTINGS LTD
		SRIPIPES	SRI PIPES / ECL
		JINDAL	JINDAL SAW LTD
		ELECTROTHERM	ELECTROTHERM INDIA LTD.
168	Panel Board-Switch Breaker, Ammeter, Voltmeter	L&T	L&T ELECTRICAL & AUTOMATION, MUMBAI
		SIEMENS	SIEMENS LTD
		CG	CROMPTON GREAVES CONSUMER ELECTRICALS LTD
		STANDARD	STANDARD – HAVELLS INDIA LTD, STANDARD ELECTRICALS
169	Power Capacitor	CG	CROMPTON GREAVES CONSUMER ELECTRICALS LTD.
		L&T	L&T ELECTRICAL & AUTOMATION
		SIEMENS	SIEMENS LTD.
170	Fully Automatic Star Delta Starter	L&T	L&T ELECTRICAL & AUTOMATION
		BHARATCUTLER HAMMER	BCH ELECTRIC LTD
		SIEMENS	UNITEC ENGINEERING LTD.
171	Fully Automatic Transformer Starter	JYOTHI	JYOTHI LTD
		KILBURN	KILBURN TRANSFORMER LTD
		UNILEC	UNITEC ENGINEERING LTD
172	UG Cables	FINOLEX	FINOLEX INDUSTRIES LTD
		PARAGON	PARAGON CABLES & WIRES HARYANA
		SUNCAB	SUNCAB POWER CABLES LTD
		EMPIRE	EMPIRE CABLE INDUSTRIES (P) LTD, DELHI

173	Horizontal split casing pump	JYOTHI	JYOTHI LTD
		KIRLOSKAR	KIRLOSKAR BROTHERS LTD
		BEACON	BEACON INDUSTRIES PV. LTD
		GRUNDFOS	GRUNDFOS PUMPS INDIA (P) LTD, CHENNAI
174	Genset Battery	AMCO	AMCO BATTERIES LTD
		STANDARD	STANDARD BATTERIES LTD
		EXIDE	EXIDE INDUSTRIES LTD
		DAGENITE	DAGENITE BATTERIES
		AMARON	AMARA RAJA ENERGY & MOBILITY LTD (AREMC)
175	Change over switches	STANDARD	
		HAVELLS	HAVELLS INDIA LTD
		KUNDAN	KUNDAN CAB
		GEM	GEM
176	CI/DI Motorised valve	AVK	AVK VALVES INDIA PVT. LTD
		VAG	VAG VALVES INDIA PVT. LTD

LIST OF ADDITIONAL BRAND OF APPROVED MATERIALS IN PWD NIT AS PER CIRCULAR NO.1102/PW/CE/EE(P)/AE(P)-I/F.No.Tech.Cir./2025-26, Dt.23.06.2025

Sl.No.	Product Description	Brand Name
1.	Steel TMT	IISCO
2.	12mm fibre reinforcement	Recorn 3S
3.	Decentering chemical	Don Chemical/Reebol Emulsion / Fosroc Chemical
4.	Ceramic glazed wall tiles	Asian
5.	Ceramic glazed floor tiles	Kajaria
6.	Ceramic glazed floor tiles	Bell/Regency/Asian
7.	Fully vitrified floor tiles	Nitco/ Rak / Johnson / Asian
8.	22mm thick factory made pre-polished cement concrete flooring tiles	Endura / Technic
9.	0.5 HP, 1 HP, 2 HP Monoblock pumpset	Suguna / Texmo / Sharp
10.	Cement based polymer modified bonding admixture	Fosroc or equivalent
11.	Water Metre	ATTARIS
12.	Electromagnetic Bulk Flow metre	KROHNE / YOKOGWA / EMERSON
13.	CI Flanges	Electro steel, Jindal, Lanco, Electrtherm
14.	UPVC pipe	TRUEBORE
15.	Bonding admixture	Fosroc or equivalent
16.	D/F gate valve	VAG, AVK, FOURESS
17.	DI pipes double flanged pipes class k9	Eletrotherm
18.	DI specials	Kiswok
19.	Cast iron specials	Electro steel / Sripipes / Jindal
20.	Square ammeter	IMP / AE/ L&T / Siemens
21.	TPN-63 amps	Crompton Greaves, L&T, Siemens, Standard make
22.	Cubical switch	Crompton Greaves, L&T, Siemens, Standard make
23.	Star-delta starter range for SA to 13A F.A.S.D	Bharat Culter hammer / L&T / Siemens
24.	Fully Automatic Auto Transformer starter Pedestal type	Jyothi, Kilburn, unilec
25.	Battery	Amco, Standard, Exide, Daganite
26.	Tools and spares (Diesel Generator)	Taparia, Gedorge, Everest
27.	Pilot lamp	Standard make
28.	MCCB	L&T, Crompton
29.	Change over Switch	Standard / Havells / Kundan / Gem
30.	DI Manhole cover and frame	Neco / Acl / Areaco
31.	PE graded manholes	Ultra
32.	UPVC plain casing pipe	Finolex / Jain / Supreme / Truebore / Nandi
33.	UPVC ribbed screen slotted pipe	Finolex / Jain / Supreme / Truebore / Nandi

LIST OF ADDITIONAL BRAND OF APPROVED MATERIALS IN PWD NIT AS PER CIRCULAR NO.2661/PW/CE/EE(P)/AE(P)-I/F.No.Tech.Cir./2025-26, Dt.26.09.2025

Sl.No.	Material Description	Brand Name	Make
1.	Vitreous Commodes / Wash basin	Johnson	Prism Johnson Ltd.,
2.	Flushing Cistern	Johnson	-do-
3.	Structural steel	Shyam steel	M/s Shyam Steel Industries Ltd.,
4.	Upvc pipes for water supply	PRINC	M/s. Prince pipes & Fittings Ltd.
5.	Upvc pipes for drainage system		
6.	HDPE for drainage and cable ducting		
7.	Borewell casing and column pipe		
8.	Water storage tank		
9.	Pvc conduit pipes for Electrical works		
10.	Acrylic Emulsion	JSW Paints	M/s. JSW Paints Ltd.
11.	Interior & Exterior primers		
12.	Water proofing's Paint		
13.	Putty		
14.	Distemper		
15.	Enamel Paint		
16.	Texture products		
17.	LED Street Lights	LEDGEO	M/s. LEDGEO Lights Pvt. Ltd.,
18.	LED Down Lights		
19.	LED Panel Lights		
20.	LED Flood Lights	LEDGEO	M/s. LEDGEO Lights Pvt. Ltd.,
21.	LED Highbay Lights		
22.	LED Tube Lights		
23.	LED Highmast Lights		
24.	Solar Street Lights		

LIST OF ADDITIONAL BRAND OF APPROVED MATERIALS IN PWD NIT AS PER CIRCULAR NO.4166/PW/CE/EE(P)/AE(P)-I/F.No.Tech.Cir./2025-26, Dt.29.01.2026

Sl. No	Material Description	Materials	
1	Clear Float Glass	Brand	Make
2	Reflective Glass	Gold Plus Glass	M/s. GOLD PLUS GLASS INDUSTRY LIMITED.
3	Tinted Glass		
4	Mirror		
5	Frosted		
6	Lacquered Glass		
7	Toughened Glass		
8	Laminated Glass		
9	Damp Proof Material	Classic - Primadon	M/s. Primadonn Buildtech (P) Ltd
10	Plasticizer & Super Plasticizer		
11	Adhesive		
12	Grout		
13	Epoxy Coating		
14	Silicon Coating		
15	Water Proofing Compound		
16	Membrane Water Proofing System		
17	Chemical Water Proofing System		
18	Structural Sealant		
19	Water Stops		
20	Non-metallic floor surface hardener		
21	PV Coating (UV resistant liquid applied Coating)		
22	Epoxy		
23	Weather Silicon Makengrade		
24	Modified Water Proof Membrane		
25	GP Grout		
26	Anti – Carbonate Coating		
27	Poly–Sulphide Sealant		
28	Bitumen & Concrete road repairs materials		
29	Building and Bridge Repair Chemicals		
30	LED lights	Luker	M/s Luker Electric Technology's Pvt Ltd
31	Solar lights		
32	Indoor and Outdoor lights		
33	TPWE Fans (Table, Pedestal. Wall Mounted and Exhaust Fans)		
34	Energy efficient Fans		
35	BLDC Fans		
36	Switch Gear Products		
37	Water Heater		
38	Wires		

LIST OF ADDITIONAL BRAND OF APPROVED MATERIALS IN PWD NIT AS PER CIRCULAR NO.631/PW/CE/EE(P)/AE(P)-I/F.No.Tech.Cir./2026-27, Dt.17.06.2026

Sl. No	Material Description	Materials	
		Brand	Make
1	HDPE Pipes	Mangalam Pipes	M/s Mangalam Pipes Pvt Ltd.,
		Arun	M/s Arun Polymers
		Delta Irrigation India LLP	M/s Delta Irrigation India LLP
2	PVC-O Pipes	Delta Irrigation India LLP	M/s Delta Irrigation India LLP
3	PVC Pipes	Arun	M/s Arun Polymers
4	PVC - Water Tanks		
5	Column / Borewell PVC Pipes		
6	CPVC Pipes & Fittings		
7	Emulsion (Interior and Exterior)	Madras Paints	M/s Madras Paints
8	Wall Primer (Interior and Exterior)		
9	Water and damp proof material		
10	Putty (Acrylic & Powder)		
11	Galvalume sheet – Roofing sheet	Signature, Spectrum, Prathan, Metalume	M/s. Colorshine Coated Pvt. Ltd.,
12	Galvalume sheet – Cladding sheet		
13	PVC doors & Frames	Rajshri Plasti Wood, Qute Extrusions	M/s Rajshri Plasti Wood M/s Qute Extrusions (P) Ltd.
14	UPVC doors & Frames		
15	PVC & UPVC windows		
16	WPC Doors & Frame	Rajshri Plasti Wood	M/s Rajshri Plasti Wood
17	Electromagnetic Bulk Flow Meter	Pride Controls & Systems	M/s Pride Controls & Systems Pvt. Ltd.
18	Decorative Lights & Fixtures, Decorative Poles	VAK Lighting	M/s VAK Lighting India Pvt. Ltd.
19	LED Lights	GM Modular	M/s GM Modular Pvt. Ltd.
20	Fixtures (Indoor, Outdoor – all types and variants)		
21	Wires – FR/FRLS/FRLS OH		
22	Fans – BLDC, Ceiling Mounted, Table/Wall Mounted, Exhaust Fans		

Note: In case make of any equipment or material is not specified in the NIT, the decision of the Puducherry Schedule of Rates Standing Committee in this regard will be final.

1. Equivalent material and finished of any other specialized make may be used on written request of the contractor, in case of unavoidable circumstance and also if it is established that the brands specified above are not available in the market, after written approval of the alternate brand by the Puducherry Schedule of Rates Standing Committee. This substitution shall be subject to cost adjustment in case the substituting brands is available at cheaper rates in market than those mentioned herein above.

2. In addition, above brands wherever applicable, should have valid and active BIS certificate on the date of supply for the work.

3. Other brands not included in the above list but having BIS certificate on the date of supply for the work shall only be allowed against note (1) above.

Equivalent materials and finished of any other specialized make may be used, in case it is established that the brands specified above are not available in the market but only after approval of the alternate brand by the Puducherry Schedule of Rates Standing Committee.

GENERAL TERMS AND CONDITIONS APPLICABLE FOR ALL Electrical & Mechanical Components

1. The rates quoted by the tenderer, shall be firm and inclusive of all taxes (including GST-works contract which is 18% as on date, & labour, cess1% and Income Tax as applicable), duties, levies, octroi etc. and all charges for packing forwarding, insurance, freight and delivery, installation, testing, commissioning etc.at site including temporary construction of storage, risks, Overhead charges, general liabilities/obligations and clearance from CEA/ Lift Inspectorate/ Fire department etc. as required.
2. The department will not issue Octroi exemption certificate.
3. The contractor has to carry out maintenance as per manufacturer's standards for a period of 12 months from the date of handing over. Nothing extra shall be paid on this account.
4. All equipment's shall be guaranteed for a period of 12months, from the date of taking over the installation by the department, against unsatisfactory performance and/or break down due to defective design, workmanship or material. The equipment's or components, or any part thereof, so found defective during guarantee period shall be forthwith repaired or replaced free of cost, to the satisfaction of the Engineer-in Charge. In case it is felt by the departmentthat undue delay is being caused by the contractor in doing this, the same will be got done by the department at the risk and cost of the contractor. The decision of the Engineer-in- charge in this regard shall be final & building on the contractor.
5. The tender shall guarantee among other things, the following:
   a) Quality, strength and performance of the materials used as permanufacturers standards.
   b) Safe mechanical and electrical stress on all parts under all specifiedconditions of operation.
   c) Satisfactory operation during the maintenance period.
6. The contractor has to make its own arrangement for power supply required for execution of the work.
7. The contractor has to make its own arrangement for water supply required for execution of the work.

8. The acceptable makes of various equipment's/ components/ accessories have been indicated in "Acceptable Makes" appended with the tender documents.

   The tenderer shall work out the cost of the offer on this basis. Alternate makes arenot acceptable.

9. All major equipment's shall be offered for initial inspection at manufacturer's works. The contractor will intimate the date of testing of equipment's at the manufacturer's works before dispatch. The successful tenderer shall give advance notice of minimum two weeks regarding the dates proposed for such tests to the department's representative to facilitate his presence during testing.

10. The Engineer-in-charge or his representative may witness such testing. The cost of the Engineer's visit to the factory will be borne by the Department. Equipment's will be inspected at the manufacturer/ Authorized Dealers premises, before dispatch to the site by the contractor if so desired by the Engineer-in-charge. Engineer-in-charge at his discretion may waive of inspectionat factory /at the manufacturer's works before dispatch.

11. Copies of all documents of routine and type test certificates of the equipment, carried out a the Manufacturer's premises shall be furnished to the Engineer-in-charge and consignee.

12. After completion of the work in all respects the contractor shall offer the installation for testing and operation.

13. All works shall be carried out in accordance with relevant regulation, both statutory and those specified by the Indian Standards related to the works covered by this specification. In particular, the equipment and installation will comply with the following:

    i) Factories Act.

    ii) Indian Electricity Rules.

    iii) B.I.S. & other standards as applicable.

    iv) Workmen's compensation Act.

    v) Statutory norms prescribed by local bodies like CEA, Power Supply Co., etc.

14. After completion of the installation, the same shall be offered for inspection by the representatives of the Central Electricity Authority. The contractor will extend all help including test facilities to the representatives of CEA. The observations of CEA will be attended by the contractor. The installation will be commissioned only after getting clearance from CEA.

15. Nothing in this specification shall be construed to relieve the successful tenderer of his responsibility for the design, manufacture and installation of the equipment with all accessories in accordance with currently applicable statutory regulations and safety codes.

16. The successful tenderer shall at all times indemnify the department, consequent on this works contract. The successful tenderer shall be liable, in accordance with the Indian Law and Regulations for any accident occurring due to any cause and the contractor shall be responsible for any accident or damage incurred or claims arising there from during the period of erection, construction and putting into operation the equipment's and ancillary equipment under the supervision of the successful tenderer in so far as the latter is responsible. The successful tenderer shall also provide all insurance including third party insurance as may be necessary to cover the risk. No extra payment would be made to the successful tenderer on account of the above.

17. No tools and tackles either for unloading or for shifting the equipment's for erection purposes would be made available by the department. The successful tenderer shall make his own arrangement for all these facilities.

18 The successful tenderer shall co-ordinate with other contractors and agencies engaged in the construction of buildings, if any, and exchange freely all technical information so as to make the execution of this work/contract smooth. No remuneration should be claimed from the department for such technical cooperation. If any unreasonable hindrance is caused to other agencies and any completed portion of the work has to be dismantled and re-done for want of cooperation and coordination by the tenderer during the course of work, such expenditure incurred will be recovered from the successful tenderer if the restoration work to the original condition or specification of the dismantled portion of the work was not undertaken by the tenderer himself.

19. The work will be carried out with least disturbance during shifting & shut down taken in consultation with the client department.

20. All consignments are to be duly insured upto the destination from warehouse at the cost of the contractor. The insurance covers shall be valid till the equipmentis handed over duly installed, tested and commissioned.

21. The contractor shall have to produce all the relevant records to certify that the genuine equipment's from the manufacturers has been supplied and erected.

22. This shall include cost of painting of the entire installation. The major equipment's like, L T panel, Transformers, DG set, lifts, HVAC equipment's, axial fans, pumps, cable trays etc. shall be factory final finish painted. The agency shall be required to do only touching to the damages caused to the painting during transportation, handling & installation at site, if there is no major damage to the painting. However hangers, supports etc. of cable tray etc. shall be painted with required shade including painting with two coats of anticorrosiveprimer paint at site.

23. The scope of works includes the on job technical training of two persons of Department at site. Nothing extra shall be payable on this account.

24. Sufficient trained and experienced staff shall be made available to meet any exigency of work during the guarantee period of one year from the handing over of the installation.

25. The maintenance, routine as well as preventive, for one year from the date of taking over the installation as per manufacturer's recommendation shall be carried out as per OEM standards.

26. Approval of drawings makes and models of equipment/materials for all E&M Components:

The agency shall submit drawings and details such as makes and models of the equipment's/materials offered by him along with specifications for all E&M components to the Engineer-in-charge of the work, before ordering the equipment/materials for approval of the department.

The Engineer-in-charge shall scrutinize the proposal and approve the makes and models which are acceptable as per the schedule, specifications, conditions of the agreement and inform the agency for procurement. The approving authority shall be technical sanctioning authority of E&M component.

. After approval of the equipment/materials by the department the agency shall procure the equipment/materials from the OEM/authorized distributor/dealer as the case maybe:

. Adequate care that only tested and genuine materials of proper quality are used in work shall be ensured by firm. The firm shall also ensure that:

Material will be ordered & delivered at site only with the prior approval of the department to ensure timely delivery. As and when the order is placed for the fittings/ fixtures, cables, switchgears, poles, other main items etc, its copy shall be endorsed to the Oulgaret Municipality Engineer-in-charge.

The contractor will submit makes & brands of electrical fittings wires & cables, conduits and switchgears, rising mains, poles , outdoor fittings etc. of preferred make list as per tender documents for approval of Engineer-In-Charge whose decision will be final in the matter.

The firm will be required to procure material directly from the manufacturer/ authorized dealers to ensure genuineness & quality and as per the approved makes only. Proof in this regard shall be submitted by the contractor if required by the department. Inspection at factory or at godown, as required, shall be arranged by the firm for a mutually agreed date.

Delivery of material shall be taken up only with the consent of department, after clearance of the material.

Department shall reserve the right to waive inspection in lieu of suitable test certificate, at its discretion.

All the materials to be supplied by the contractor shall be procured & brought to site as per requirement at site of work in consultation with department so that these materials are not damaged & their manufacturer‘s warrantee is not lost.

27. Safety Codes & Statutory Regulations:

Nothing in this specification shall be construed to relieve the successful tenderer of his responsibility for the design, manufacture and installation of the equipment with all accessories in accordance with currently applicable statutory regulations and safety codes. Successful tenderer shall arrange for compliance with statutory provisions of safety regulations and departmental requirements of safety codes in respect of labour employed on the work by the tenderer. Failure to provide such safety requirement would make the tenderer liable for penalty of Rs.1000/- for each default. In addition, the department will be at liberty to make arrangement for the safety requirements at the cost of tenderer and recover the cost thereof from him.

In respect of all labour employed directly or indirectly on the work for the performance of the of work, the contractor at his own expense, will arrange for the safety provisions as per the statutory provision, B.I.S. recommendations, factory act, workman's compensation act, PWD code and instructions issued from time to time.

Failure to provide such safety requirements would make the tenderer liable for penalty. In addition, the Engineer-in-charge shall be at liberty to make arrangements and provide facilities as aforesaid and recover the cost incurred thereon form the contractor.

The contractor shall provide necessary barriers, signals and other safety measures while executing the works wherever necessary so as to avoid accident. He shall also indemnify PWD against claims for compensation arising out of negligence in this respect. Contractor shall be liable, in accordance with the Indian law and Regulations for any accident occurring due to any cause. The department shall not be responsible for any accident occurred or damage incurred or claims arising there from during the execution of work. The contractor shall cover the risk. No extra payment would be made to the contractor due this.

UNDERTAKING LETTER FOR LED FITTINGS

We hereby agree that all the LED fittings supplied by us are guaranteed for five years including drivers from the date of handing over. In case of discontinuation of model and non-availability of spares, we will replace the fittings with equivalent/ high end model in case of manufacturing defect during the warranty period of 5 years.

For M/S .....,
.....

(Authorised signatory of Contractor)

LIST OF ACCEPTABLE MAKES OF MATERIALS
(IEI and Fans)

Sl. No.	*Material*	*Make*
1	Wires (PVC insulated copper conductor cable- FRLS-ISI marked)	Finolex/ Havells/ Polycab/ RR Kabel/ Anchor/ KEI
2	PVC Conduits (ISI marked)	Precision/ Polycab/ AKG/ Finolex/ BEC/ Anchor Panasonic/ Avon Plast/ Modi
3	Steel conduits (ISI marked)	BEC/ AKG/ NIC/ Steel Krafts/ Gupta/ Bharat Industries
4	MCB DB/ MCB enclosures/ Industrial sockets/ MCBs/ RCBOs/ RCCBs	Legrand/ Schneider Electric/ Siemens/ L&T/ ABB/ Eaton/ Hager
5	MCCBs	Legrand/ Schneider Electric/ L&T/ ABB/ Eaton/ Hager/ Siemens
6	TV and Telephone Cable	Finolex/ Havells/ Polycab/ RR Kabel/ Anchor/ KEI
7	Modular switch boxes/ switches/ sockets/ TV & Telephone outlets/cover plates and Accessories	Legrand/ Honeywell/ Schneider Electric / ABB
8	LED light fittings	Philips/ K-Lite/ Crompton/Bajaj
9	CCMS	Crompton/ K-Lite/L&T
10	BLDC Ceiling Fans	Orient/ Atomberg/ Anchor Panasonic
11	Rising mains (compact/air insulated/ sandwich type), tap off Boxes	L&T/ Legrand/ Schneider Electric/ ABB/ Siemens/ C&S
12	Cable Management System/ Floor raceways & Junction boxes	Legrand/ Honeywell/ Schneider Electric/ OBOBettermann
13	Street light pole	Chennai poles/ K-lite/ Bajaj/ Valmont
14	DWC Pipe	Gemini/ Rex/ Duraline
15	1.1 KV/ 11 KV XLPE insulated, PVC sheathed armoured/ unarmored Aluminium/ copper conductor UG cable.	Universal Cables (Unistar)/ RPG/ CCI/ Havells/ RR Kabel/ Finolex/ Gloster/ Polycab/ KEI/ KEC/ Anchor
16	Cable Compression Glands	Comet/ Dowells/ Jainson/ Raychem/ Gripwell/ Controlwell/ Braco
17	Cable lugs	Dowells/ Jaison/ Comet/ Prabath/ Zeeta/ Amiable/ Pioneer
18	GI Pipes	Jindal Star/ Jindal Hisar/ Jindal India/ Zenith Birla/TATA/ TNT/ Swastik/ SAIL

19	Multi function meter/ammeter/ voltmeter	Schneider Electric/ L&T/ Legrand/ Siemens/ Indotech/ Socomec/ Rishab Instruments/ AE/ Integra/ Secure/ Conzerv
20	Push buttons/ LED indicationlamps	L&T (ESBEE)/ ESSEN/ VAISHNO/ TEKNIC/ SIEMENS/ Schneider Electric/ BCH
21	Selector switches	BCH/ Rishabh/ Conzerv/ Kaycee/ AE
22	Current Transformers	AE/ Rishabh/ Meco/ Kappa
23	UPS	Numeric / Emerson / APC/ Eaton/ Socomec/ Consul Neowatt
24	Batteries for UPS	Exide/ Panasonic/ Amara Raja/ Tata/ HBL or as recommended by OEM of UPS
25	LT panels	Agencies/ Firms manufacturing as per IEC-61439- 1&2 Standards duly authenticated by CPRI/ ASTA/ ERDA
26	TMT bars	SAIL/TISCO/VIZAG/JSW/JINDAL
27	CEMENT	ACC/ ULTRATECH/ COROMANDAL/CHETTINADU/ DALMIA/ZUARI/JSW/J.K.CEMENTS/ AMBUJA CEMENT/ KONARK CEMENT/CENTUARY CEMENTS/ SHREE CEMENTS/RAMCO CEMENTS/ EMAMI CEMENTS.

NOTE:

1. The Puducherry Schedule of Rates Standing Committee reserves the right to add or delete any materials and makes / brands in the list of preferred makes of materials / brands.

2. Incase of non availability of the Makes & Models given above ThePuducherry Schedule of Rates Standing Committee shall decide the equivalent Make & Model which should be used and whose decision will be conveyed in writing and shall be final and binding on the contractor.

PROFORMA OF SCHEDULES
SCHEDULE – A
SCHEDULE OF QUANTITIES

Name of Work: Improvements to the link road from ECR to 12th Street - I Cross extension at Krishna Nagar in Kamaraj Nagar Constituency, Puducherry.

Name of Department Oulgaret Municipality

Sl.	PSR Code No./Description of Items.	**Quantity**	**Modified Rate**	**Unit**	**Amount**
1.	Code No. 2.8.1 Earthwork in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5m 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 per direction of Engineer-in-charge , within a lead of 50m - all kinds of soil	79.00 Cum	272.13	1Cum (One Cubic metre)	21,498/-
2.	Code No. 4.1.2 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plinth level - 1:1.5:3 (1 cement : 1.5 fine aggregate : 3 graded stone aggregate 20mm nominal size).	6.30 Cum	7849.34	1Cum (One Cubic metre)	49,451/-
3 .	Code No. 4.1.5 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plinth level - 1:3:6 (1 cement : 3 fine aggregate : 6 graded stone aggregate 20mm nominal size)	49.00 Cum	6817.30	1Cum (One Cubic metre)	3,34,048/-
4 .	Code No. 4.1.10 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plinth level - 1:5:10 (1 cement : 5 fine aggregate : 10 graded stone aggregate 40mm nominal size)	11.00 Cum	6075.30	1Cum (One Cubic metre)	66,828/-

5.	Code No.4.3.1 Centring and shuttering including strutting, propping etc. and removal of form work for - foundations, footings, bases for columns.	63.00 Sqm	409.56	1Sqm (One Square metre)	25,802/-
6 .	Code No.4.3.2 Centring and shuttering including strutting , propping etc. and removal of form work for - retaining walls, return walls, walls (any thickness) including attached pilasters, buttresses, plinth and string courses fillets, kerbs and steps etc	242.00 Sqm	847.05	1Sqm (One Square metre)	2,04,986/-
7.	Code No. 10.25.2 Steel work welded in built up sections / framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required - in gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	488.00 Kg.	167.67	1Kg. (One Kilogram)	81,823/-
8.	Code No. 11.3.1 Cement concrete flooring 1:2:4 (1 cement : 2 fine aggregate : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc .complete - 40mm thick with 20mm nominal size stone aggregate	48.00 Sqm	586.09	1Sqm (One Square metre)	28,132/-
9.	Code No. 13.16.1 6mm cement plaster of mix 1:3 (1 cement : 3 fine aggregate)	359.00 Sqm	275.62	1Sqm (One Square metre)	98,948/-
10.	Code No. 4.1A.1 Construction of granular sub-base by providing close graded material, mixing in a mechanical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layer with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per clause 401 of MoRTH specification, 4th Revision - by plant mix method - for grading I material.	91.00 Cum	1641.67	1Cum (One Cubic metre)	1,49,392/-

11.	Code No. 5.5 Providing, laying and rolling of built-up spray grout layer over prepared base consisting of a two layer composite construction of compacted crushed coarse aggregates using motor grader for aggregates. Key stone chips spreader may be used with application of bituminous binder after each layer and with key aggregates placed on top of the second layer to serve as a base conforming to the line, grades and cross-section specified, the compacted layer thickness being 75mm. (As per MORTH specification, 4th Revision)	1235.00 Sqm	326.94	1Sqm (One Square metre)	4,03,771/-
12.	Code No. 6.1.MO Cleaning the existing W.B.M. road surface including removing of binding material and other foreign matter with wire brushes and small picks, sweeping with brooms or soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment. As per clause no 502.4.2 and 503.3.1 of MOST specification.	909.00 Sqm	43.31	1Sqm (One Square metre)	39,369/-
13.	Code No. 6.2.MO Cleaning of the existing black topped surfaces with brooms, soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment. As per clause no 503.3.1 of MOST specification.	1235.00 Sqm	10.82	1Sqm (One Square metre)	13,363/-
14.	Code No. 6.5E.1.MO Providing and applying tackcoat on the prepared surface, heating bitumen in boiler and spraying the bitumen with sprayset fitted on bitumen boiler - on black topped surface bitumen @ 5kg/10sqm.	1235.00 Sqm	33.95	1Sqm (One Square metre)	41,928/-
15.	Code No. 6.5F.1.MO Providing and applying tack coat on the prepared surface, heating bitumen in boiler and spraying the bitumen with sprayset fitted on bitumen boiler - on granular base such as WBM and WMM surfaces not bitumen primed. Rate of application 10kg/10sqm	909.00 Sqm	67.91	1Sqm (One Square metre)	61,730/-

16.	Code No. 6.11B.MO Providing and laying open graded premix carpet 20mm thick on prepared surface in a single course as wearing course composed of specified size of stone aggregates premix with a bituminous binder in mini hot mix plant 6 to 10 tonne laying manually and rolling with power roller 8 to 10 tonne but excluding cost of pimer/tack coat. As per clause no 509 of MOST specification.	1235.00 Sqm	193.85	1Sqm (One Square metre)	2,39,405/-
17.	Code No. 6.17.MO Providing and applying premixed seal coat type `B' comprising of thin application of fine aggregate premix with bitumen binder in mini hot mix plant, carriage manually of mixed material and laying and rolling with power roller 8 to 10 tonne. As per clause no 513 of MOST specification.	1235.00 Sqm	73.98	1Sqm (One Square metre)	91,365/-
				Total Rs.	**19,51,839/-**

Certified that the NIT contains 1 to 130 Pages.

*Certified that the NIT Contains 17 **i**tems in the above Schedule of Quantities.*