

Municipal Corporation Gurgaon



TENDER

and

CONTRACT DOCUMENT

**For Procurement of Civil/Mechanical/Electrical Works under Local
Competitive Bidding Procedure.**

**Name of Work: Construction of (Civil work,
Plumbing work, Electrical work) Multi purpose
hall in village Gadoli Khurd ward no. 24 under
MCG.**

Name of Agency:

Agreement No. :

-Sd-

Signature of Dy. Supdt.

Tender Notice No

DETAIL NOTICE INVITING TENDER

On behalf of Commissioner, Municipal Corporation Gurugram, Online bids are hereby invited on prescribed forms from registered contractors with Municipal Corporation Gurugram & other State Govt. / Semi Govt. Corporations/ Board of State of Haryana for similar nature for the following works:

E-Tender is invited for below mentioned Work in single stage two cover system i.e. Request for Pre-Qualification/Technical Bid (online Bid under PQQ/ Technical Envelope) and Request for Financial Bid (comprising of price bid Proposal under online available Commercial Envelope):-

Sr. No	Description of work / Items	DNIT Amount In lakh.	EMD to be deposited by Bidder	Tender Document Fee & eService Fee (Rs.)	Start Date & Time of Bid Preparation & Submission	Expiry Date & Time of Bid of EMD Submission	Expiry Date & Time of Bid Preparation & Submission
1.	Construction of (Civil work, Plumbing work, Electrical work) Multi purpose hall in village Gadoli Khurd ward no. 24 under MCG.	17828117/-	357000/-	16180/-	09-05-2022 13:00 Hrs	30-05-2022 12:00 Hrs	30-05-2022 12:00 Hrs

1. **Cement and steel will be used as per brands approved in HSR.**
2. **Defect Liability Periods of 2 year with maintenance by agency.**
3. **Experience :**
 - (i) **Experience of having successfully completed similar works i.e. "Construction of public building like Community Center, Chaupal, School, Hospital, Dispensary and any other RCC frame structure building." of any Govt \ semi Government \ PSU \ Board & Corporation during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following:**
 - (a) **Three similar completed works costing not less than the amount equal to 40% of the estimated cost. Or**
 - (b) **Two similar completed works costing not less than the amount equal to 50% of the estimated cost. Or**
 - (c) **One similar completed works costing not less than the amount equal to 80% of the estimated cost.**
 - (ii) **Cement (OPC-43 Grade Cement): In case contractor is allowed to use PPC Cement, arrange by himself deduction a 25/- per bag of 50 kg cement will be made from the bills of agency.**
 - (iii) **Steel (Fe-500, TMT Steel Bars): (i) The revised premia are based on Fe-500 TMT steel Bars of the company's TISCO, SAIL, RINL or IISCO.**

(ii) In case steel is to be arranged by the agency and agency is allowed to use Fe-500 TMT steel bars of companies other than above but ISI marked the deduction @ Rs. 6000/- per MT will made from the bill of agency.

4. **Annual Turnover:** Average annual financial turnover during the last 3 year, ending 31st march of the previous financial year should be at least 30% of the estimated cost.
5. In case the rates received in financial bids received on lower side then additional performance security shall have to be deposited in the following manner:-
 - I. Upto 10% below tender value - 0.5% for each 1% below tender value.
 - II. For more than 10% below tender value - 3% + 1% for each 1% after 10% below tender value.
6. That after opening of technical bids, no participating bidders will be allowed to withdraw online bids, if at any stage, it has been found that any bid has been got withdrawn without technical evaluation or without any reason, such agencies will be debarred for tendering in future.
7. The material recovered from site during execution will be the property of MCG and the recovery of the same will be made from the bill of the agency as per market rate.
8. There is a Provision of 3% the performance security of the agreement/awarded amount.
9. Cont./ Agency/will submitted online scanned copy of Cont/firm/Registration Certificate, Pan Number, GST No.
10. If the agency is not having ESI & EPF No. then he has to submit an undertaking saying that he is not covered under ESI & EPF and if he deployed more manpower, in that condition, he will submit ESI & EPF No. & necessary returns as per law.
11. The contractors/firm/agency shall have to submit an affidavit of present date to the effect that he has no relation or connection with firm contractor blacklisted by any government department municipal corporation/council at the time of Online Bid Submission.
12. The Contractor/ Agency have to upload this DNIT after sign on all pages of this that he agree to work on these conditions.
13. Bidder should submit the banker certificate (Bank Solvency) up to estimated amount of tender work.
14. Bidder should submit the annual turnover of last three years statement attested by C.A. on his letter head confirming annual turnover for each of the last three years with UDIN number.
15. The Contractor/ Agency shall not be in good relation with Municipal Employees, members of MC and the contractors/firm/agency shall have to submit an affidavit of present date the to this effect to MCG.
16. All uploaded documents should be self attested with stamped.
17. Bidder should submit receipt of latest TDS return attested by C.A.
18. The C&D waste generate, if any will be disposed off by the Contractor/ Agency at the C&D Plant situated at Basai.
19. Only treated water from mini STP, micro STP or from main STP will be used in the construction work. The successful bidder shall have to submit certificate regarding use of treated water in the construction work.

- 20.Valid enlistment.**
- 21.Earnest Money**
- 22.GST, PAN No.**
- 23.All Condition as per tender Documents.**
- 24.The period of bid capacity is 120 Days.**

Under this process, the Pre-qualification/ Technical online bid Application as well as online Price Bid shall be invited at single stage under two covers i.e. PQQ/Technical & Commercial Envelope. Eligibility and qualification of the Applicant will be first examined based on the details submitted online under first cover (PQQ or Technical) with respect to eligibility and qualification criteria prescribed in this Tender document. The Price Bid under the second cover shall be opened for only those Applicants whose PQQ/ Technical Applications are responsive to eligibility and qualifications requirements as per Tender document.

Intending bidders will be mandatorily required to Demand draft (create user account) on the website <https://etenders.hry.nic.in> to be eligible to participate in the e-Tender.

The interested bidders shall have to pay mandatorily e-Service fee (under document fee – Non refundable) of Rs. 16180/- (Rupee Sixteen Thousand One Hundred Eighty Only) offline in form of Demand draft in favour of Commissioner, Municipal Corporation Gurugram.

The Bidders can submit their tender documents (Online) as per the dates mentioned in the key dates:-

Key Dates

Sr. No.	Department Stage	Bidder's Stage	Start date and time	Expiry date and time
1		Tender Document Download and Bid Preparation/Submission	09-05-2022 13:00 Hrs	30-05-2022 12:00 Hrs

Important Note:

- 1) The Applicants/bidders have to complete 'Application / Bid Preparation & Submission' stage on scheduled time as mentioned above. If any Applicant / bidder failed to complete his / her aforesaid stage in the stipulated online time schedule for this stage, his / her Application/bid status will be considered as 'Applications / bids not submitted'.

The bids shall be submitted online in two separate envelopes:

Envelope 1: Technical Bid

The bidders shall upload the required eligibility & technical documents online in the Technical Bid.

Envelope 2: Commercial Bid

The bidders shall quote the prices in price bid format under Commercial Bid.

Instructions to bidder on Electronic Tendering System

These conditions will over-rule the conditions stated in the tender documents, wherever relevant and applicable.

1. Registration of bidders on e-Procurement Portal:-

All the bidders intending to participate in the tenders process online are required to get registered on the centralized e - Procurement Portal i.e. <https://etenders.hry.nic.in>
Please visit the website for more details.

2. Obtaining a Digital Certificate:

2.1 The Bids submitted online should be encrypted and signed electronically with a Digital Certificate to establish the identity of the bidder bidding online. These Digital Certificates are issued by an Approved Certifying Authority, by the Controller of Certifying Authorities, Government of India.

2.2 A Digital Certificate is issued upon receipt of mandatory identity (i.e. Applicant's PAN Card) and Address proofs and verification form duly attested by the Bank Manager / Post Master / Gazetted Officer. Only upon the receipt of the required documents, a digital certificate can be issued. For more details please visit the website – <https://haryanaeprocurement.gov.in>.

2.3 The bidders may obtain Class-II or III digital signature certificate from any Certifying Authority or Sub-certifying Authority authorized by the Controller of Certifying Authorities or may obtain information and application format and documents required for the issue of digital certificate from.

2.4 The bidder must ensure that he/she comply by the online available important guidelines at the portal <https://haryanaeprocurement.gov.in> for Digital Signature Certificate (DSC) including the e-Token carrying DSCs.

2.5 Bid for a particular tender must be submitted online using the digital certificate (Encryption & Signing), which is used to encrypt and sign the data during the stage of bid preparation. In case, during the process of a particular tender, the user loses his digital

certificate (due to virus attack, hardware problem, operating system or any other problem) he will not be able to submit the bid online. Hence, the users are advised **to keep a backup of the certificate** and also keep the copies at safe place under proper security (for its use in case of emergencies).

2.6 In case of online tendering, if the digital certificate issued to the authorized user of a firm is used for signing and submitting a bid, it will be considered equivalent to a no-objection certificate /power of attorney / lawful authorization to that User. The firm has to authorize a specific individual through an authorization certificate signed by all partners to use the digital certificate as per Indian Information Technology Act 2000. Unless the certificates are revoked, it will be assumed to represent adequate authority of the user to bid on behalf of the firm in the department tenders as per Information Technology Act 2000. The digital signature of this authorized user will be binding on the firm.

2.7 In case of any change in the authorization, it shall be the responsibility of management / partners of the firm to inform the certifying authority about the change and to obtain the digital signatures of the new person / user on behalf of the firm / company. The procedure for application of a digital certificate however will remain the same for the new user.

2.8 The same procedure holds true for the authorized users in a private/Public limited company. In this case, the authorization certificate will have to be signed by the directors of the company.

Online Viewing of Detailed Notice Inviting Tenders:

The bidders can view the detailed N.I.T and the time schedule (Key Dates) for all the tenders floated through the single portal eProcurement system on the Home Page at <https://etenders.hry.nic.in>

5 Download of Tender Documents:

The tender documents can be downloaded free of cost from the <https://etenders.hry.nic.in>

6 Key Dates:

The bidders are strictly advised to follow dates and times as indicated in the online Notice Inviting Tenders. The date and time shall be binding on all bidders. All online activities are time tracked and the system enforces time locks that ensure that no activity or transaction can take place outside the start and end dates and the time of the stage as defined in the online Notice Inviting Tenders.

7 Online Payment of Tender Document Fee, eService fee , EMD fees & Bid Preparation & Submission (PQQ/ Technical & Commercial/Price Bid):

i) Online Payment of Tender Document Fee + e-Service fee:

The offline payment for Tender document fee, eService Fee & EMD can be done in form of Demand draft.

ii) PREPARATION & SUBMISSION Of online APPLICATIONS/BIDS:

Detailed Tender documents may be downloaded from e-procurement website (<https://etenders.hry.nic.in>) and tender mandatorily be submitted online.

Scan copy of Documents to be submitted/uploaded for Prequalification or Technical bid under online PQQ/ Technical Envelope: The required documents (refer to DNIT) shall be prepared and scanned in different file formats (in PDF /JPEG/MS WORD format such that file and uploaded during the on-line submission of PQQ or Technical Envelope.

FINANCIAL or Price Bid PROPOSAL shall be submitted mandatorily online under Commercial Envelope and original not to be submitted manually)

Office Timings of Help-desk support :- The details are mentioned on Web site.

GENERAL NOTES (A)

1. This contract schedule of rates is an extract of the relevant items from the Haryana PWD schedule of rates, 2021 and is to be read with another schedule attached hereto namely as the " SCHEDULE OF CEILING PREMIA ". For the purpose of cross reference against each items the chapter no and the item no has been indicated.
2. The above rates are for the complete items including cost of all materials, labour, tools and plants etc. unless otherwise specified.
3. All clauses and notes L given in the Haryana PWD schedule of rates 2021 with upto the date of tender shall be applicable on all above items where ever necessary.
4. The description rates, units etc. of the above items shall be corrected as per Haryana PWD schedule of rates, 2021 in case of any error or omission.
5. Nothing shall be paid for unforeseen delays on account of non-availability of any kind of material, drawing or design.
6. Nothing shall be paid for the damage done by rain, floor or any other act of God.
7. The whole work shall be carried out strictly in accordance with the Haryana PWD specifications 1990 edition with upto date correction slips.
8. In case contract schedule of rates. Only essential portion or items has been written it will deem to cover the entire items fully described in Haryana PWD schedule of rates subject to the foot notes and notes given in the Haryana PWD schedule of rates 2021.
9. The work shall be considered to be situated within the Municipal limits for all purposes.
10. No claims will be entertained from the contractor in case any mistake in description, rates or units accrue in any of the items taken in the schedule, while composing this schedule or on account of typing or comparison or over sighting. If there is any mistake, the same shall be rectifiable at any stage as per Haryana PWD schedule or rates, 2021 by the Engineer-in-charge along with the amendments of the same received from time to time.
11. Approximate quantities have been given in the contract schedule of rates and these can vary at the time of execution of the work. The payment will however be made according to the actual work done by the contractor and accepted by the Department.

12. The amount of work can be increased or decreased. The contractor will have no claims on this account.
13. The items given in the contract schedule of rates can be changed by the Engineer-in-charge and its execution will be handing over the contractor.
14. No claim on account of fluctuated in prices due to any reason what so ever will be considered.
15. The list of ceiling premia admissible on various items contained in various chapter of Haryana PWD schedule of rates 2021 is attached with the notice inviting tender and shall from the part and parallel of this contract schedule of rates. All those items which do not fall within Haryana PWD schedule of rates, 2021 the ceiling premia shall be "ZERO".
16. Payment only made to the contractor for the work actual done at site and accepted by the department.
17. All the items in the contract schedule of rates are subject to the foot notes as given in the Haryana PWD schedule of rates, 2021 regarding these items.
18. The department reserve the option to take away any item of work or any part there of at any item during the currency of contractor and re-allot to another contractor with due notice to the contractor without liability of compensation.
19. The item of HSR 2021 is described very briefly but the description would mean the complete description in aforesaid PWD schedule of rates, 2021 regarding these items with upto date amendments.
20. All the pages of the tender for must be signed by the tendered before submitting the tender failing which the tender shall be treated as invalid.
21. The validity of the tender shall be considered as three months and no lower limit even if quoted by the contractor shall be considered.
22. In the DNIT CSR means CONTRACT SCHEDULE OF RATES.
23. If water connection is given to the contractor by the department ½% (Half percent) charges shall be deducted from the bill of the work done. However, material required for water connection will be arranged by the contractor.
24. The work will be carried out according to IRC, MORT & H / PWD specification latest edition which will form a part and parcel of this contract schedule of rates.
25. Nothing extra shall be paid for any type of jungle clearance which the tenderer may have to carry out.

26. If any damaged is done by the contractor to any existing work during the coarse of excavation of the work. This shall have to be made good by him at his own cost.
27. The shall take all the precaution to avoid the accidents by providing and maintaining necessary caution boards, day and night speed limit breakers, red flags and red light and providing barriers as necessary at either end of the location. All these arrangements will be considered as incidental to the work and contractor responsibility and nothing shall be payable to him in this respects.
28. The contractor shall make his own arrangement for the electric connection of required and make necessary payment directly to the department concerned.
29. The work will be open to third party inspection arranged by the department and contractor will have no claims in this regard. The charges for third party inspection will be born by the department.
30. Any item of work not provided in the contract schedule of rates but require to be executed, will be at the Haryana PWD schedule of rates, 2021 together with the ceiling premium exhibited in the NIT for various chapters where the item exists in the Haryana PWD schedule of rates 2021 subject to premium or discount tendered by the contractor. In case of non scheduled item, this will be governed by clause 12 of the contract agreement.
31. MCG has right to negotiate the rates to explore lower rates if required.

**Executive Engineer-I
Municipal Corporation
Gurgaon.**

TECHNICAL CONDITIONS (B)

1. The ISI marked OPC 43 Grade; Cement will be used and arranged by the Contractor/ Agency at his own cost.
2. The work will be open for third party inspection for quantity and quality as per prescribed relevant. IS specification as directed by the Engineer in charge.
3. The design mix to be used will be going approved by the agency from Engineer-in-charge at least 15 day in advance. The samples will be given by the agency free of cost.
4. Contractor shall provide suitable measuring arrangement and leveling instruments latest quality approved by Engineer-in-charge at the site of work.
5. No extra payment on account of quality control measures shall be paid to the contractor.
6. PERIOD OF DEFECTS LIABILITY. The contractor shall be responsible to make good and defect which may develop or may be noticed during period of one year from the certified date of completion and which is attributable to the contractor. All notices of such defects shall be given to the contractor promptly. In case the contractor fails to make good the defects, the Engineer-in -Charge may employ other means to make good such defects and all expenses consequent and incidental there to shall be borne by the contractor.
7. The contractor shall not occupy or obstruct by his operations more than $\frac{1}{2}$ of the width of any road or street. However, in special conditions, the contractor shall obtain the consent of the Engineer-in-charge in writing before closing any road for vehicular traffic and footpath shall be kept clear at all times. The contractor shall make all the precaution to avoid any accidents and for proper guidance of the traffic by providing necessary barriers, reflective cautionary sign/ signal, speed limit boards, red and green flags, electric light focus type at night, with sufficient number of chowkidars and other measures while work is in progress or blocking the road wherever otherwise necessary. The material and the machinery shall be stocked/ placed at the site of work in such a way that there will be no obstruction to traffic and inconvenience to public. No claim shall be entertained on account of such faulty arrangement made by the contractor. The contractor shall be fully responsible for all accidents caused by the negligence of such precaution. In case the contractor fails to comply with the afore said

arrangements the same shall be made by the Engineer-in-charge at the risk and cost of the contractor.

8. If directed by the Engineer-in-charge in writing the work shall be done during night time for which nothing extra shall be paid to the contractor.
9. Before tendering the tender shall inspect the site of work and shall fully acquaint/satisfy himself about the condition with regard to site, nature of soil, availability of material, suitable location for construction of god owns stores and labour huts, the extent of leads and lifts is involved in the work (over the entire duration of contract) including local required for a satisfactory execution of work. This rate should take into consideration all such factors and contingencies. No claim what so ever shall be entertained by the department on this account.
10. Only actual quantities of work completed by the Engineer-in-charge shall be paid for if any damage in done by the contractor to any existing work during the course of execution of work, this shall have to be made good by him at his own cost.
11. At least one authorized representative of the contractor should always be available at site of work to take instruction from departmental officers and ensure proper execution of work should be done in the absence of the contractor.
12. The contactor shall be required to provide all such materials/ equipment's at site to conduct field tests and to ensure that the quality of aggregate shall be according to the prescribed specification and no payment for material required for samples for such tests shall be made to him. In case the material is not found up to mark, the same will be rejected.
13. For cement, bitumen, steel and similar other material there essential tests are to be carried out at the manufacturer's plants or at laboratories other then the site laboratory, the cost of samples, testing and furnishing of test certificates to the Engineer.
14. Nothing shall be paid for making and maintenance of service road required for the transportation of the material.
15. Nothing shall be paid for making and maintenance of service road required for the transportation of the material.
16. If any damage is done by the contractor to any existing work during the course of excavation of the work this shall have to be made good by him at any cost.
17. Only actual quantities of work completed and accepted by the Engineer-in-charge shall be paid for.

18. The contractor shall make his own arrangement for obtaining the electric connection of required and make necessary payment directly to the department concerned.
19. Irrespective of what is stated in para 6 of the preface of Hr. PWD/ schedules of rates 2021 general rules no carriage of cement, steel and bricks aggregate bitumen or any other type of material shall be admissible irrespective of lead involved.
20. No payment will be made to the contractor for damage caused by the rains or other natural claimants during the execution of the work and no claim on this account will be entertained.
21. This security shall be refunded after 3(three) months of completion of work but the contractor/ Agency shall submit deposit at call in the shape of bank Guarantee of equal amount for balance 09(nine) months in favour of Engineer-in-charge before release of security.
22. The aggregate & fine aggregate used shall be as per PWD/ Most specification and the water shall be as per IS 456 2000.
23. All aggregates including water etc. and furnished products in RMC will be tested as per relevant ISI standard.
24. The Fly ash may be used in mix designed for M-40 grade to max extent of 10% and design be got approved by the NCCB/CRRI with minimum cement content 420 Kg of 43 grade per cubic meter.
25. Any item of work not provided in the contract schedule of rates but require to be executed, will be paid at the Haryana PWD schedule of rates, 1998 together with the ceiling premium exhibited in the NIT for various chapter where the item exists in the Haryana PWD schedule of rates 2021 subject to premium or discount tendered by the contractor. In case of non schedule items, this will be governed by class 12 of the contract agreement.
26. Municipal Corporation Gurgaon has right has to negotiate the rates to explore lower rates if required.
27. Before laying any construction layer GSB, sub grade or base course, earth work on berms, if it is to be done by the agency against this agreement, should be completed in all respect simultaneously. Before taking work of any next layer, earth work on berms should be completed payment of any layer will be released only when on berms should be completed payment of any layer will be released only when earth work on berms are completed

Executive Engineer-I

SPECIAL CONDITIONS (C)

1. Wherever in the description of the item in the bill of the quantities the specification clause No. of MORT&H is missing, the same shall be carried out strictly in accordance with the MORT&H (Road Wing) and latest revision/ amendment as applicable.
2. The contractor shall clear the site of work simultaneously as the work proceeds failing which the same shall be got cleared by the Engineer-in-charge at the risk and cost of the contractor.
3. Collection of material at site for the proper execution of work as per specification shall include all leads and lifts. The percentage rates quoted by the contractor shall hold good irrespective of the quarry/ sources from which materials are brought so long it conform to the specification. Clause/ change of any quarry/ source shall not entitle the contractor to claim any revision in rates.
4. The contractor shall store all materials in proper manner so as to avoid contamination, deterioration and any accidents. He shall not store or keep any materials are to be stored shall be subject to the approval of the Engineer-in-charge. At the places where the materials are stored by the contractor he will make his own arrangements to clear the place within such time as may be instructed by the Engineer-in-charge or the same shall be got clear by the Engineer-in-charge at the risk and cost of the contractor.

5. No compensation for any damage caused to the work/ materials by him, folds or other natural calamities shall be paid to the contractor. The contractor shall make good all such damages at his own cost as per directions of the Engineer-in-charge.
6. The contractor shall obtain prior approval of the Engineer-in-charge before installation of water and power system, electrical and mechanical equipment and plants and all temporary construction etc. at site of work. On completion of work, the contractor be made good the ground at his own cost as per directions of the Engineer-in-charge, failing which the same shall be made good by the Engineer-in-charge at the risk and cost of the contractor.
7. The contractor shall make his own arrangement for obtaining electrical connection, if required and make necessary payment directly to the department concerned.
8. The contractor shall not occupy or obstruct by his operation more than $\frac{1}{2}$ of the width of any road or street. However, in special conditions, the contractor shall obtain the consent of the Engineer-in-charge in writing before closing any road for vehicular traffic and foot path shall be kept clear at all times. The contractor shall make all the precaution to avoid any accidents and for proper guidance of the traffic by providing necessary barriers, reflective cautionary sign/ signal, speed limit boards, red and green flags, electric light focus type at night, with sufficient number of chowkidars and other measures while work is in progress or blocking the road wherever otherwise necessary. The material and the machinery shall be stocked/ placed at the site of work in such a way that there will be no obstruction to traffic and inconvenience to public. No claim shall be entertained on account of such faulty arrangement made by the contractor. The contractor shall be fully responsible for all accidents caused by the negligence of such precaution. In case the contractor fails to comply with the aforesaid arrangements the same shall be made by the Engineer-in-charge at the risk and cost of the contractor.
9. If directed by the Engineer-in-charge in writing the work shall be done during night time for which nothing extra shall be paid to the contractor.
10. The contractor shall make arrangement at his own cost for at least two numbers of modern leveling instruments (wild type) for the purpose of carrying leveling operation failing which the same shall be arranged by the Engineer-in-charge at his risk and cost.
11. No work should be done in the absence of the contractor on his authorized representatives. A technician and surveyor will be provided/ made available for all working time by the contractor for carrying out quality control tests and surveying. Nothing extra will be paid on this account.

12. Nothing will be paid unforeseen delays on account of non-availability of any kind of material or drawing and design.
13. The contractor will be responsible for setting cut the work establishing benchmark, center line etc and will carry out all such works at his own cost.
14. Before start of the work, the contractor shall submit the program of execution of work, get it approved from Engineer-in-charge and strictly adhere to the same for timely completion of the project.
15. The contractor shall have to make approached to the site, if so required and keep them in good condition for transportation of labour and materials as well as inspection of work by Engineer-in-charge. Nothing extra shall be paid on this account.
16. The contractor shall bear all incidental charges for cartage, storage and safe custody of materials issued to him by the department if any or his own material.
17. The rate quoted by the agency/ contractor shall including the entire cost of royalty, Municipal tax, direct or indirect including all loading, unloading, carriage on Kacha/ Pacca bed or road and stacking including all labour for supply of material at the destination and nothing extra shall be paid. The contractor shall quote his accordingly.
18. The contractor will arrange and use its own all type of machinery and T&P incidental to all operation for the work. The rates to be quoted should be inclusive of the same.
19. The stacking will be done at hot mix plant site for various type of material in the sequence as approved by the Engineer-in-charge, which will have to be maintained.
20. The contractor shall remove all bituminous on kerbs and channels and all heaps of wasted mix from gully grating, bell mount and other installation at the end of the day work, failing which the same shall be done at his risk and cost.
21. In case of important roads where the intensity of traffic is high, the contractor shall be constructed by the Engineer-in-charge, restrict the work to non peak period as determined by the Engineer-in-charge. No claim/ compensation on account of the same shall be entertained.
22. Collection of material should be so planned that it is commensurate with physical progress.
23. The quality control for road work and materials will be exercised as per section 900 of MORT&H specification latest revision/ amendment and for determining the quality of bitumen used by extraction method as per procedure laid for doing such tests by IRC, the frequency of sampling will be:-

- a) MSS/ Pre Mix Carpet/ LBM & BC: One test per 50 meter cube and not less than two tests per day.
 - b) BM: One test per 100 meter cube and not less than two tests per day.
24. At the time of start of work, the contractor shall get a sample work done in presence of Engineer-in-charge who shall fix up the degree of compaction/ consolidation required for a particular item of work and conduct suitable tests at regular intervals to determine for the work done approaches the desired limit. In case tests reveal any deficiency, the contractor shall made good the same without extra payment or work will be rejected if not according to required specification.
 25. The contractor shall progress on different parts simultaneously to ensure completion of the road so that minimum breakage and repairs are involved.
 26. To arrive at the desired grading of materials for BM, the exact quantities of material of different gauges shall be determined and stacked on the basis of laboratory tests from time to time. The extra payment on this account worked not be admissible.
 27. To ensure quality of intermediate traction test check may be carried out and sample taken from materials. In case that is not found according to specification the work may be rejected. However, the engineer-in-charge if considered it expedient and in the interest of work, he may ask the contractor to supply the missing fraction up to quantity as determined by him separately, free of cost.
 28. Before tendering the tendered shall inspect the site of work and shall fully acquaint/satisfy himself about the condition with regard to site, nature of soil, availability of materials, suitable location for construction of godowns stores and labor huts, the extent of leads and lifts is involved in the work (over the entire duration of contract) including locals conditions, traffic restriction, obstructions and other conditions as required for a satisfactory execution of work. His rate should take into consideration all such factors and contingencies. No claim what so ever shall be entertained by the department on this account.
 29. Weather and seasonal limitation: The work of laying shall not be taken up during rainy or foggy weather or when base course is damp or wet or during dust storm or when atmospheric temperature is 10 degree C or less at site of work of particular reach.
 30. The rate quoted should include hire charges of land or purchase of land for installation of Ht Mix Plant etc.
 31. Only actual quantities of work completed and accepted by the Engineer-in-charge shall be paid for if any damage in done by the contractor to any existing work during the course of execution of work this shall have to be made good by him at his own cost.

32. Samples will also be got tested from CRRRI/ Shree Ram Test House/ IIT's or any other reputed test house & testing laboratory. Samples will be given by the agency free of cost and testing charges will be borne by the contractual agency.
33. Before start of the work contractor will get his machinery inspected and approved from the Engineer-in-charge of the work.
34. The agency to which the work is allotted will have to produce original vouchers for all quantities in lieu of purchase of bitumen from refinery steel, cement, and bricks from the original manufacturer or other authorized dealers/distributors to the entire satisfaction of the Engineer-in-Charge for ascertaining the genuineness of material. Attested copy of voucher will have to be submitted along with bills
35. The documentary proof of procurement of bitumen from refinery as per requirement prescribed in the MORT&H specification/technical note of MORT&H and IRC special publication No. 53 from the reputed source and test result from CRRRI will be produced by the agency.
36. i) The contractor shall provide, install, maintain and operate at his own cost in good working condition a weigh bridge of suitable capacity at site of the hot mix plant under the direction of Engineer-in-charge or his representative.

(ii) Each truck before loading of the mix shall be weighted on the weight bridge and its weight shall be recorded in the measurement book under the signature of authorized representative of the contractor and of the Engineer.

(iii) The truck shall be again be weighed on the weight bridge after loading of the mix and its weight recorded as per prescribed Performa.

(iv) The volume shall then be worked out by dividing the weight of the mix laid on particular stretch of the road with average field density of the very particular stretch. For this purpose the average density for the stretch shall determine by the actual determination of field density by core cutter method. The test will be carried out at the rate of minimum of one test per 250 sqm area as prescribed in MORT&H specification.
37. Unloading of bitumen at plant site will be done in the presence of representative of Engineer-in-Charge. The day to day receipt and issue account of bitumen shall be maintained by the representative of Engineer and signed daily by the contractor or his authorized representative on the Performa appearing on subsequent pages.
38. The Hot Mix Plant will be so located subject to the approval of the Engineer-in-charge involving such lead in transportation of the mix so as to avoid its segregation and temperature drop beyond specified limits. The maximum lead should not be more than 25 km.

39. Checking of pilferage bitumen in road works:-

- (i) The data of each & every tanker of receipt of bitumen be intimated to the concerned Assistant Engineer at the time of its receipt ;
- (ii) Unloading of bitumen at plant site will be done in the presence of representative of Assistant Engineer. The day to day receipt and issue account of bitumen shall be maintained by the representative of Engineer and signed daily by the contractor or his authorized representative.
- (iii) The bitumen indents of refinery should be sent to concerned refinery for verification as many fake indents are also available in market.
- (iv) No contractual agency should be allowed to work from the same hot mix plant against two different contracts at one time. If he wants to start work on new project, he will have to stop the first work & then take permission from concerned Assistant Engineer. in writing intimating the balance bitumen available at plant site. No verbal permission will consider/allow.
- (v) An undertaking should be taken from the agency during the payment of every bill that :
 - He has actually purchased the bitumen as per it's enclosed as annexure He has used this bitumen on this work only.
 - He has not claimed its cost from any other division/office of anywhere else.
 - He owns full responsibility for the quality & quantity of bitumen and submission of data.
 -
- (vi) For controlling the quantity of mixed material the following procedure is adopted.
 - The contractor shall provide, install, maintain and operate at his own cost in good working condition a weigh bridge of suitable capacity at site of the mix plant under the direction of Engineer-in charge or his representative.
 - Each truck before loading of the mix shall be weighted on the Weight Bridge and its weight shall be recorded in the measurement book under the signature of authorized representative of the contractor and the Assistant Engineer Engineer.
 - The truck shall be again weighed on the weight bridge after loading of the mix and its weight recorded as per prescribed Performa.

40. Approximate quantities are given in the contractor schedule of rates and these can vary at the time of execution of the work, the payment will however be made according to the actual work done in the contractor.

41. All amendments issued in the Haryana P.W.D schedule of rates 2021 up till the date of opening the tender will be applicable on this contract schedule of rates.
42. No claim will be entertained by the department in case any omission in description, rates and unit occurred in any of the schedule on account of typing comparison of over writing there will be any such mistake will be rectify at any stage by the Engineer-In-Charge.
43. The contractor will make his own arrangement at his own cost for the diversion of the traffic and public movement for making the site clear from the obstructions for smooth cleaning operation.
44. The contractor may have its own assessment of site conditions before submitting the tenders. No claim of any account will be entertained at later stage after allotment of the work.
45. Any damage caused to the structure during construction operation shall be repaired by the contractor at his own cost and the Department shall not bear this cost of any stage.
46. The work will be carried out strictly in accordance with the PWD book of the specification 1990 addition which will for a part and parcel of the contract agreement.
47. In this contract schedule of item only essential portion of description of the item has been written but it will deem to cover the entire cost of described in the Haryana PWD schedule of rates 2021.
48. The Engineer-In-Charge shall be entitled or order work against any item of work shown in this contract schedule of rates herewith after called "The Schedule" to any extent and without any limitation what so ever required in his opinion for the proposed work irrespective of quantities are omitted at together the schedule and shown less or more than the work order to be carried out.

**Executive Engineer-I
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MAINTENANCE OF ROAD (D)

- a) The contractor will maintain the roads for period of one year from date of completion of roads. Maintenance will include repair of any potholes or depression or damage, which will be done by contractor at his own cost. The contractor will be bound to repair road cuts also for which he will be paid for and the contractor will be bound to repair the road cuts if any during mtc. Period. The contractor will be paid for cuts @425/- per sqm and bitumen will be issued free of cost to contractor. The contractor will be bound to repair the road cut within 2 days from its occurrence. The road cuts will be repaired by filling Yamuna sand in trenches, with three layers metal having compacted 9" thickness and 75 mm thick LBM, 25mm thick premix carpet with seal coat type 'B' proper compaction with suitable capacity of roller to entire satisfaction of the engineer-in-charge the bitumen issued for restoration of road cuts shall be 6.75 kg/sqm.
- b) If the contractor /agency fail to repair the road cut within two days of its occurrence then penalty amounting to Rs.500/-per cut per day will be levied on contractor.
- c) The contractor/agency will have to arrange the related material and required machinery for the repair of potholes and depression during the mtc. period at his own cost. Nothing extra will be paid on his account.
- d) Security amount deducted under clause-1 of agreement will be 5% of gross amount of work. This security amount will be refunded after successful completion of the mtc. period of one year.

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QUALITY CONTROL (E)

1. Identify defects: The engineers-in-charge or his representative shall check the contractor's any work and notify the contractor any defects that are found. Such checking shall not relieve the contractor/ contractor's responsibility/ responsibilities. The engineer-in-charge may instruct the contractor to search for defect and to uncover any work that the engineer-in-charge or his authorized representative considers may have a defect.
 - b) Correction of defects: The Engineers-in-charge shall give notice to the contractor of any defects before the end of defects liability period/ maintenance period which will be one year after completion. The defect liability period/ maintenance shall be extended as long as defects remain to be corrected. Every time notice of a defect is given, the contractor shall correct the notified defect within the limit of time specified by the Engineer-in-Charge's notice. If the contractor has not corrected a defect within the time specified in Engineer-in-charge's notice, the Engineer-in-charge will assess the cost of having the defect corrected and the contractor will pay the amount.
 - c) The contractor shall have to provide a field laboratory fully equipped at work site and at hot mix plant for conducting all the relevant tests mentioned in the MORTH&H specification subject to the approval of the Engineer-in-charge or his representative. The record of such tests is to be maintained in proper register duly signed by the contractor or his representative, which will become the property of Deptt. The contractor will bear all the running expenses for conducting such tests. All the tests will be carried in the presence of Engineer-in-charge or his authorized representative. All the entries are to be signed by the contractor and such authorized representative of Engineer-in-charge.
2. The quality control tests will be got done by department and the material for such tests will be supplied by the contractor free of cost. In case the material is not found upto the requirement, the same will be rejected. Cost of such tests will also be borne by contractual agency.
3. Various quality control operation will be maintained as per clause No. 901, 902, 903 of MORTH&H (Road wing) specification (IVth revision) of 2001/ latest edition.
4. Contractor shall provide suitable measuring arrangement and leveling instruments of latest quality approved by Engineer-in-charge at the site of work.
5. No extra payment on account of quality control measures shall be paid to the contractor.
6. The Engineer-in-charge at his discretion can get any type and nos. of tests carried out from any other approved laboratory for his satisfaction for which all the expenses incurred would be borne by the contractual agency. The results so obtained from the laboratory would be acceptable/ binding to the agency.

7. The riding quality of each and every reach will be strictly as per specifications.
8. Work will be also be opened to third party inspection also.
9. Tiles/RMC be procured from the approval sources only and invite of the same be submitted alongwith bill by the firm.

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Condition of NGT (F)

1. Contractor should strictly comply with the directions contained in the various orders of Tribunal as well as the MOEF Guidelines 2010 in relation to precautions required to be taken while carrying on construction
2. Contractor shall put tarpaulin on scaffolding around the area of construction and the building. No Person including contractor, owner can be permitted to store any construction material particularly sand on any part of the street, road in any colony.
3. The construction material of any kind that is stored in the site will be fully covered in all respects so that It does not disperse in the air in any form
4. All the construction material and debris shall be carried in the trucks or other vehicle which are fully covered and protected so as to ensure that the construction debris or the construction material does not get dispersed into the air or atmosphere, in any form whatsoever.
5. If any reason, owner or contractor is found to be violating any of the condition stated in this order or for their non compliance, such person, owner, contractor shall be liable to pay, compensation of Rs. 50,000/- for each default in relation to construction activity at its site and Rs. 5000/- for each violation during carriage and transportation of construction material, debris through trucks or other vehicle, in terms of section 15 of the NGT Act on the principal of polluter pay. Such action would be in addition not in derogation to the other action that the authority made take against such contractor, owner, person and transporter under the laws in force.
6. If construction is being carried out without taking the preventive and protective environment/ steps as stated in this order and MOEF guidelines, 2010, the State Government, SPCB and any officer of any department as aforestated shall be entitled to direct stoppage of work.
7. Compliance of the following instruction be ensured as per direction given by Hon'ble NGT vide order dated 26.11.2014 , 04.12.2014 & 19.01.2015
 - A. There should be no hot mixing on the road side. During construction and maintenance of road, it shall be also ensure that coal tar, bitumen and

asphalt is brought in molten condition and same is neither brunt nor fire is put to melt these substances on open roads.

- B. No Govt. authority, contractor, builders would be permitted to store and dump construction material or debris on the metalled road.
 - C. Such storage does not cause any obstruction to the free flow of traffic and/ or inconvenience to the pedestrians. Every builders, contractor or person shall ensure that the construction material is completely covered by tarpaulin. To ensure that no dust particles are permitted to pollute the air quality as a result of such storage.
 - D. The builder / contractor will be responsible and ensure that their activity does not cause any air pollution during course of the construction and / or storage of material or construction activity. Defaulters shall be liable to be prosecuted under the law in force.
 - E. The builder / contractor will be responsible and ensure that their activity does not cause any air pollution during course of the construction and / or storage of material or construction activity. Defaulters shall be liable to be prosecuted under the law in force.
 - F. The ground water shall not be used for purpose of construction of work in terms of order of Hon'ble High Court dated 16.07.2012 in CWP's No. 2..32 of 2008, 13594 of 2009 and 807 of 2012
8. Compliance of the following instruction be ensured as per direction given by Hon'ble NGT vide order dated 28.04.2015 in OA No. 21 of 2014 & O.A No. 95 of 2014
- I. All the direction contained in our order dated 04th Dec. 2014 shall continue to be in force and the Authorities concerned would carry out the said directions in their true spirit and substance.
 - II. There shall be complete prohibition of burning of any kind of garbage leave, waste plastic, rubber, self moulding compound and such other materials in open. Any person affected or concerned area, the office of the corporation, council or local authority under whose jurisdiction that area falls , NGT has directed that every public authority, corporation , State Government of NCT of Delhi , Utter padres and Haryana to forthwith notify the telephone numbers, website address or any other electronic media and process to which the complaints can make the complaint to any or all of the authorities as indicated herein above. The complaints preferably should be made to the authorities concerned who have jurisdiction over the area in which the offending activities is being carried on has been carried on.
 - III. NGT further directed that all the corporation concerned state falling in NCR, within two days from 28.04.2015 would notify on their websites. The website address and mobile no. to which such complaint can be made/ sent.
 - IV. Immediately upon receipt of such complaint, the concerned Authority and / or Authorities the designed officers would proceed to take action in accordance with law.

- V. For every incident of burning of any such above stated material, the person who is found actually burning such and / or responsible for or abating such burning would be liable to pay compensation in terms of the section 15 of the National Green Tribunal Act-2010 for polluting the environment and would be liable to pay a sum Rs.-5000/- to be paid instantaneously.
- VI. In the event such offender refuses to comply with directions of the authorized officers, the Authorized officers would be at liberty to serve a notice upon him appearing before the tribunal and to show cause why the person burning, abating or responsible for such burning materials afore indicated, be not directed to pay compensation as may be determined by the tribunal in accordance with law.
- VII. The orders of the NGT are to be complied with as a decree/ order of the Civil Court. All these Authorities and the Police are duty bound to carry out the directions/ orders of the Tribunal in accordance with law. The money so collected, shall be maintained by the Corporation and / or any authority as a separate fund to be utilized for improvement, restoration and restitution of the environmental degradation resulting from such activity or otherwise.
- VIII. The payment of such compensation shall not absolve the offender of the other liabilities that such person may incur under different laws in force including other provisions of the national Green Tribunal Act-2010.
- IX. NGT has directed that there is no burning of leaves or horticulture residue, all the Corporations, Authorities and the State Governments to ensure that there is proper composting pits area-wise prescribed within one week from today (28.04.2015). The composting will be only at those sites and all the corporation Authorities and the State governments shall be responsible to provide due space for collection and deposit of horticulture waste including leaves for composting purposes at these sites.
- X. Each officer under whose jurisdictions the area would fall, would be personally responsible for imposition of compensation and costs. If any activity is could to be carried out in any area of NCR of Delhi in violations to the orders of the Tribunal and the law in force in that regard, the Deputy Commissioners, Director Horticulture, SHO concerned, Assistant Commissioners, Sanitary Officers of the area would be personally responsible, similarly officers from the state of Haryana would be personally responsible for compliance of these directions.
- XI. The composting sites should be provided nearer to the places where there is a large numbers of trees, gardens and compost bits which also convert into self manure should be used for horticulture purposes to ensure that the burden on the site does not increases beyond its capacity.
- XII. Decision in regard the land fill sites should be taken expeditiously as possible in any case not later that three weeks from 28.04.2015. Such adequate number of sites if no earmarked should be identified by the respective Corporations and authorities if not done so far.
- XIII. No one would permit the burning of plastic and allied products in NCR area.

If authorities notice any burning of such materials they would not only ensure that such activity does not persist but ever would be entitled to seize the entire material which is illegally and unauthorisedly stored held by a person is does not possess of license or authorized for dealing with such products in accordance with the plastics waste management and handling rules 2011. Upon seizure of such material, the authorities would take a direction from the Tribunal dispose off the same by giving it to the authorized dealer in accordance with directions issued.

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Municipal Corporation
Gurugram**

DNIT				
Sub Head No-II (N.S Items)				
Name of Work:-		ESTIMATE FOR CONSTRUCTION OF (CIVIL WORK, PLUMBING WORK, ELECTRICAL WORK) MULTI PURPOSE HALL IN VILLAGE GADOLI KHURD WARD NO. 24 UNDER MCG		
Sr. No.	HSR no.	Description of item	Qty	UNIT Rates to be quoted by agency
1	NSITEM	-boring of 150 mm dia nominal boreholes through all type of soil shell and agure or other approved equipment until N value is more then 100 (nrefusel) test including as per IS standards and as per IRC 78-2000	45.00	Meter Rates to be quoted by agency
2	NSITEM	-N.S. "Supply, Erection,testing & commissioning of Puffin 18W White Round Bright LED Panel Light Ceiling Downlight Lamp Kit with LED Driver Surface Mount LED Ceiling Light (Pack of 1)(2 Year Warranty Make:-Philips,Bajaj,GE,Wipro,K-lite,crompton greaves" 690	20.00	Nos Rates to be quoted by agency
3	NSITEM	-Providing and fixing Concertina coil 0.75mm expansion of case 7m/coil with high tensile spring steel size 2.50mm dia including M.S angle nut & bolt and carriage, loading and uploading in all respect.(290.80)	7.00	Meter Rates to be quoted by agency
4	NSITEM	-NS Self Priming Monoblock Pump 1 HP make Crompton sct complete work given Head 6-45 meters, Discharge 57-13 LPM (7918.00) SDS.	1.00	Nos Rates to be quoted by agency

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Executive Engineer
MCG

88	24.1.14	-HSR 24.1.14 Supply and erection of 20mm x 3 mm thick GI tape fixed with suitable GI staples of same size (69.00) SDS	10.00	Meter	69.00	Meter	69.00
89	24.1.16	-HSR 24.1.16 Supply and erection of 25mm dia 1.3 metre long lightning GI tube tapered into a point at the top with 16cm x 16cm x 3mm thick GI base plate and necessary nuts and bolts with washers (1006.00) SDS	1.00	Nos	1006.00	Each	1006.00
90	24.1.2	-HSR 24.1.2 Extra for using salt and char coal/coke for pipe earth electrode as required (730.00) SDS	1.00	Nos	730.00	Each	730.00
91	24.1.3	-HSR 24.1.3 Earthing with GI earth plate 600 mmx 600 mm x 6 mm thick including accessories and providing masonry enclosures with cover plate having locking arrangement and watering pipe etc (but without charcoal or coke and salt) complete as required (3772.00) SDS	1.00	Nos	3772.00	Each	3772.00

EE

AE

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76	7.20.1	7.20.1-Brick work with common burnt clay modular bricks of class designation 7.5 in foundation and plinth in -Cement mortar 1:4 (1 cement : 4 coarse sand)	21.00	cum	4341.00	^Cum	91161.00
77	7.22.1	7.22.1-Brick work with common burnt clay non-modular bricks of class designation 7.5 in superstructure above plinth level up to floor IV level in all shapes and sizes in - Cement mortar 1:4 (1 cement : 4 coarse sand)	124.00	cum	4342.00	^Cum	538408.00
78	7.28.1	7.28.1-Half brick masonry with common burnt clay non-modular bricks of class designation 7.5 in superstructure above plinth level up to floor IV level - Cement mortar 1:3 (1 cement : 3 coarse sand)	253.00	sqm	581.00	^Sqm	146993.00
79	9.18	9.18-Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1 m x 1 m x 400 micron, finished with 12 mm cement plaster 1:3 (1 cement : 3)	8.00	Nos	165.00	EACH	1320.00
80	24.1.1	-HSR 24.1.1 Earthing with GI earth pipe 4.5 m long and 40 mm dia. with masonry enclosures on the top etc. (but without charcoal or coke and salt) as required (3047.00) SDS	1.00	Nos	3047.00	Each	3047.00
81	24.1.17	-HSR 24.1.17 Providing and fixing testing joints made of 20mm x 3mm thick GI strips 125 mm long with 4 nos. GI bolts and nuts with washers complete (82.00)SDS	1.00	Nos	82.00	Each	82.00
82	24.1.9	-HSR 24.1.9 Providing and fixing 25 mm x 3 mm copper strip in 40 mm dia GI pipe from earth electrode as required (818.00) SDS	10.00	Nos	818.00	Each	8180.00
83	6.25.2	-HSR 6.25.2 Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge All works above plinth level up to floor IV level (3041.00) SDS	234.00	Cum	5041.00	^Cum	1179594.00
84	28.43	28.43-Providing and fixing Heat Resistant Terrace Tiles (300 mm x 300 mm x 20 mm) with SRI (solar refractive index) > 78, solar reflection > 0.70 and initial emittance > 0.75 on waterproof and sloped surface of terrace, laid on 20 mm thick cement sand mortar in the ratio of 1:4 (1 cement : 4 coarse sand) and grouting the joints with mix of white cement & marble powder in ratio of 1:1, including rubbing and polishing of the surface up to 3 cuts complete, including providing skirting up to 150 mm height along the parapet walls in the same manner	259.00	sqm	1052.00	^Sqm	272468.00
85	5.23.2	5.23.2-Demolishing cement concrete manually by mechanical means including disposal of material within 50 metres lead as per direction of Engineer-in-charge - Nominal concrete 1:2:4 or leaner mix (i/c equivalent design mix)	5.04	cum	1287.00	^Cum	6486.48
86	8.32	-ALUMINIUM COMPOSITE PANELS 8.32 Designing, fabricating, testing, installing and fixing in position Curtain Wall with Aluminium Composite Panel Cladding, with open grooves for linear as well as curvilinear portions of the building, for all heights and all levels etc including (a) Structural analysis & design and preparation of shop drawings for pressure equalisation or rain screen principle as required, proper drainage of water to make it watertight including checking of all the structural and functional design 2772	458.00	Sq. CM	2772.00	Sq. CM	1269576.00
87	24.1.12	-HSR 24.1.12 Supplying and laying 6 S.W.G.G.I. wire at 0.50 m below ground level from earth electrode including thimbles, soldering etc as required (142.00) SDS	20.00	Meter	142.00	Meter	2840.00

66	22.88.1	22.88.1-Providing and fixing GI pipes complete with GI fittings and clamps, i/c cutting and making good the walls etc - Internal work - Exposed on wall -15 mm dia nominal bore	200.00	metre	191.00	metre	38200.00
67	22.88.3	22.88.3-Providing and fixing GI pipes complete with GI fittings and clamps, i/c cutting and making good the walls etc - Internal work - Exposed on wall 25 mm dia nominal bore	100.00	metre	318.00	metre	31800.00
68	23.1.3.1	23.1.3.1-Wiring in MS conduit system for 3-pin 15amp Plug point by using 2 no 4 sqmm FRLS copper wire and 1 no 4 Sqmm FRLS copper wire for earthing, including providing 1 no 15/16 Amp 3/6 pin socket and 1 no 15/16 Amp switch required MS Box etc complete as required -Group A	15.00	Nos	1305.00	each	19575.00
69	23.1.5.3	23.1.5.3-Wiring in MS conduit system for 3-pin 15amp Plug point by using 2 no 4 sqmm FRLS copper wire and 1 no 4 Sqmm FRLS copper wire for earthing, including providing 1 no 15/16 Amp 3/6 pin socket and 1 no 15/16 Amp switch required MS Box etc complete as required -Group C	15.00	Nos	1857.00	each	27855.00
70	23.22.4.7	23.22.4.7-Supply and erection of double /door sheet steel enclosure distribution board suitable for MCBs and ELCS etc recessed in wall including bonding to earth with all labour and material required to complete the job in all respect up to the entire satisfaction of the Engineer-in-Charge of the work TPN DB Horizontal type Double Door 8 way (8 incoming 3phase*8 outgoing)	1.00	Nos	4432.00	each	4432.00
71	6.30.3	6.30.3-Centering and shuttering including strutting, propping etc and removal of form for Suspended floors, roofs, landings, balconies and access platform	783.00	sqm	233.00	Sqm	182439.00
72	23.22.6.6	23.22.6.6-Supply and erection double pole/Four pole Residual (RCCB/ELCB) on 240/415V, 5Hz. AC supply installed in existing sheet steel enclosures including making necessary connections and bonding to earth with all labour and material required to complete the job in all respect up to the entire satisfaction of the Engineer-in-Charge of the work FP RCCB 30ma sensitivity, 63 A	1.00	Nos	2513.00	each	2513.00
73	23.7.6.2	23.7.6.2-Supply and erection of PVC CONDUIT ISI marked (Medium) recessed in wall/ceiling etc including the cost of PVC bends, inspection boxes, iron hooks and cement concrete etc complete in all respect up to the entire satisfaction of Engineer-in-Charge of work PVC pipe of 25 mm dia	120.00	metre	36.00	metre	4320.00
74	28.12	28.12-Providing and applying waterproofing treatment to sound, moisture free concrete surface using liquid applied single component pitch free polyurethane coating capable of bridging substrate cracks up to 2 mm. It shall be applied in two coats at coverage rate of 2kg/sqm to achieve a minimum DFT of 1.3 mm. The membrane formed shall conform to following minimum properties: 1) Elongation >=400% as per ASTM D 412 2) Tensile Strength >= 2.5 N/mm2 as per ASTM D 412 3) Adhesion in-peel test >=50 N as per ASTM C- 836 4) Recovery from 350% elongation >= 95% as per ASTM D 412 5) Water Vapour Transmission 2.3mm film 0.6 g/m2/hr 6) Initial Hardness Shore A min 60 as per ASTM D 2240 7) Root resistant - protection screed required System includes supply, application and termination of coating all complete as per the manufacturer methodology Clean the RCC slab/screed surface & wall for treatment by removing dust, dirt and layers of concrete over the surface etc by mechanical tools and wire brushing. Pressure grouting at construction joints or honeycombs with non shrink cementations grout by mixing shrinkage compensating admixture per bag of cement as per manufacturer 's recommendations. Providing and applying liquid applied single component pitch free polyurethane coating in 2 coats at coverage rate of 2kg/sqm to achieve a minimum DFT of 1.3 mm. (Fibre cloth/fleece/reinforcement should not be used in between two coats of PU as it has adverse effect on elongation.	203.00	sqm	805.00	Sqm	163415.00
75	6.34.6	6.34.6-Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and bending all complete above plinth level Mild steel and Medium Tensile steel bars Details of cost for 1 quintal-MATERIAL - (B0041+CA011+LS004) LABOUR -	122958.00	KG	68.00	KG	8361144.00

50	9.17.1	9.17.1-Providing gola 75x75 mm in cement concrete 1:2:4 (1 cement 2 coarse sand 4 stone aggregate 10 mm and down gaug), including finishing with cement mortar 1:3 (1 cement 3 fine sand) as per standard design In 75x75 mm deep chase MATERIAL - (B0021+CA0)	70.00	metre	125.00	metre	8750.00
51	9.57.2	9.57.2-Providing and fixing on wall face Unplasticised Rigid PVC rain water pipes conforming to IS 13592 Type A, including jointing with seal ring conforming to IS 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes 110 mm diameter	52.00	metre	224.00	metre	11648.00
52	9.58.5.2	9.58.5.2-Providing and fixing on wall face Unplasticised - PVC moulded fittings/ accessories for Unplasticised Rigid PVC rain water pipes conforming to IS 13592 Type A, including jointing with seal ring conforming to IS 5382, leaving 10 mm gap for thermal expe	8.00	Nos	104.00	each	832.00
53	11.4.2	11.4.2-10 mm thick cement plaster - 1:3 (1 cement 3 fine sand)	729.00	sqm	96.00	/Sqm	69984.00
54	11.77	11.77-Applying pink primer or aluminium priming coat on wood work including preparation of surface, Knotting and stopping etc	116.00	sqm	21.00	/Sqm	2436.00
55	13.3.3.1	13.3.3.1-Providing and fixing pressed steel door frames conforming to IS 4351, manufactured from commercial mild steel sheet of 2.0 mm thickness, including hinges, jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25 mm, or b	297.00	metre	434.00	metre	128898.00
56	15.1.1.1	15.1.1.1-Manual Means - Depth upto 3 m Note - 1. Cost of dewatering may be added where required upto, 10 per cent of labour cost Assessment for dewatering shall be made as per site conditions 2.The excavated earth can be used partially for backfilling of fou	556.00	cum	172.00	/Cum	95632.00
57	20.71.1	20.71.1-CEILING FAN/ EXHAUST FAN Supply, erection, testing of Ceiling fans IS marked (as per IS code 374) with suitable GI pipe complete in all respects complete as per directions of Engineer-in-charge - 48" (1200mm)	18.00	Nos	2300.00	each	41400.00
58	20.72	20.72-Supplying erection testing of Exhaust fan having a capacity of 45 cubic Metre per minutes complete with suitable GI sheet ducting in structure conforming to latest IS specifications complete in all respect to satisfaction of Engineer-in-charge	2.00	Nos	1499.00	each	2998.00
59	21.93.1	21.93.1-Providing and fixing SFRC MANHOLE COVERS AND FRAMES MARKED WITH IS 12592 including setting the same to correct lines and levels in 1:3 cement sand mortar over manhole including carriage loading unloading stacking handling re-handling etc complete in all respects to the satisfaction to the Engineer-in-charge - Type - Extra Heavy Duty Set (EHD-35) 560MM Clear Opening	1.00	Nos	1293.00	each	1293.00
60	22.20.2	22.20.2-Providing and fixing in position C.I. plain Nahani Trap conforming to IS 1 specifications and of self cleaning design with C.P. brass hinged grating with frame complete With 75 mm internal diameter outlet	6.00	Nos	1310.00	each	7860.00
61	6.1.6	6.1.6-1:4:8 (1 Cement 4 coarse sand (zone-III) 8 graded stone aggregate 40 mm nominal size) Details of cost for 1 cum MATERIAL - (B0017+B0019+CA012+CA008+B0036+CA009+B0029CA015) LABOUR - (LB032+LB008+LB002+PM001+PM009+LS004)	21.00	CUM	2735.00	/Cum	57435.00
62	22.42.2	22.42.2-Providing and fixing toilet paper holder -vitreous chinaware	6.00	Nos	284.00	each	1704.00
63	22.51.2.1	22.51.2.1-Providing and fixing soil, waste and vent pipes -75 mm diameter - Sand cast iron S&S pipe as per IS 1729	50.00	metre	853.00	metre	42650.00
64	22.6.2	22.6.2-Providing and fixing white vitreous chinaware laboratory sink with C.I. brackets, C.P. brass chain with rubber plug, 40mm C.P. brass waste and 40mm C.P. brass trap with necessary C.P. brass unions complete, including painting of fittings and brackets, cutting and making good the wall wherever required - Size 600x450x200 mm	3.00	Nos	4681.00	each	14043.00
65	22.78.2	22.78.2-Providing lead caulked joints to sand cast iron/centrifugally cast (spun) iron pipes and fittings of diameter -75 mm	2.00	Nos	234.00	each	468.00

37	21 47 1	21 47 1-G STONE WARE INTERCEPTING TRAPS, FLAP VALVES, ROAD GULLIES ETC Fixing cast iron or stone-ware intercepting traps to be supplied by the Engineer-in-charge and embedding the same in cement concrete to the requirements of the Engineer-in-charge in screening chambers including carriage from the stores of the Engineer-in-charge 100 mm internal diameter	3.00 Nos	296.00	each	888.00
38	24 2 6 6	-HSR 24 2 6 6 Supply and erection of copper lugs including crimping etc entire satisfaction of Engineer-in- Charge of the work 16 sqmm (15.00) SDS	1.00 Nos	15.00	Each	15.00
39	22 23 1	22 23 1-Providing and fixing white vitreous china-ware pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing system, including flush pipe, with manually controlled device (handle lever), conforming to IS 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required -W.C pan with ISI marked white solid plastic seat and lid	3.00 Nos	3755.00	each	11265.00
40	10 1 1	10 1 1-Re-compacting excavated soil in plinth under floors, including watering, ramming, consolidating and dressing complete	278.00 cum	82.00	/Cum	22796.00
41	22 79 2	22 79 2-Providing and fixing M.S stays and clamps for sand cast iron/centrifugally cast (spun) iron pipes of diameter 75 mm	2.00 Nos	57.00	each	114.00
42	22 88 2	22 88 2-Providing and fixing G.I pipes complete with G.I fittings and clamps, v/c cutting and making good the walls etc. - Internal work - Exposed on wall 20 mm dia nominal bore	156.00 metre	239.00	metre	35850.00
43	23 22 5 1	23 22 5 1-Supply and erection of double door sheet steel enclosure distribution board suitable for MCBS and ELCBS etc recessed in wall including bonding to earth with all labour and material required to complete the job in all respect up to the entire satisfaction of the Engineer-in-Charge of the work. Supply and erection of miniature circuit Breaker/isolator 240/415 V in the existing distribution board including making necessary connections - 6 amp to 32 amp Single Pole	6.00 Nos	162.00	each	972.00
44	23 3 6 5	23 3 6 5-Wiring main and sub mains in two single core for phase and neutral wire and one single core for earth wire PVC insulated Copper conductor cable 1100 Volts grade in PVC Conduit etc as required. 1 run of Size 10 Sqmm (17.50 mm)	120.00 metre	387.00	metre	46440.00
45	5 42	5 42-Dismantling cement conglomerate /terrazzo floors 25 mm to 50 mm manually/ by mechanical means and disposal of material within standard lead as per direction of Engineer- in-charge. UNIT sqm (Taking out put = 74 sqm) LABOUR - (LB008)	33.58 sqm	109.00	/Sqm	3660.22
46	6 29 1	6 29 1-4. CENTRING AND SHUTTERING (FORM WORK) Centering and shuttering including strutting, propping etc and removal of form work for Foundations, footings, bases for columns Details of cost for footing size 2.7m x 2.7m x 1.00m Contact area = 10.8 sqm MATERIAL -As	143.00 sqm	174.00	/Sqm	24882.00
47	6 30 2	6 30 2-Centering and shuttering including strutting, propping etc and removal of form for Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc. MATERIAL - (B0073+B0082+B0083+B0084+B0085+L5004+L5002) LABOUR - (LB010+LB008)	138.00 sqm	316.00	/Sqm	43608.00
48	10 58	10 58-Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS 15622 (thickness to be specified by the manufacturer) of approved make in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge	1366.18 sqm	605.00	/Sqm	823806.54
49	10 60	10 60-Providing and laying rectified Glazed Ceramic floor tiles of size 300x300 mm or more (thickness to be specified by the manufacturer), of 1st quality conforming to IS 15622, of approved make, in colours White, Ivory, Grey, Fume Red Brown, laid on 20 mm 1	554.00 sqm	767.00	/Sqm	424918.00

10	22 107.1	22.107.1-Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS 8931 -15 mm nominal bore	12.00	Nos	569.00	each	6828.00
11	22 182	22.182-Providing and fixing rectangular high density polyethylene water storage loft tank with cover, conforming to ISI 12701, colour of opaque white or as approved by Engineer-in-charge. The rate includes making necessary holes for inlet, outlet & over flow pipes. The base support i/c fittings & fixtures for tank shall be paid separately	2000.00	litre	8.00	litre	16000.00
12	22 22.1	22.22.1-Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm sand cast iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required -White vitreous china-ware Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests	3.00	Nos	3911.00	each	11733.00
13	11.6	11.6-Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete	2226.00	sqm	66.00	/Sqm	146916.00
14	23.3.1.3	23.3.1.3-COPPER WIRING IN PVC CONDUIT (SURFACE/RECESS) Wiring for Light/Fan/call bell point in 1.5 sqmm PRLS PVC insulated copper conductor cable in 1.6 mm thick PVC conduit pipe Group C	19.00	Nos	728.00	each	13832.00
15	23.7.6.3	23.7.6.3-Supply and erection of PVC CONDUIT ISI marked (Medium) recessed in wall/ceiling etc. including the cost of PVC bends, inspection boxes, iron hooks and cement concrete etc. complete in all respect up to the entire satisfaction of Engineer-in-Charge of work PVC pipe of 32 mm dia	116.00	metre	50.00	metre	5500.00
16	28.9	28.9-WATERPROOFING TREATMENT TO RAFT BOTTOM USING 4-5mm Thick HDPE MEMBRANE Supplying and installing positive side waterproofing treatment for 'Raft Slab' sqm using 4-5mm thick blended polyethylene / polypropylene membrane incorporating a cell mesh, enabling the membrane to mechanically bond with the poured concrete. The membrane shall be supplied with one self-adhesive selvedge to provide sealed laps and comply with British Standard BS102 2009 Membrane shall have 125 years of certificate of durability and Water tightness test. The membrane should have the following typical properties 1. Resistance to static loading (EN 12730 method B) 15 Kg 2. Tensile Strength (EN 12311-2) L >18MPa, T >10MPa 3. Elongation at break (EN 12311-2) L >800%, T >600% 4. Elongation at peak load (EN 12311-2) L >800%, T >600% 5. Crack Bridging (ASTM C1305) up to 5mm (100 cycles) 6. Durability of water tightness against durability (EN 1296/ EN 1928) Pass 7. Resistance to impact (EN 12691 Method A) 1500mm 8. Puncture Resistance (ASTM E134-08) 672N 9. Resistance to tear (nail shank) EN 12310-1) 720N	216.00	sqm	1484.00	/Sqm	320544.00
17	11.71.1	11.71.1-Wall painting on a cement plaster surface with acrylic emulsion paint of approved brand and manufacture to give an even shade - Two or more coats on new work	2226.00	sqm	61.00	/Sqm	135786.00
18	11.78	11.78-Painting two coats excluding priming coat with synthetic enamel paint in all shades on new wood work or metallic or plastered or concrete surfaces to give an even shade	116.00	sqm	35.00	/Sqm	4060.00
19	10.62	10.62-Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge	81.00	sqm	638.00	/Sqm	51678.00
20	11.5.3	11.5.3-12 mm cement plaster of mix - 1:4 (1 cement 4 fine sand)	1246.00	sqm	94.00	/Sqm	117124.00
21	12.78.1	12.78.1-Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete -250x10 mm	116.00	Nos	357.00	each	41412.00

22	21 94.2	21 94.2-Providing salt glazed stone ware pipes grade 'A' in standard length of 600 mm each pipe marked with IS 651 and their lowering, cutting, jointing and testing as described in item No 21 38, 21 39, item 21 40 including the cost of jointing materials as well as carriage, loading, unloading, stacking, handling, re-handling etc complete in all respects to the satisfaction of Engineer-in-charge - 150mm i/d	25.00	per metre	210.00	per metre	5250.00
23	22 106.1	22 106.1-Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms. -15 mm nominal bore	6.00	Nos	512.00	each	3072.00
24	11 67.1	11 67.1-Water thinnable cement primer	2226.00	sqm	25.00	/Sqm	55650.00
25	23 22.5.6	23 22.5.6-Supply and erection of double door sheet steel enclosure distribution board suitable for MCBS and ELCBS etc recessed in wall including bonding to earth with all labour and material required to complete the job in all respect up to the entire satisfaction of the Engineer-in-Charge of the work Supply and erection of miniature circuit Breaker/isolator 240/415 V in the existing distribution board including making necessary connections - 40 amp to 63 amp. MCB's TRIPLE POLE	3.00	Nos	1162.00	each	3486.00
26	11 76	11 76-Preparation of ply wood surface for painting including sand papering the surface and applying filling with approved quality filler consisting of white lead, linseed oil, varnish and chalk mix including finishing the surface to required finish	116.00	sqm	41.00	/Sqm	4756.00
27	23 3.1.2	23 3.1.2-COPPER WIRING IN PVC CONDUIT (SURFACE/RECESS) Wiring for Light/Fan/call bell point in 1.5 sqmm PRLS PVC insulated copper conductor cable in 16 mm thick PVC conduit pipe Group B	19.00	Nos	573.00	each	10887.00
28	23 3.6.2	23 3.6.2-Wiring main and sub mains in two single core for phase and neutral wire and one single core for earth wire PVC insulated Copper conductor cable 1100 Volts grade in PVC Conduit etc as required 1 run of Size 2.50 Sqmm (1 1.80mm)	150.00	metre	126.00	metre	18900.00
29	23 8.1.13	23 8.1.13-FITTING AND ACCESSORIES Providing and fixing Piano type accessories of approved make in existing box and Bakelite sheet including fixing and making necessary connections, complete in all respect Socket size rotary step type Electronic regulator for A.C ceiling fan	18.00	Nos	210.00	each	3780.00
30	23 8.4	23 8.4-Supply and erection of 10.5 cm dia M.S Fan box including 8 mm dia 30 cm long M.S Rod made into suitable suspension hook and erected in R.C.C slab for the erection of fan complete with all labour and material required to complete the job	18.00	Nos	106.00	each	1908.00
31	12.86	12.86-Providing and fixing bright finished brass hanging type floor door stopper with necessary screws, etc complete	16.00	Nos	102.00	each	1632.00
32	6.25.1	6.25.1-All works up to plinth level Details of cost for 1.00 cum MATERIAL - (B0019+B0021+CA008+B0036+CA009+B0029+CA015+B007.2) MACHINERY COST - (PM003+PM006) LABOUR - (LB032+LB008+LB002+PM009+LS004)	181.00	CUM	4999.00	/Cum	904819.00
33	6.29.2	6.29.2-1 CENTRING AND SHUTTERING (FORM WORK) Centering 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 file	40.00	sqm	316.00	/Sqm	12640.00
34	6.30.5	6.30.5-Centering and shuttering including strutting, propping etc and removal of form for Lintel, beams, plinth beams, girders, bressomers and cantilevers Consider a beam of 6 m clear span, 0.50 m deep 0.30 m wide and height 3.5 m from floor MATERIAL - (13.27+)	476.00	sqm	332.00	/Sqm	158032.00
35	6.30.6	6.30.6-Centering and shuttering including strutting, propping etc and removal of form for Columns, Pillars, Piers, Abutments, Posts and Struts MATERIAL - (B0086+B008)+B0087+B0088+LS004+LS002) LABOUR - (LB010+LB008+LS004+LS002)	249.00	sqm	293.00	/Sqm	72957.00
36	3.1.2 + 17.8.2 + 17.8.3	Good Earth for filling un-even land [HSR3 1.2+17.8.2+17.8.3]	834.00	Cum	207.00	/Cum	172638.00

DNIT						
Sub Head No-II (H.S.R Items)						
Name of Work:-		ESTIMATE FOR CONSTRUCTION OF (CIVIL WORK, PLUMBING WORK, ELECTRICAL WORK) MULTI PURPOSE HALL IN VILLAGE GADOLI KHURD WARD NO. 24 UNDER MCG				
Sr. No.	HSR no.	Description of item	Qty	Rate	Units	Total Amount
1	10.51	10.51-Providing and fixing granite stone in all shades 15mm to 18 mm thick in skirting / dado, risers of steps, pillars and wall facing, laid in any pattern as specified over base of 12mm thick cement coarse sand mortar 1:3 and jointed with white cement slurry	32.00	2838.00	/Sqm	90816.00
2	11.8.1	11.8.1-12 mm cement plaster of mix - 1:4 (1 cement: 4 coarse sand)	251.00	92.00	/Sqm	23092.00
3	12.36.1	12.36.1-Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) decorative type, core of black board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face ven	121.00	26.71	/Sqm	323191.00
4	10.50.1	10.50.1-Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of c	45.00	3031.00	/Sqm	136395.00
5	12.8	12.8-Providing and fixing bright finished brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles of approved quality with necessary screws etc complete	51.00	606.00	each	30906.00
6	13.41	13.41-Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc, including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bo	1128.00	443.00	kg	499704.00
7	13.44	13.44-Providing and fixing circular/ Hexagonal cast iron or M.S. sheet box for ceiling fan clamp, of internal dia 140 mm, 73 mm height, top lid of 1.5 mm thick M.S. sheet with its top surface hacked for proper bonding, top lid shall be screwed into the cast iron	18.00	148.00	each	2664.00
8	21.84.1	21.84.1-M MASONRY CHAMBERS - Constructing brick masonry inspection Chamber sizes as given below up to 0.60 metre average depth in cement mortar 1:5 lime concrete with 40 per cent lime mortar 2:3 in foundation cement concrete 1:2:4 in benching, 12mm thick cement plaster 1:2 with a floating coat of 1 mm thick of neat cement R.C.C. 1:2:4 slab 100 mm thick/cement concrete topping, 50mm thick with 455mmx455mm / 455mm x610mm inside light duty C.I inspection chamber cover and frame weight as per ISI specification painted with 3 coats of black bitumen/superior paint complete as per standard design - Size 450 mm X450 mm inside (with 455 mm x 455 mm cover and frame light duty single seal weighing 20 kg with C.C. topping.	1.00	3905.00	each	3905.00
9	21.90.1.1	21.90.1.1-Construction of rectangular standard brick masonry manhole chambers to standard drawings on S.W. pipe sewers or other circular pipe sewers up to the required depth in 1:5 cement sand mortar, lime concrete in bed and sides of pipe sewer and cement concrete 1:2:4 in benching, 12 mm thick water tight 1:2 cement sand plaster with a floating coat of neat cement and finished with 2 coats of sodium silicate on interior surface where required, reinforced cement concrete slab 180mm thick fixing 560 mm internal diameter C.I. manhole cover and frame weight not less than 2.5 quintal painted with 3 coats of black bitumen paint, fixing galvanised malleable iron steps embedded in 1:2 cement sand mortar complete the rate covers the cost of M.S. steel for R.C.C. slab labour for fixing and carriage of C.I. manhole frame and cover and malleable iron steps from the stores of the Engineer-in-charge of the works to the site of works. The rate also include the cost of accurately planned and fitted centring, supports for all works as well as for all curves and special work, cleaning out their beds etc. sodium silicate shall be supplied free of cost at the stores of the Engineer-in-charge - On 100 mm internal diameter pipe sewer - for 1.20 meters depth below ground level	1.00	10463.00	each	10463.00