

AN ISO 9001 & 14001 COMPANY

TENDER DOCUMENT

TENDER No: WRO/CON/EMRS/866/330

FOR

Construction of Eklavya Model Residential School (EMRS) in Single- Phase comprise of school building, Boys hostel (240 students), Girls-hostel (240 students), Kitchen & Dinning block, 2 blocks of Type-III quarters including guest house (8+8 Nos), Type-II quarters (10 Nos), Principal Residence, Warden Residence (Boys & Girls), electrical provision, water supply and Sanitary installations, External sewerage system and Drainage facility, Campus development such as road, Compound wall etc. at Vijaynagar in Sabarkantha District of Gujarat State.

VOLUME- I

EXECUTING AGENCY

Engineering Projects (India) Limited Western Regional Office: Mumbai

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ENGINEERING PROJECTS (INDIA) LTD.

(A. Govt. of India Enterprise) (Western Regional Office)

Tender No: WRO/CON/EMRS/866/330

Date: 19.12.2023

NOTICE INVITING e- TENDER (NIT)

Tender for "Construction of Eklavya Model Residential School (EMRS) in Single- Phase comprise of school building, Boys hostel (240 students), Girls-hostel (240 students), Kitchen & Dinning block, 2 blocks of Type-III quarters including guest house (8+8 Nos), Type-II quarters (10 Nos), Principal Residence, Warden Residence (Boys & Girls), electrical provision, water supply and Sanitary installations, External sewerage system and Drainage facility, Campus development such as road, Compound wall etc. at **Vijayanagar in Sabar kantha District of Gujarat State.**"

1.0 Engineering Projects (India) Ltd. invites the online Percentage rate tenders on behalf of "National Education Society for Tribal Students (NESTS)" through e-tendering from the eligible contractors/firms who fulfill the eligibility criteria as per the brief particulars of scope for the "Construction of Eklavya Model Residential School (EMRS) in Single- Phase comprise of school building, Boys hostel (240 students), Girls-hostel (240 students), Kitchen & Dinning block, 2 blocks of Type-III quarters including guest house (8+8 Nos), Type-II quarters (10 Nos), Principal Residence, Warden Residence (Boys & Girls), electrical provision, water supply and Sanitary installations, External sewerage system and Drainage facility, Campus development such as road, Compound wall etc. at Vijaynagar in Sabarkantha District of Gujarat State." in two bid system (Techno-commercial bid & Price Bid) for the following works:

Sr. No.	NAME OF WORK	ESTIMATED COST	TIME OF COMPLETION	EMD
1	"Construction of Eklavya Model Residential School (EMRS) in Single- Phase comprise of school building, Boys hostel (240 students), Girls- hostel (240 students), Kitchen & Dinning block, 2 blocks of Type-III quarters including guest house (8+8 Nos), Type-II quarters (10 Nos), Principal Residence, Warden Residence (Boys & Girls), electrical provision, water supply and Sanitary installations, External sewerage system and Drainage facility, Campus development such as road, Compound wall etc. at Vijaynagar in Sabarkantha District of Gujarat State. "	32,06,72,818/- (Including GST)	18 months	Rs: 42,06,728/- (Rupees Forty- Two Lacs Six Thousand Seven Hundred Twenty-Eight)

Estimated cost is based on **DSR – 2019** for scheduled items and prevailing market rate for Non-Scheduled items. Out of total duration of 18 months, the works to be executed on priority as specified in the Work Programme enclosed.

Scope of Work:

"The brief scope of work in this tender shall include (but not limited to) Civil Architectural & Structural, Sanitary, Plumbing, Electrical (internal & External) Mechanical (Firefighting), Water supply (Internal & External) Sanitary installation, drainage, Sewerage, STP, Pump House, Power Supply, Fire detection including fire alarm works, Sprinkler system, Signage's, road network, Site development, landscaping work, Boundary wall, Rain water Harvesting etc. for "Construction of Eklavya Model Residential School Buildings, Residential facility including Principal and Warden Residence, Boys & Girls Hostels, Quarters, Kitchen and Dining Hall Buildings along with sport facilities including MEP works and other infrastructure Development work for the entire Plot.

Time schedule of Tender activities:

- (i) Start Date & Time for Downloading of tender documents: **19.12.2023 from 06.30 PM**
- (ii) Date of Pre-bid Meeting: NA Bidders are requested to send their queries after visiting the site through email upto 05 days prior to due date of submission of tender and reply will be given accordingly.
- (iii) Last Date & Time of submission of Tender (online): 10.01.2024 up to 02.00 PM
- (iv) Date & Time of online opening of tender (Techno-Commercial Bid): 11.01.2024 at 03.00 PM
- (v) Date of Site Visit: Upto submission date.
- (vi) Site visit for the bidders for Geo-tagging: Upto submission date.

2.0 Qualification Criteria:

Contractors/Bidders who fulfill the following requirements are eligible to participate in this tender. **The joint ventures/Consortium is not accepted.**

- a) The bidders must have experience of having successfully completed following similar works during the last seven (7) years ending last day of the month previous to the one in which tender invited and should be either of the following:
 - a. Three similar works, each costing not less than the amount equal to FORTY PERCENT (40%) of estimated cost put to tender

OR

b. Two similar works, each costing not less than the amount equal to FIFTY PERCENT (50%) of estimated cost put to tender

OR

c. One similar work of aggregate cost not less than the amount equal to **EIGHTY PERCENT (80%)** of estimated cost put to tender

The Similar work would mean "Construction of Residential / Non-Residential Buildings successfully completed with RCC framed structure including PH, Electrical and Fire Fighting Works during the last seven years."

And

One Completed Work of minimum 40% should be of Institutional/Commercial Building either Part of qualifying Works above or Separate Work.

Note- The work order & Completion Certificate should clearly mention about the scope of work and all other allied work along with name, designation, email id, Complete postal address, phone number etc. The experience certificate in this regard should be issued by officer not below the rank of Executive Engineer / Project Manager / Unit Officer. Credential submitted by bidders regarding qualifications documents are clearly mentioned the above and following paragraph

For evaluation purpose, the completion cost of works mentioned in the Completion Certificate shall be enhanced by Seven Percent (7%) per annum till the end of month prior to date of NIT.

The cost of free issue materials shall not be included in the completion cost of works. The experience certificates issued by any Government Organizations / Semi Government Organizations / Autonomous Bodies / Municipal Bodies / Public Limited Companies listed on BSE / NSE and private party shall be accepted for assessing the eligibility of the tenderer. In case of experience certificate issued by private firm it should be supported with Form 26AS duly certified by CA. However, Bidder shall submit self-attested copies of Completion certificate issued by Client along with LOI, Contract agreement clearly mentioning the nature of work, value of work, date of start, time period as per LOI and actual date of completion with complete address and official mail id of issuing authority for Credential verification.

Relevant Experience certificates and other documents as mentioned above fulfilling the qualifying criteria duly self-attested by the tenderer shall be uploaded on online submission, The Completion certificate from Clients shall be in the name of the company who is submitting the tender. The bidder has to produce original documents for verification at the time of opening of tender or as and when demanded. The tender of any bidder shall be rejected if on detailed scrutiny, documents submitted along with the tender are found to be unsatisfactory. The decision of EPI in this regard shall be final and binding on the bidder.

- b) Should have average annual financial turnover on works amounting at least 50% of the estimated cost of the work during the last three consecutive financial years ending on 31.03.2023. Turnover certificate duly certified by a Chartered Accountant along with UDIN issued by ICAI is also to be submitted. The value of completed works shall be brought to current costing level by enhancing at a simple rate of 7% per annum.
- c) Should not have incurred any losses in more than two years during the immediate last Five consecutive financial years, ending 31.03.2023, Copies of Annual report/balance sheet and a No loss Certificate duly certified by a Chartered Accountant along with UDIN issued by ICAI is also to be submitted.
- d) **Bid Capacity:** The bidding capacity of the contractor should be equal to or more than the estimated cost of the work put to Tender. The Bidding capacity shall be worked out by the following formula:

Bidding Capacity = [A x N x 1.5] – B

Where,

A = Maximum turnover in construction works executed in any one year during the last seven years considering the completed as well as works in progress. The value of completed works shall be brought to current costing level (ending last day of the month previous to the one in which tender was invited) by enhancing at a simple rate of 7% per annum.

N = Number of years prescribed for completion of work for which bids have been invited. **B** = Value of existing commitments and ongoing works to be completed during the period of completion of work for which bids have been invited. The Bidders are requested to furnish the existing commitments on Works under execution along with stipulated period for completion of remaining for each of the work should be furnished **in an affidavit on non-judicial stamp paper of value of Rupees 100/-** duly certified that the particulars furnished are corrected as per the Proforma in **Annexure-A**.

e) Should submit a **Banker's Certificate** from Commercial Bank of the amount equal to 40% of the estimated cost put to tender. The banker's certificate should not have been issued earlier than three months of last date of submission of tender.

Or

Net Worth certificate of Minimum 10% of the estimated cost put to tender issued by certified Chartered Accountant with Unique Document Identification Number (UDIN). The net worth certificate shall be of the last financial year ending on 31st March 2023.

The Bankers certificate & net worth certificate shall be in the format prescribed in the enclosed **Annexure H.**

- f) Should have Goods and Service Tax (GST) Registration No. (Copy of GST Registration certificate to be enclosed).
- g) It is desired that the bidder should have valid PF Registration number, GST Registration number, ESI registration.

- h) Bidder has to note regarding applicability of Public Procurement Policy, 2012 to the Works Contracts: - "Policy is meant for procurement of only goods produced and services rendered by Micro Small Enterprises (MSEs). However, Works Contract are excluded from purview of Public Procurement Policy for MSEs Order, 2012". Henceforth, all the Bidders (including MSE/UDYAM Registration) has to submit Tender Fee & EMD as stated in the NIT
- i) For Site Visit, bidders have to submit the Site Visit report along-with Geotagging photographs of self-mentioning with GPS coordinate, date and time and submit the same in online bid document.

The site visit is mandatory & the bidder has to visit the site to assess the Ground condition and working conditions at site on date as mentioned above and submit Site visit undertaking (Annexure –C). EPIL engineer's certification & presence is not required at site.

- j) Subletting of works is not allowed. 100% Subletting (Back-to-back) is not allowed. However, for specialize and labour works (other than construction work) subletting is allowed with the prior approval from Engineer-in- Charge. Bidder should provide selfundertaking for the same.
- k) Bidder has to submit undertaking regarding details of Constitution of firm/Company along with the details of its directors as per enclosed Annexure-D. In case the bidder fails to submit Constitution of firms with the bid along with the details of its firm Directors as per Annexure-D their bid will be rejected.
- Even though an applicant may satisfy the eligibility criteria, EPI reserves the right to reject the tender documents if he has record of poor performance such as abandoning work, not properly completing the work, delay in completion of work, poor quality of work, financial failure / weakness etc.
- m) Notwithstanding anything stated in tender, EPI reserves the right to assess the capabilities and capacity of the tenderer to perform the contract, in the overall interest of EPI. In case, tenderer's capabilities and capacities are not found satisfactory, EPI reserves the right to reject the tender. If any credentials submitted by the bidder are found false/fraud, the bidder shall be debarred from future tender of EPI, besides rejection of bid and forfeit the full said Earnest Money absolutely.
- n) The Bidder should not have been blacklisted or Debarred in any State Govt./Municipal Corporations/Central Govt./any State Govt. Organizations, Urban Local Body and/or its Undertaking company during last 03 years ending last day of the previous month of date of NIT. Bidder has to submit a notarized self-declaration with the bid in respect of the same that "He has not been reprimand in past 03 years for poor performance and also he has not been debarred by any of his client/ in any State Govt./Municipal Corporations/Central Govt./any State Govt. Organizations, Urban Local Body for poor

performance, unprofessional/ slow work leading to cancellation of his ongoing assignment".

o) The maximum Two (2) numbers of EMRS works that can be awarded to the single contractor. If the bidders have already worked on EMRS for one or more PSU 's they have to give undertaking (as enclosed Annexure-I) for the same. In such case, EPIL reserve rights about qualification of bidder in terms of financial & technical capacities & in any case maximum two EMRS (Including ongoing EMRS work in any PSU's) can only be given to the bidder. If any time found that bidder has given wrong information, bidder shall be disqualified by EPIL and Blacklisted for any jobs from Government of India.

2.1 Evaluation of the bidders:

Evaluation of the Bidders shall be subject to through verification of their documents related with credentials and BG and if required inspection of similar type works carried out / in progress by them, through a Technical Committee of experts to be constituted by EPIL. Price Bid is to be submitted in online mode separately, and price bid of technically qualified bidders will only be opened. Price bids of all eligible bidders will be opened only after receiving the confirmations of Credentials & BG from the concerned Department/Bank.

3.0 Tender documents comprising of the following are available on the website of EPI: <u>www.epi.gov.in</u> & CPP Portal: <u>https://etenders.gov.in/eprocure/app</u>

- Volume I: Notice Inviting Tender, Addendum to Instructions to Tenderers, Special instructions to Bidders for e-Tendering, Letter of Undertaking, Form of tender, Memorandum, Bidder Information, Affidavit non-judicial stamp paper of Rs.100 for Bidding Capacity (Annexure-A), Affidavit non-judicial stamp paper of Rs.100 for NIT (Annexure-B), Site Visit certification (Annexure-C), Letter of Undertaking for Constitution of Firm (Annexure-D) and Declaration for local content (Annexure-E), Integrity Pact Format (Annexure-F), Tender Acceptance Letter (Annexure G), Banker certificate / Net worth Certificate (Annexure-H) Undertaking for EMRS Work (Annexure I) and other documents as per qualification criteria.
- **Volume II:** Additional Conditions of Contract, General Conditions of Contract, Technical Specifications with Scope of Work and Drawings.
- Volume III: Price Bid & Bill of Quantities.

4.0 In order to participate, the bidder should have Digital Signature Certificate (DSC) from one of the authorized Certifying Authorities.

5.0 Interested bidders have to necessarily register themselves on the portal <u>https://etenders.gov.in/eprocure/app</u> to participate in the bidding under this invitation for bids. It shall be the sole responsibility of the interested bidders to get them registered at the aforesaid portal for which they are required to contact

For any technical related queries please call at 24 x 7 Help Desk Number 0120-4001 002, 0120-4001 005, 0120-6277 787 International Bidders are requested to prefix +91 as country code Technical - support-eproc@nic.in Policy Related - cppp-doe@nic.in

They may obtain further information regarding this tender from Addl. General Manager (T) at the address given at Clause No. 21.0 below from 10:00 hours to 17:00 hours on all working days till the last date of online submission of Bidding Documents. No special character like! @, #, \$, %, &, *, _ to be include while saving the file/uploading.

For proper uploading of the bids on the portal namely <u>https://etenders.gov.in/eprocure/app</u> (hereinafter referred to as the 'portal'), it shall be the sole responsibility of the bidders to apprise themselves adequately regarding all the relevant procedures and provisions as detailed at the portal as well as by contacting M/s CPPP., directly, as and when required, for which contact details are mentioned above. The EPI in no case shall be responsible for any issues related to timely or properly uploading/submission of the bid in accordance with the relevant provisions of Section Instruction to Bidders of the Bidding Documents.

6.0 Bidders can download the bid document from the portal any time from 06:30 PM. On 19.12.2023. However, interested bidders have to pay tender fees for participating in the tendering and submitting the bid as per NIT format. For this purpose, the interested bidders shall be required to pay Rs 29,500/- (Rs 25,000 + GST @ 18 %) as non-refundable document fees.

7.0 E-Bids must be submitted/uploaded along with scanned copies of relevant documents pertaining to Clause no. 2 (a) to 2 (o) & Clause no. 18 under Single Stage Two Envelope Bidding Procedure on the CPPP portal on or before last date and time of online bid submission. Late bids will not be accepted. Under the above procedure, only the first envelope (Technical Part) shall be opened in the presence of the bidders' representatives who choose to attend in person at the address given below on schedule date and time of bid opening or may be viewed by the bidders by logging in to the portal as per features available to them. Second envelope i.e. Price part shall be opened of technically qualified bidders only.

The bid must be accompanied by **Tender fee and Earnest Money Deposit (EMD).**

Tender Fee - Interested bidders shall be required to **pay Rs 29,500/- (Rs 25,000 + GST @ 18 %)** as non-refundable in online NEFT/RTGS mode on below mentioned account details and the scanned copy of Tender fee receipt after depositing the tender fee online in EPI's Bank Account is to be upload along with technical bid documents.

IndusInd Bank Name of Branch: Greater Kailash II, New Delhi IFSC Code: INDB0000012 Name of A/c Holder: EPI LTD A/C Number: 200001601125

Account Type: Current

However, tenders submitted without or insufficient tender fees shall be rejected except for those who will claim exemption.

EMD - The bid must be accompanied by an Earnest Money Deposit (EMD) of Rs: 42,06,728/-(Rupees Forty-Two Lacs Six Thousand Seven Hundred Twenty-Eight only) This can be either in the form of Insurance Surety Bond or Account Payee Demand Draft or Fixed Deposit Receipt or Banker's cheque in an acceptable form for the full amount of EMD payable favouring "Engineering Projects (India) Limited" payable at New Delhi or Bank Guarantee of any Nationalized Bank/Scheduled Bank/Commercial bank supporting with SFMS confirmation as per bank details mentioned below as per the enclosed format or payment online as below mentioned account details. The EMD shall be valid for minimum period of 150 days (One hundred fifty) from the last day of submission of tender. The earnest money (if any) will be forfeited without any prejudice to any right or remedy, in case the Bidder withdraws his Tender during the validity period or in case he changes his offer to his benefits, which are not acceptable to EPI. The bid shall be valid for 90 days from date of opening of Price Bid. The validity period may be extended on mutual consent.

IndusInd Bank Name of Branch: Greater Kailash II, New Delhi IFSC Code: INDB0000012 Name of A/c Holder: EPI LTD A/C Number: 200001601125 Account Type: Current

If the bidder has submitted a scanned copy of EMD (Insurance Surety Bond, Bank Guarantee, (With SFMS), DD, FDR, Bankers Cheque etc) with their online bid, then Physical submission of Original EMD is to be submitted by lowest bidder at later stage as and when required by EPI.

In case of EMD BG bidder must submit SFMS message sent by their issuing bank as a part of the bid with EMD.

8.0 Return of EMD

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

9.0 The Terms & Conditions contained in this NIT and tender documents shall be applicable. In case of any unscheduled holiday falling on the last day of submission of tender, the next working day will be treated as scheduled day and time for submission of Tender.

10.0 The rates quoted by the bidder shall be firm and fixed for the entire period of completion and till handing over of the work. No revision to rates or any escalation shall be allowed on

account of any increase in prices of materials, labour, POL and Overheads etc. during the entire contract period or extended contract period.

The rates quoted by bidder shall be included all applicable taxes, duties, cess and GST etc. However, ESI, EPF will be payable at actual after receipt of deposited challans.

11.0 The corrigendum or addendum, extension, cancellation of this NIT, if any, shall be hosted on the EPI's website as well as CPP portal <u>https://etenders.gov.in/eprocure/app</u> the bidders are required to check these websites regularly for this purpose, to take into account before uploading/submission of tender. All Corrigendum and addendum are to be uploaded duly signed & stamped with tender documents as bid Annexure.

12.0 The offer of the L-1 bidders shall be accepted subject to the confirmation of authenticity of the PQ documents/BG from the concerned department/bank.

13.0 EPI reserves the right to extend the date of submission of the tender or cancel the tender or accept any tender or reject any or all tenders or split the work of tender or annul this tendering process without assigning any reason and liability whatsoever and to re-invite tender at its sole discretion even if an applicant may satisfy eligibility criteria.

14.0 a) In case of tie-tender, where two firms are bidding lowest, EPI reserves the right to split the work among these bidders and / or EPI will reserve the right to award the tender to any one of such bidders.

b) EPI reserves the right to delete any item while awarding the work.

15.0 Bidders to use as much as possible the material / services from MSME. Contractors to use as much as possible, the material/service from MSEs & Local suppliers/Manufacturers for promotion of Make in India. For Promotion of Public Procurement (Preference to Make in India) order 2017 (amended on 28.05.2018) GOI Guideline for procurement, the equivalent Indian makes of materials conforming to requisite quality in addition to List of Makes/Brands may be considered subject to approval of Client/Engineer.

All the bidders (Class –I local supplier, Class-II local Supplier, Non-Local Supplier) shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of supplies other than companies) giving the percentage of local content in their bid as per Annexure-E irrespective of whether they are availing or not availing purchase preference under public procurement (Preference to Make in India) Policy.

16.0 In case of any discrepancy between the downloaded tender documents from the website and the uploaded copy by the tenderer, the tender documents appearing in the website being uploaded by EPI with the tender shall hold good for contractual as well as legal purposes. The tenderer shall furnish a **declaration** to this effect that "**no addition/deletion/corrections have been made in the downloaded tender document being uploaded by him and it is identical to the tender document appearing on the Website. In case of any discrepancy between the**

downloaded tender documents from the website and the uploaded copy by me/us, the tender documents appearing in the website being uploaded by EPI with the tender shall hold good for contractual as well as legal purposes".

17.0 Disqualification

The tenderers may note that they are liable to be disqualified and not considered for the opening of Price Bid if;

- a) Non-Submission of Tender Fee and EMD as per NIT Condition.
- b) Representation in the forms, statements and attachments submitted in the prequalification document are proved to be incorrect, false and misleading.
- c) EPI reserves its right to take appropriate action including disqualification of tenderer(s) as may be deemed fit and proper by EPI at any time without giving any notice to the Bidder in this regard. The decision of EPI in the matter of disqualification shall be final and binding on the Bidders.
- d) If bidder have submitted incompletely filled in formats without attaching certified supporting documents and credentials to establish their eligibility to participate in the Tender.
- e) If the tenderers attempt to influence any member of the committee. EPI reserves its right to take appropriate action including disqualification of tenderer(s) as may be deemed fit and proper by EPI at any time without giving any notice to the contractor in this regard. The decision of EPI in the matter of disqualification shall be final and binding on the Tenderers.
- f) If documents are not uploaded by the bidder as per instructions/due to special characters while saving files the files are unable to download the bids will be disqualified.
- g) The Bidder is expected to examine all instructions, forms, terms and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or submission of a bid not substantially responsive to the bidding documents in every respect will be at the bidder's risk and may result in the rejection of its bid.
- h) In case of existing contractors of EPI, if progress is not satisfactory in any of the project their bid will be rejected.
- i) The credentials of the Bidders with respect to Technical & Financial criteria shall be verified and inspection of the works, if required will be carried out by EPI. If not found satisfactory by EPI, their bid will be considered non-responsive and rejected.
- j) To the satisfaction of EPI / NESTS, they have record of poor performance during the past 5(five) years such as abandoning the work, rescinding of contract for which the reasons are attributable to the non - performance of the contract, inordinate delay in completion,

consistent history of litigation / arbitration awarded against the contractor or any of its constituents or financial failures due to bankruptcy etc. in their on-going / past projects.

k) If bidder have not visited site and submitted Site Visit certification (Annexure-C)

Note: If any tenderer withdraws his tender before the said period or issue of letter of acceptance/intent, whichever is earlier, or makes any modifications in the terms and conditions of the downloaded tender which are not acceptable to the EPIL, then the EPIL shall, without prejudice to any other right or remedy, be at liberty to forfeit entire amount of Earnest Money as aforesaid.

18.0 Tenderer shall submit the following documents duly signed and stamped a part of Technical bid online. Only Online mode will be accepted for tender submission. No documents are required to be submitted offline by the bidders.

- a) Document evidence with regard to tender fees and EMD.
- b) Notarized Power of Attorney.
- c) Affidavit on **non-judicial stamp paper of Rs.100** of NIT (**Annexure-A and Annexure-B**) and Site Visit certification (**Annexure-C**)
- d) Undertaking regarding Constitution of Firm/Company (Annexure-D)
- e) Covering letter for participation in Bid with Bid name, number with All Corrigendum and addendum (if any).
- f) Details of similar works executed along with completion certificate & copy of Work order for qualification as per PQ criteria.
- g) List of works executed during the last 5 years indicating name of the Client, value, date of start and completion date.
- h) List of works under execution indicating name of the Client, Total Contract Value, Value of balance work in hand, date of start and completion.
- i) CA certified Annual Reports including Audited balance sheets, Financial Turnover and profit and loss accounts along with schedules for the last 3 years upto 31.03.2023 with UDIN issued by ICAI is to be submitted.
- j) Local Supplier Content certificate (Annexure-E)
- k) Integrity Pact (Annexure-F)
- I) Copy of Bankers certificate /Net worth certificate as per NIT condition (Annexure-H).
- m) **Declaration** in Letter Head in accordance to Clause no. 16.0 of this NIT for no addition/deletion/ corrections in the downloaded tender document.
- n) A notarized self-certification by bidder in accordance to Clause no. 2.0 (n) of this NIT for not blacklisted/debarred & reprimanded.
- o) Form of Tender and Letter of Undertaking
- p) Registration Certificate/Memorandum and Articles of Association/ Partnership Deed /Affidavit as proof of the organization set up.
- q) Details of manpower and equipment/plant machinery available with Bidder.
- r) Copy of valid PF Registration No.
- s) Memorandum and Bidder Information with banker details as per the format
- t) Copy of PAN Card and GST Registration Certificate.
- u) Tender Acceptance Letter (Annexure G).

- v) Undertaking for subletting as per NIT Cl 2(j)
- w) Undertaking for EMRS Work (Annexure I)

19.0 If any tenderer withdraws his tender before the said period or issue of letter of acceptance/intent, whichever is earlier, or makes any modifications in the terms and conditions of the downloaded tender which are not acceptable to the EPIL, then the EPIL shall, without prejudice to any other right or remedy, be at liberty to forfeit entire amount of Earnest Money as aforesaid.

20.0 In the event, this agreement with the NESTS is terminated or NESTS instruct to Cancel/terminate the Work Order the agreement between EPIL and Contractor will automatically stand terminated and that he should take away T&P and surplus materials from site of work after the joint measurements are taken of the same.

21.0 All correspondence with regard to the NIT shall be to the following address (By Post/In Person)

General Manager (Contracts) Engineering Projects (India) Limited, 6A, Bakhtawar, Nariman Point, Mumbai 400021 Tel . 022 22027585 <u>wro-contracts@engineeringprojects.com</u>

22.0 Only Online mode will be accepted for tender submission. The bidders have to upload, the scanned copy of Tender fee receipt after depositing the tender fee online in EPI's Bank Account (as mentioned Below) along with EMD, Affidavit non-judicial stamp paper of Rs.100 for Bidding Capacity (Annexure-A), Affidavit non-judicial stamp paper of Rs.100 for NIT (Annexure-B), Site Visit certification (Annexure-C), Letter of Undertaking for Constitution of Firm (Annexure-D), Declaration for local content (Annexure-E). (Vol-I) and & Integrity Pact Format (Annexure-F), Tender Acceptance Letter (Annexure G) to be submitted Online in technical bid and Banker certificate / Net worth Certificate (Annexure-H) Undertaking for EMRS Work (Annexure I). In case, the above scan documents are not submitted as per schedule time, then Bid shall not be considered and EPI shall not be responsible for any online delay in respect of submission of the bids. No Documents is required to be submitted by the bidders in Physical form.

However, Physical submission of All Original Bid Documents, EMD, POA etc. to be submitted by lowest bidder at later stage as and when required by EPI.

23.0 Post tender clarification will not be sought in case of non-submission of Tender Fee or EMD of requisite amount as per NIT condition or unconditional letter of Acceptance or Affidavit for Correctness of documents/information or Basic Qualification Criteria Documents. In such case the bidder shall be rejected summarily without seeking any further clarification/documents.

24.0 Contact details for site releated Queries / Visit:
 Addl. General Manager (Tech)
 ENGINEERING PROJECTS (INDIA) LTD
 A-511, VIVANTA ICON,
 L.P. SAVANI ROAD,
 ADAJAN,
 SURAT-395009.
 Mobile- 9949826873

For more information on EPI, visit our website at: http://www.epi.gov.in For more information on the e-tender visit website <u>https://etenders.gov.in/eprocure/app</u>

25.0 This tender is covered under Integrity Pact. The particulars of IEM (independent External Monitor) of EPIL is as Under:

a). Shri Arun Kumar Sharma, F-501, Indian Oil Apartments, Plot No- C-58/23, Sector-62, Noida. Uttar Pradesh-201301 <u>Email id: sharmaak6@gmail.com</u> b) Shri Animesh Chauhan, Flat No. 948, G Block, 6th Avenue, Gaur City 1, Sector 4, Greater Noida (West), Uttar Pradesh-201009 <u>Email id: animeshchau@gmail.com</u>

Special instructions to Bidders for e-Tendering

Some Bidding related Information for this Tender (Sealed Bid)

The entire bid-submission would be online only and submitted in CPP Portal i.e. <u>www.eprocure.gov.in</u>.

Broad outline of submissions are as follows:

- Submission of Bid-Parts/ Envelopes
 - Technical-Part
 - Financial-Part

Submission of Bid:

The Bidder should upload the scanned copies of all the original documents as mentioned in **NIT Clause No 18.0** and Bid-Annexures during Online Bid-Submission in addition to PQ documents listed in **NIT Clause No. 2.0**, However Physical submission of Original Bid Documents, EMD, POA for signing Bid, Form of tender, Letter of undertaking, Memorandum, Bidders Information, to be submitted by lowest bidder before award of LOI/LOA for successful Bidder.

Bidder's guide for CPP Portal:

Please refer

Appendix 1 - Bidder Registration Module &

Appendix 2 - Bid Submission Module for assistance in online bidding procedure.

Please note that at the end the bid must be final submit, otherwise the same will not be considered.

For any assistance regarding the Tender Document and/or term and conditions the bidders may contact at EPIL:

General Manager (Tech) Engineering Projects (India) Limited, 6A, Bakhtawar, Nariman Point, Mumbai 400021 wro-contracts@engineeringprojects.com

For any assistance during bid submission, system settings etc. bidders may contact at CPPP:

For any technical related queries please call at 24 x 7 Help Desk Number

0120-4001 002 , 0120-4001 005 , 0120-6277 787

International Bidders are requested to prefix +91 as country code

Technical - support-eproc@nic.in

Policy Related - cppp-doe@nic.in

LETTER OF UNDERTAKING (TO BE ENCLOSED IN LETTER HEAD)

To, CONTRACTS DIVISION ENGINEERING PROJECTS (INDIA) LTD.

REF: Tender for "Construction of Eklavya Model Residential School (EMRS) in Single- Phase comprise of school building, Boys hostel (240 students), Girls-hostel (240 students), Kitchen & Dinning block, 2 blocks of Type-III quarters including guest house (8+8 Nos), Type-II quarters (10 Nos), Principal Residence, Warden Residence (Boys & Girls), electrical provision, water supply and Sanitary installations, External sewerage system and Drainage facility, Campus development such as road, Compound wall etc. at Vijaynagar in Sabarkantha District of Gujarat State."

NIT No. : WRO/CON/EMRS/866/330 Date: 19.12.2023

Sir,

UNDERTAKING FOR ACCEPTANCE OF TENDER CONDITIONS

- 1. The Tender Documents for the work as mentioned in "Memorandum" to "Form of Tender" have been issued to us by ENGINEERING PROJECTS (INDIA) LIMITED and we hereby unconditionally accept the tender conditions and Tender Documents in its entirely for the above work.
- 2. The contents of the Tender Documents (Instructions to Tenderers) have been noted wherein it is clarified that after unconditionally accepting the tender conditions in its entirety, it is not permissible to put any remarks(s) / condition(s) (except unconditional rebate on price, if any) in the 'Price-Bid' enclosed in "Envelope-2" and the same has been followed in the present case. In case this provision of the Tender is found violated at any time after opening "Envelope-2", We agree that our tender shall be summarily rejected and EPI shall, without prejudice to any other right or remedy be at liberty to forfeit the full said Earnest Money absolutely.
- 3. The required Earnest Money for this work is enclosed herewith.

Yours faithfully,

(Signature of the Tenderer)

Seal of Tenderer

Dated:

Sign and Stamp of Bidder

Sign and Stamp of EPIL

FORM OF TENDER (TO BE ENCLOSED IN LETTER HEAD)

To, CONTRACTS DIVISION ENGINEERING PROJECTS (INDIA) LTD.

REF: Tender for "Construction of Eklavya Model Residential School (EMRS) in Single- Phase comprise of school building, Boys hostel (240 students), Girls-hostel (240 students), Kitchen & Dinning block, 2 blocks of Type-III quarters including guest house (8+8 Nos), Type-II quarters (10 Nos), Principal Residence, Warden Residence (Boys & Girls), electrical provision, water supply and Sanitary installations, External sewerage system and Drainage facility, Campus development such as road, Compound wall etc. at Vijaynagar in Sabarkantha District of Gujarat State."

NIT No. : WRO/CON/EMRS/866/330 Date: 19.12.2023

- We hereby tender for execution of work as mentioned in "Memorandum" to this "Form of Tender" as per Tender Documents within the time schedule of completion of work as per separately signed and accepted rates in the Bill of Quantities quoted by us for the whole work in accordance with the Notice Inviting Tender, Conditions of Contract, Specifications of materials and workmanship, Bill of Quantities Drawings, Time Schedule for completion of jobs, and other documents and papers, all as detailed in Tender Documents.
- 2. It is agreed that the time stipulated for jobs and completion of work in all respects and in different stages mentioned in the "Time Schedule for completion of jobs" and signed and accepted by us is the essence of the contract. We agree that in case of failure on my/our part to strictly observe the time of completion mentioned for jobs and the final completion of work in all respects according to the schedule set out in the said "Time schedule for completion of jobs" and stipulations contained in the contract, the recovery shall be made from us as specified therein. In exceptional circumstances extension of time which shall always be in writing may, however be granted by EPI at its entire discretion for some items, and We agree that such extension of time will not be counted for the final completion of work as stipulated in the said "Time schedule of completion of jobs".
- 3. We agree to pay the Security Deposit /Retention money, Performance Guarantee and accept the terms and conditions as laid down in the "Memorandum" to this "Form of Tender".
- 4. Should this Tender be accepted, we agree to abide by and fulfill all terms and conditions referred to above and as conditioned in Tender Documents elsewhere and in default thereof, allow EPI to forfeit and pay EPI, or its successors or its authorized nominees such sums of money as are stipulated in the Tender Documents.

- 5. We hereby pay the earnest money amount as mentioned in the "Memorandum" to this "Form of Tender" in favour of Engineering Projects (India) Limited payable at place as mentioned in the "NIT/ITT".
- 6. If we fail to commence the work within 10 days of the date of issue of Letter of intent and / or We fail to sign the agreement as per Clause 84 of General Conditions of Contract and/or We fail to submit Performance Guarantee as per Clause 9.0 & 9.1 of General Conditions of Contract, We agree that EPI shall, without prejudice to any other right or remedy, be at liberty to cancel the Letter of Intent and to forfeit the said earnest money as specified above.
- 7. We are also enclosing herewith the Letter of Undertaking on the prescribed proforma as referred to in condition of NIT.

Date the	day of
SIGNATURE OF TENDERER NAME (CAPITAL LETTERS):	
OCCUPATION	
ADDRESS	

SEAL OF TENDERER

MEMORANDUM

Name of Project: Tender for "Construction of Eklavya Model Residential School (EMRS) in Single- Phase comprise of school building, Boys hostel (240 students), Girls-hostel (240 students), Kitchen & Dinning block, 2 blocks of Type-III quarters including guest house (8+8 Nos), Type-II quarters (10 Nos), Principal Residence, Warden Residence (Boys & Girls), electrical provision, water supply and Sanitary installations, External sewerage system and Drainage facility, Campus development such as road, Compound wall etc. at Vijaynagar in Sabarkantha District of Gujarat State."

S. NO.	Description	Cl. No.	Values/Description to be applicable for relevant clause(s)	
i.	Name of work	NIT	Tender for "Construction of Eklavya Model Residential School (EMRS) in Single- Phase comprise of school building, Boys hostel (240 students), Girls-hostel (240 students), Kitchen & Dinning block, 2 blocks of Type-III quarters including guest house (8+8 Nos), Type-II quarters (10 Nos), Principal Residence, Warden Residence (Boys & Girls), electrical provision, water supply and Sanitary installations, External sewerage system and Drainage facility, Campus development such as road, Compound wall etc. at Vijaynagar in Sabarkantha District of Gujarat State. "	
ii.	Client	NIT	National Education Society for Tribal Students (NESTS)	
iii.	Type of Tender	NIT	Percentage rate	
iv.	Earnest Money Deposit	NIT	Rs: 42,06,728/- (Rupees Forty-Two Lacs Six Thousand Seven Hundred Twenty- Eight)	
٧.	Estimated Cost	NIT	Rs: 32,06,72,818/- (Including GST)	
vi.	Time for completion of work	NIT	18 (Eighteen) months from the 10 th day of issue of LOI & Defect Liability Period is 12 months.	
vii.	Mobilization Advance		10% of Agreement value (Against Submission of B. G.)	
viii.	Interest Rate on Mobilization Advance	7.0 of ACC and 8.00 of	Base rate of State Bank of India + 2% or 12% whichever is higher.	
ix.	Number of Installments for recovery of Mobilization Advance	GCC	The mobilization advance will be recovered @25% (Twenty Five percent only) of the value of work done from each running bill till complete mobilization advance recovered.	
х.	Schedule of Rates applicable	69.0 of GCC	DSR 2019 and prevailing Market Rate	
xi.	Validity of Tender 4.0 of GCC		The validity of offer(s) submitted by Tenderer shall be ninety (90) days from the last date of submission of the Tender. The earnest money will be forfeited without any prejudice to any right or remedy, in case the Contractor	

			withdraws his Offer(s) during the validity period or in case he changes his offer to his benefits, which are not acceptable to EPI. The validity period may be extended on mutual consent.
xii.	Security Deposit cum Performance Guarantee	9.0 of GCC	The successful bidder shall have to submit SDPG equitant to 5.0% (Five Point Zero Percentage) of the contract value of the accepted tender within 21 (twenty-one) days from the date of issue of Letter of intent (LOI). If required, any extension of time beyond 21 days and upto 60 days may be granted by the Competent Authority. However, a penal rate of interest @ 12% per annum shall be charged for the &lay in submission of SDPG after 21 (twenty-one) days i.e., from 22nd day to the date of submission of SDPG but within 60 days after the date of issue of LOI. Further, if 60th day happens to be declared holiday in the concerned office of EPI, submission of SDPG can be accepted on the next working day.
			The SDPG shall be submitted in the form of Bank Guarantee (format enclosed), from any Nationalized bank/ Scheduled Bank / Commercial Bank or in the form of Insurance Surety Bonds or Account Payee Demand Draft or Fixed Deposit Receipt or Online Payment in an acceptable form. This SDPG shall be initially remain valid upto 90 (ninety) days after the end of Defect Liability Period (DLP). In case, the time for completion of work gets extended, the contractor shall get the validity of SDPG extended to cover such extended time for completion of work plus DLP plus 90 days.
			In case, even after 60 days from the date of issue of LOI, the Bidder fails to submit the SDPG of the requisite amount, LOI will stand withdrawn and EMD of the Bidder shall be forfeited.
xiii.	Additional security for abnormally Low Bid		1. During the process of bidding, if the lowest bid is less than that of 10% below to the estimated cost put to tender, then the authority inviting tenders/bids shall obtain from the concerned bidder/contractor, the detailed planning regarding execution of the work at such low rates. It shall be ensured that, the work can be executed by the lowest bidder based on the detailed planning of execution submitted by the contractor/bidder.
			2. If the lowest bid is below up to 10% of the estimated cost put to tender, then the bidder/contractor shall submit

			 Bank Guarantee or the Demand Draft of 1% of the cost put to tender as a Performance Security in bid/tender envelope no. 2 (Scan Copy) (e.g., from the bidder who has quoted 1% to 10% below to the estimated cost-1% of Bid cost). 3. If the cost bid/tender is less than 10% below of the estimated cost put to tender, then (A) Bank Guarantee/DD corresponding to the percentage over and above 10% and as per above 2 may be submitted
			in envelope no. 2 along with bid/tender (e.g., for Bid Offer of 14%, upto 10% below -1% and 14%-10%=4%, thus total=1%+4%=5%), If this amount is less then Rs. 1000/-, then Bank Guarantee /DD of minimum Rs. 1000/- may be submitted.
			(B) If bid/tender quoted is less than 15% below, then DD amount for the balance percentage over & above 15% be worked out at double rate and the same may be submitted (e.g., if the offer is 19% below, then (19-15=4%x2=8%).
xiv.	Retention Money	10.0 of GCC	5% (Five percent only) of Basic contract value which shall be deducted from each RA Bill. The retention money shall be release after expiry of defect liability period.
XV.	Time allowed for starting the work	43.0 of GCC	10 (Ten) days from the date of issue of LOI.
xvi.	Defect Liability Period	74.0 of GCC	12 months after handing over to client.
xvii.	Arbitration	76.0 of GCC & A(21.0) of ACC	As per clause no. 76.0 of GCC & A(21.0) of ACC
xviii.	Jurisdiction	76.3 of GCC & A(21.0) of ACC	As per clause no. 76.0 of GCC & A(21.0) of ACC Courts in Mumbai.

SIGNATURE OF BIDDER

:

:

:

:

:

NAME (CAPITAL LETTERS)

OCCUPATION

ADDRESS

SEAL OF BIDDER

Sign and Stamp of Bidder

ADDENDUM TO INSTRUCTIONS TO TENDERERS

Mode of submission of tender is through e-bids only. Hence clause no. 1 of ITT is deleted.

Kindly refer "Special instructions to Bidders for e-tendering" for downloading & uploading of tender documents as per NIT".

Bidder Information (To be submitted by Bidder on its company Letter Head)

Company Name*	
Registration Number*	
Registered Address*	
Name of Partners/Directors	
Bidder type*	
Indian/Foreign	
City*	
State*	
Country*	
Postal code*	
PAN/TAN /GST Number*	
Company's Establishment Year	
Company's Nature of business*	
Company's Legal status*	
Limited company/	
Undertaking/Joint	
venture/Partnership/others	
Company Category*	
Micro unit as per MSME/	
Small unit as per MSME/	
Medium unit as per MSME/	
Ancillary unit/Project of affected	
person of this company/SSI/others	
Contact Details	
Enter Company's Contact Person Det	ails
Title *	
Mr/Mrs/Dr/Shree/Ms	
Contact Name*	
Date of Birth* (DD/MM/YYYY)	
Correspondence Email*	(Correspondence Email ID can be same as your Login
	ID. All The mail correspondence will be sent only to
	the Correspondence Email ID.)
Designation	
Phone *	
Mobile*	

BANKER DETAILS

PAN NO*	
GST NO*	
NAME OF BANK*	
ACTIVE BANK A/C DETAILS*	
A/C NO*	
A/C TYPE*	
BRANCH ADDRESS*	
IFSC *	

*Mandatory information (must be filled by the bidders)

BID CAPACITY

Name of the Work: "Construction of Eklavya Model Residential School (EMRS) in Single- Phase comprise of school building, Boys hostel (240 students), Girls-hostel (240 students), Kitchen & Dinning block, 2 blocks of Type-III quarters including guest house (8+8 Nos), Type-II quarters (10 Nos), Principal Residence, Warden Residence (Boys & Girls), electrical provision, water supply and Sanitary installations, External sewerage system and Drainage facility, Campus development such as road, Compound wall etc. at **Vijaynagar in Sabarkantha District of Gujarat State.**"

NIT No. : WRO/CON/EMRS/866/330 Date: 19.12.2023

ESTIMATED COST PUT TO TENDER : 32,06,72,818/- (Including GST)

<u>Bid Capacity</u>: The bidding capacity of the contractor should be equal to or more than the estimated cost of the work put to Tender. The bidding capacity shall be worked out by the following formula :

Bidding Capacity = [A x N x 1.5] – B

Where,

A = Maximum turnover in construction works executed in any one year during the last seven years considering the completed as well as works in progress. The value of completed works shall be brought to current costing level by enhancing at a simple rate of 7% per annum.

N = Number of years prescribed for completion of work for which bids have been invited.

B = Value of existing commitments and ongoing works to be completed during the period of completion of work for which bids have been invited. The Bidders are requested to furnish the existing commitments on Works under execution along with stipulated period for completion of remaining for each of the work should be furnished **in an affidavit on non-judicial stamp paper of value of Rupees 100/-** duly certified that the particulars furnished are corrected as per the Proforma in Annexure-A. (Format enclosed)

BID CAPACITY CALCULATION BY BIDDER

SIGN & STAMP OF BIDDER

							ANNEXURE-A	
AFFIDAVIT								
	(To be typed on Rs. 100/- non-judicial stamp paper)							
-	I/Wedo hereby solemnly affirm and decleare as follows for and on behalf of the Firm :							
Sr.	LIST OF EXISTING COMMITMENT AND ONGOING WORKS Sr. Name of Client Work Work Balance Balance Work to be							
Sr. No.	Works	Name & Address	Order Value (in Rs)	Executed till Date (Rs)	Amount of work to be completed (Rs)	period to complete the works (Total months)	completed in 18 months (Rs)	
					(4–5)			
1	2	3	4	5	6	7	8	
	Balance Commitments during 18 monthd as per NIT Rs							
It is certify that the above particulars furnished are true and correct. If any information given is found to be concealed at a later date, the Contract will be terminated forthwith without prejudice to the rights thereon consequent on termination and the bidder will be blacklisted. I/We agree for debarring tendering for one year if any facts are suppressed.								
SIGN AND STAMP OF BIDDER Signature of Notary Public								

AFFIDAVIT

(To be submitted by bidder on non-judicial stamp paper of Rs.100/-(Rupees Hundred only) duly attested by Notary Public)

Affidavit of Mr ------ So ------ R/o ------ R/o

I, the deponent above named do hereby solemnly affirm and declare as under :

- 1. That I am the Proprietor/Authorized signatory of M/shaving its Head / Regd. Office at.....
- 2. That the information / documents/Experience certificates submitted by M/salong with the tender for (Name of work).... To EPI are genuine, true and nothing has been concealed.
- 3. I shall have no objection in case EPI verifies them from issuing authority (ies). I shall also have no objection in providing the original copy of the document (s), in case EPI demand so for verification.
- 4. I hereby confirm that in case, any document, information & / or certificate submitted by me found to be incorrect / false / fabricated, EPI at its discretion may disqualify /reject/ terminate the bid / contract and also forfeit the EMD / All dues.
- 5. I shall have no objection in case EPI verifies any or all Bank Guarantee(s) under any of the clause (s) of Contract including those issued towards EMD and Performance Guarantee from the Zonal Branch / office issuing Bank and I / we shall have no right or claim on my submitted EMD before EPI receives said verification.
- 6. That the Bank Guarantee issued against the EMD issued by (name and address of the Bank) is genuine and if found at any stage to be incorrect / false/ fabricated, EPI shall reject my bid cancel pre-Qualification and Debar me from Participating in any future tender for three years.

I, ------, the Proprietor / Authorised signatory of M/s ------ do hereby confirm that the contents of the above Affidavit are true to my knowledge and nothing has been concealed there from ------ and that no part of it is false.

Verified at ----- day of -----

DEPONENT

ATTESTED BY (NOTARY PUBLIC)

Sign and Stamp of Bidder

Sign and Stamp of EPIL

Site Visit Certification

Tender for "Construction of Eklavya Model Residential School (EMRS) in Single- Phase comprise of school building, Boys hostel (240 students), Girls-hostel (240 students), Kitchen & Dinning block, 2 blocks of Type-III quarters including guest house (8+8 Nos), Type-II quarters (10 Nos), Principal Residence, Warden Residence (Boys & Girls), electrical provision, water supply and Sanitary installations, External sewerage system and Drainage facility, Campus development such as road, Compound wall etc. at Vijaynagar in Sabarkantha District of Gujarat State."

NIT NO	b.: WRO/CON/EMRS/866/330 Date: 19.12.2	023
	SITE VISIT REP	ORT
		Date: -
1	Name of the Bidder	
	Authorized Person's Name for Site Visit	
	Id Proof	
	Email-Id	
	Contact Details	
SI NO	DESCRIPTION	CONFIRMATION
2	Site Accessibility from Road is checked	
3	Water & Electricity Availability is checked	
4	UNDERTAKING: -Authorized person has visited site before submitting the bid to assess the ground condition & working condition at site. Bidder is quoting price & responsible for any further site related consequences thereof & it is to be considered as self-declaration.	
5	We have noted all local conditions & availability of raw material for construction.	

Authorized Person of Bidder (Signed Off) Seal of Tenderer: Date:

<u>UNDERTAKING</u> (To be submitted by Bidder on its company Letter Head)

NIT No. : WRO/CON/EMRS/866/330 Date: 19.12.2023

Ref: Tender for "Construction of Eklavya Model Residential School (EMRS) in Single- Phase comprise of school building, Boys hostel (240 students), Girls-hostel (240 students), Kitchen & Dinning block, 2 blocks of Type-III quarters including guest house (8+8 Nos), Type-II quarters (10 Nos), Principal Residence, Warden Residence (Boys & Girls), electrical provision, water supply and Sanitary installations, External sewerage system and Drainage facility, Campus development such as road, Compound wall etc. at Vijaynagar in Sabarkantha District of Gujarat State."

This is to confirm that the following persons are the present Directors of the company/firm:

1. 2. .

It is further confirmed that none of the above Directors is associated with any other company/firm which is quoting for the above referred tender of EPI.

The details of constitution of M/sis submitted along with this annexure.

In case, at any later stage the above information is found incorrect, EPI can cancel our BID/LOI/Contract Agreement and may take any suitable action deemed fit against our company.

Authorized Signatory CEO/Proprietor/MD

Date:

Name & Seal of the Company

Sign and Stamp of Bidder

Sign and Stamp of EPIL

LOCAL CONTENT CERTIFICATE

(From Statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of supplies other than companies) giving the percentage of local content

NIT No.: WRO/CON/EMRS/866/330 Date: 19.12.2023

Ref: Tender for "Construction of Eklavya Model Residential School (EMRS) in Single- Phase comprise of school building, Boys hostel (240 students), Girls-hostel (240 students), Kitchen & Dinning block, 2 blocks of Type-III quarters including guest house (8+8 Nos), Type-II quarters (10 Nos), Principal Residence, Warden Residence (Boys & Girls), electrical provision, water supply and Sanitary installations, External sewerage system and Drainage facility, Campus development such as road, Compound wall etc. at Vijaynagar in Sabarkantha District of Gujarat State."

"Wethe s	statutory auditor (o	or as the case may	y be) of M/s. (N	ame of the	bidder) hereby
certify that	M/s	(Name of the b	idder) meet the	mandator	y local content
requirements	s of the tender as	per Public Procure	ment (Preference	e to Make	in India) - Local
Content	policy	quoted	vide	offer	no
	dated		against	EPI NIT	No
dated	by	M/s	(Name of the	bidder). Th	e percentage of
local content	in the bid is	% and the items of	offered in the bio	d meets the	e minimum local
content and p	party shall give deta	ils of the location (s	s) at which the loo	cal value ado	dition is made".

Authorized Signatory Name & Seal of the Issuing Authority

Annexure-F

INTEGRITY PACT

Between

Engineering Projects (India) Limited (EPI) hereinafter referred to as "The Principal", and

...... hereinafter referred to as "The Bidder/ Contractor"

<u>Preamble</u>

In order to achieve these goals, the principal will appoint Independent External Monitors (IEMs) who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1 – Commitments of the Principal

- (1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:
 - a. No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
 - b. The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
 - c. The Principal will exclude from the process all known prejudiced persons.
- (2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

Section 2 – Commitments of the Bidder(s)/ Contractor(s)

- (1) The Bidder(s)/ Contractor(s) commit themselves to take all measures necessary to prevent corruption. The Bidder(s)/ Contractor(s) commit themselves to observe the following principles during participation in the tender process and during the contract execution.
 - a. The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal[®]s employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
 - b. The Bidder(s)/ Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non- submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
 - c. The Bidder(s)/ Contractor(s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s)/ Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 - d. The Bidder(s)/Contractors(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly, the Bidder(s)/Contractors(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further details as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s)/Contractor(s). Further, as mentioned in the Guidelines all the payments made to the Indian agent/representative have to be in Indian Rupees only.
 - e. The Bidder(s)/ Contractor(s) will, when presenting their bid, disclose any and all payments made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
 - f. The Bidder(s)/ Contractor(s) will, when presenting their bid, disclose any transgressions with any other company that may impinge on the anticorruption principle.
 - g. Bidder(s) /Contractor(s) who have signed the Integrity Pact shall not approach the Courts while representing the matter to IEMs and shall wait for their decision in the matter.
- (2) The Bidder(s)/ Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 - Disqualification from tender process and exclusion from future Contracts

- (1) If the Bidder(s)/Contractor(s), before award or during execution has committed a transgression through a violation of Section 2, above or in any other form such as to put their reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process or to terminate the contract, if already signed for such reason.
- (2) If the Bidder/ Contractor has committed a serious transgression through a violation of section 2 such as to put his reliability or credibility into question, the principal is entitled also to exclude the Bidder/ Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressor with the company hierarchy of the Bidder and the amount of the damage. The exclusion will be imposed for a minimum of 6 months and maximum of 3 years.
- (3) If the Bidder/ Contractor can prove that he has restored/ recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely.
- (4) A transgression is considered to have occurred if in light of available evidence, no reasonable doubt is possible.

Section 4 – Compensation for Damages

- (1) If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/ Bid Security.
- (2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the Contract value or the amount equivalent to Performance Bank Guarantee.

Section 5 – Previous transgression

- (1) The Bidder declares that no previous transgressions occurred in the last three years with any other Company in any country conforming to the anti-corruption approach or with any Public Sector Enterprise in India that could justify his exclusion from the tender process.
- (2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process.

Section 6 – Equal treatment of all Bidders / Contractors / Subcontractors

(1) In case of joint venture, all the partners of the joint venture should sign the Integrity Pact. In case of Sub-contracting, the Principal Contractor shall take the responsibility of the adoption of Integrity Pact by the sub-contractor and submit duly signed Integrity Pact by all the sub-contractors. (2) The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors.

(3) The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 7 – Criminal charges against violating Bidder(s) / Contractor(s)/ Subcontractor(s)

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

Section 8 – Independent External Monitor

- (1) The Principal appoints competent and credible Independent External Monitor for this Pact after approval by Central Vigilance Commission. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- (2) The Monitor is not subject to instructions by the representatives of the parties and performs his/ her functions neutrally and independently. The Monitor would have access to all Contract documents, whenever required. It will be obligatory for him / her to treat the information and documents of the Bidders/Contractors as confidential. He/ she reports to the Chairman, EPI.
- (3) The Bidder(s)/ Contractor(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his/her request and demonstration of a valid interest, unrestricted and unconditional access to their project documentation. The same is applicable to Sub-contractors.
- (4) The Monitor is under contractual obligation to treat the information and documents of the Bidder(s) / Contractor(s) / Sub-contractor(s) with confidentiality. The Monitor has also signed declarations on "Non-Disclosure of Confidential Information" and of "Absence of Conflict of Interest". In case of any conflict of interest arising at a later date, the IEM shall inform Chairman, EPI and recues himself / herself from that case.
- (5) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- (6) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he/she will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate

action. However, the independent External Monitor shall give an opportunity to the Bidder/ Contractor to present its case before making its recommendations to the Principal.

(7) The Monitor will submit a written report to the Chairman, EPI within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.

(8) Monitor shall be entitled to compensation on the same terms as being extended to / provided to Independent Directors on the EPI Board.

- (9) If the Monitor has reported to the Chairman EPI, a substantiated suspicion of an offence under relevant IPC/ PC Act, and the Chairman EPI has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.
- (10) The word "Monitor" would include both singular and plural.
- (11) Independent External Monitor shall be required to maintain confidentially of the information acquired and gathered during their tenure/ role as independent Monitor. Any breach in this regard would be subject to the legal judicial system of India.

Section 9 – Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealings.

If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged / determined by Chairman of EPI.

Section 10 – Other provisions

- (1) This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. New Delhi.
- (2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- (3) If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- (4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

(5) Issues like Warranty / Guarantee etc. shall be outside the purview of IEMs.

(For & On behalf of the Principal)	(For & On behalf of Bidder/ Contractor)
(Office Seal)	(Office Seal)
Place	
Date	
Witness 1:	
(Name & Address)	
Witness 2:	
(Name & Address)	

Annexure-G

TENDER ACCEPTANCE LETTER (To be given on Company Letter Head)

Date:

To,

Sub: Acceptance of Terms & Conditions of Tender.

NIT No. : WRO/CON/EMRS/866/330 Date: 19.12.2023

Name of Tender / Work: - "Construction of Eklavya Model Residential School (EMRS) in Single-Phase comprise of school building, Boys hostel (240 students), Girls-hostel (240 students), Kitchen & Dinning block, 2 blocks of Type-III quarters including guest house (8+8 Nos), Type-II quarters (10 Nos), Principal Residence, Warden Residence (Boys & Girls), electrical provision, water supply and Sanitary installations, External sewerage system and Drainage facility, Campus development such as road, Compound wall etc. at **Vijaynagar** in **Sabarkantha** District of Gujarat State."

Dear Sir,

1. I/ We have downloaded / obtained the tender document(s) for the above mentioned'Tender/Work'fromthewebsite(s)namely:

as per your advertisement, given in the above-mentioned website(s).

2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents from Page No. ______ to _____ (including all documents like annexure(s), schedule(s), etc.,), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.

3. The corrigendum(s) issued from time to time by your department/ organisation too have also been taken into consideration, while submitting this acceptance letter.

4. I / We hereby unconditionally accept the tender conditions of above-mentioned tender document(s) / corrigendum(s) in its totality / entirety.

5. I / We do hereby declare that our Firm has not been blacklisted/ debarred by any Govt. Department/Public sector undertaking.

6. I / We certify that all information furnished by our Firm is true & correct and, in the event, that the information is found to be incorrect/untrue or found violated, then your department/ organisation shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully, (Signature of the Bidder, with Official Seal)

Annexure- H

BANKERS CERTIFICATE FROM A SCHEDULED BANK

This is to certify that to the best of our knowledge and information that M/s. / Sh. ______ having marginally noted address, ______ as a Customer of our bank are / is respectable and can be treated as good for any engagement upto a limit of Rs. ______ (Rupees ______)

This certificate is issued without any guarantee or responsibility on the bank or any of the officers.

(Signature) For the Bank

NOTE

- 1. Bankers Certificate should be on letter head of the Bank, addressed to tendering authority.
- 2. In case of Partnership firm, certificate should include names of all partners as recorded with the Bank.

FORM FOR CERTIFICATE OF NET WORTH FROM CHARTERED ACCOUNTANT

"It is to certify that as per the audited balance sheet and profit & loss account during the financial year _____, the Net Worth of M/s. _____ (Name & Registered Address of individual/firm/company), as on ______ (the relevant date) is Rs. ______ after considering all liabilities. It is further certified that the Net Worth of the company has not eroded by more than 30% in the last three years ending on (the relevant date)"

Unique Document Identification Number (UDIN)

Signature of Chartered Accountant _____

Name of Chartered Accountant _____

Membership No. of ICAI

Date and Seal

Sign and Stamp of Bidder

Annexure – I

UNDERTAKING FOR EXECUTION OF EMRS SCHOOL (To be submitted by Bidder on its company Letter Head)

NIT No. : WRO/CON/EMRS/866/330 Date: 19.12.2023

Ref: Tender for "Construction of Eklavya Model Residential School (EMRS) in Single- Phase comprise of school building, Boys hostel (240 students), Girls-hostel (240 students), Kitchen & Dinning block, 2 blocks of Type-III quarters including guest house (8+8 Nos), Type-II quarters (10 Nos), Principal Residence, Warden Residence (Boys & Girls), electrical provision, water supply and Sanitary installations, External sewerage system and Drainage facility, Campus development such as road, Compound wall etc. at **Vijaynagar** in **Sabarkantha** District of Gujarat State."

We(name of the bidder) undertake that following EMRS works are under execution by our Origination:

Sr. No.	Name of Work and Location	Name of CPSU/CPWD

(To be self-certified by the Bidder)

PROFORMA FOR BANK GURANTEE IN LIEU OF EARNEST MONEY DEPOSIT

We, bank having its registered/head office at..... (hereinafter referred to as the Bank) do hereby agree and undertake to pay to EPI without demur or protest an amount not exceeding Rs..... on demand by EPI.

We the above said Bank further agree and undertake to pay the said amount of Rs. without any demur on demand within 48 hours. Any demand made on the Bank by EPI shall be conclusive as regards the amount due and payable by the Bank under this guarantee.

We the above said Bank further agree that the guarantee herein contained shall be in full force and in effect until date

We, the above said Bank, further agree that EPI shall have full liberty, without our consent and without affecting in any manner our obligation to verify, modify or delete any of the conditions.

We, the above said Bank, lastly undertake not to revoke this guarantee during its currency except with the prior consent of EPI in writing.

Dated......200.

For and on behalf of the Bank

Note: BG should be submitted with Structured Finance Managing System (SFMS) issued by beneficiary bank

Bidder Registration Module

To enroll as a bidder click on the **Online Bidder Enrollment** link.

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Downloads	Corrigendum Title	Reference No	Closing	Date Di	d Opening Date	C Tender Search
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Announcements	Latest Congendum upuat	es every 15 mins.				Information About DSC
Recognitions	Certifying Agency					FAQ





The system leads to the page where the details of the bidders are to be filled in. There are preferential categories for the preferential bidders who can avail the privileges that are provided. The Preferential categories are Make in India, MSME and STARTUP. The bidders first has to click on the check box of Preferential Bidder to select the Preferential Category.

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	Login Id *			Email ID and Mobile No Policy
Tenders by Location	Enter email address for login id. eg: abc@r (Care may be taken to enter valid e-mail IE cannot be modified once registered.)	iic.com). This information will be kept confi	idential. The login ID	Email and mobile must comply following requisites,
Tenders by Organisation	Correspondence Email*			 As Mobile and Email are the modes of correspondence, ensure
	(Correspondence Email ID can be same as	your Login ID.)		that mobile no and email id provided are correct.
Tenders by Classification		-Select- T		 The verification codes are valid for 900 seconds from the time Send Verification Code is clicked.
Tenders in Archive				
	Company Details			
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Department List		e		
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Announcements	City*			
	State	-Select-	*	





The details of the bidder are entered in the Online Enrollment of Corporate/Bidder page. The Correspondence Email id and the Mobile Number should be a valid email id and a valid mobile number because further contacts will be only through this mobile number and correspondence email id.

Login Id *	biddertest2@gmail.com	Email ID and Mobile No Policy
Enter email address for login id. eg: abc@ni (Care may be taken to enter valid e-mail ID be modified once registered.)	ic.com D. This information will be kept confidential. The login ID cannot	Email and mobile must comply following requisites, 1. As Mobile and Email are the
Correspondence Email*	biddertest2@gmail.com	modes of correspondence, ensure
(Correspondence Email ID can be same as	your Login ID.)	that mobile no and email id provided are correct.
Mobile*	IND (91) v 99	 The verification codes are valid for 900 seconds from the time Send Verification Code is clicked.
Company Details		
Company Name *	Sai Private Limitted.	
Preferential Bidder:	Yes Yes	Page
Preference Category*	Make in India	0
Registration Number *	A123456Z	1
Registered Address*	Chennai	
Name of Partners / Directors		
BidderType*	Indian O Foreign	
City *	Chennai	
State*	Tamil Nadu 🗸	
Postal Code*	123456	
PAN/TAN Number *	AFSTG2458A	





Once after filling the details, the bidder enters the Captcha and clicks on the Submit Button to submit the provided details.

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The Bidder enrollment Acknowledgement is displayed on the screen. The bidder Clicks on the Send Verification Code button to receive the verification code in the provided mobile number and the correspondence email id.

: biddertest2@gmail.com
: Corporate Tenderer
: biddertest2@gmail.com
: 91-94
Sai Private Limitted.
: Yes
: Make in India
: A123456Z
: Chennai
: Nil
Chennai
Tami Nadu
: 123456
AESTG2458A
: 2010
Nature of Business
: Limited Company
Regd. with District Industries Centre(DIC)
: Mr
: Praveen Rawat
: 12-Sep-1989
: CEO
: 91 044 2000009





The bidder enters the Mobile Verification Code, Mail Verification Code, enters the New Password, confirms the same, enters the Captcha and clicks on the Submit button to submit the entered details.

rtest2@gmail.com	Email ID and Mobile No Policy Verification code must comply following requisites,
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•••••	Password Policy
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UDXC	 Length must be within 8 to 32 characters Any English lowercase and uppercase (a-z and A-Z) characters
	 Any numbers between 0-9 Any special characters from
	ertest2@gmail.com





The success message is displayed on the screen.

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Tenders Status		
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Downloads		
Debarment List		
Debarment List		





The bidder enters the Login Id, Captcha and clicks on the Login button to login to the portal.

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The bidder enters the password, captcha and clicks on the Proceed button to proceed further.

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The Bidder registers the DSC by clicking on the Signing Certificate icon to register the signing certificate.

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The Bidder selects the Signing certificate and clicks on the OK button to map the signing certificate.

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	and the second se	biddertest2@gmail.com Tenderer		
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121	2. DSC 3. User the a	can access the 'Informat application to view the DS	gin cannot be removed or reassigned ion about DSC' tab on the Homepag C certificate issuing authorities.	ge of
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	e-to 5. DSC	ken, user needs to select registered user only can j	the relevant DSC to register. perform any action in the application ation.	





The success message is displayed on the screen.

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The successful enrollment of DSC is displayed on the screen. The Bidder clicks on the Next button to proceed further.

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The Dash Board of the Bidder is loaded where the Bidder can change the Mobile Number, E-Mail Address and clicks on the Save button to save the provided details. If the Bidder does not want to change the Mobile Number, E-Mail Address he/she can just click on the Skip button to proceed further.

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	DASHBOARD			
	Welcome Sai Private Limitted.,			
	Roles : Tenderer			
	In order to enable International SMS update their Mobile Number along w	alerts facility, the eProcurement Application th the Country Code.	requires all the users to	
	In addition, the users are also requir	ed to update their email address		
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	 User Enrollment / Registratio Tender related events 	n		
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	E-Mail Address: *	biddertest2@gmail.com		
		ould receive an OTP by SMS / e-mail on above eceived the messages on time, please reche		
	Click on "Skip" button to complete t	he activity later.		
			Sk	ip Save





Once the Bidder clicks on the Save button, the system navigates to the page where OTP is to be entered, received through the changed E-Mail Id. The bidder enters the OTP and clicks on the Verify button to verify the entered OTP.

Welcome Sai Private Roles : Tenderer				
Q	OTP has been sent to the ente	red Email ID and Mobile No.		
				4
	Entered Email ID : Entered Mobile No :	biddertest2@gmail.com 91 - 9 999999998 8		
	OTP*	•••••		
		OTP will Expire in 04:44 minutes!		
			Verify	Resend OTP





The bidder enters the 15 digit GSTN Number, Name as registered in GSTN Portal and clicks on the Save button to save the provided details.

Goods and Service Tax Network (GSTN) Registration Information Do You have a GSTN Registration Number * () Yes () No GSTN Number eg: 99 AAAAA9999A 9 Z Z	
Do You have a GSTN Registration Number *	
GSTN Number eq: 00 AAAAA0000A 0 7 7	
OSTIT Number eg. 55 ANNAA5555A 5 2 2	
Please enter the 15 digit GSTN Number * 37 V AAAAA9999A 9 Z Z	
Name as Registered in GSTN Portal * Praveen Rawat	





The bidder clicks on the Next button to proceed further.

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The system navigates to the page where Startup India Registration Details page, where the bidder can click on the Registered radio button to provide the registration details or click on the Not Registered radio button and click on the Next button to proceed further.

Startup India Registration
 EProcurement portal is now integrated with Startup India. Bidders are now required to declare themselves, if they are registered/not registered as Startup India. If you are registered as Startup India, provide your Registration number and Mobile number as registered with the Startup India. Consent from User EProcurement portal will not share or disclose the Startup India Registration details with third party and will be used solely to establish and authenticate the details received from Startup India portal.
Startup * O Registered Not Registered
Next





Once the process is over the left Menu for the Bidder is loaded. Click on the My Accounts left menu to view the account details.

4	Government eProcurement	Welcome : biddertest2@gmail.com Server Time Last login : 02-Apr-2020 02:11 PM 02-Apr-2020 14:22:39 1Home	2011 C
4	System	Government eProcurement	System
		DASHBOARD	
U	ser Management		
+	My Accounts	Welcome Sai Private Limitted.,	
+	My Documents	Roles : Tenderer	
A	uction Management		
+	My Auctions		
+	Live Auctions	Announcements	
+	View Auction History		
Bi	d Management		
*	Search Active Tenders		
+	My Tenders		
*	Clarification		
+	My Active Bids		
+	Bid Opening (Live)		
+	Bidder Turnover Details		
+	Awarded Bid Document		
*	Techno Commercial Query		
*	Confirmatory Documents		
+	Techno Commercial Query History		
+	Short fall Documents		



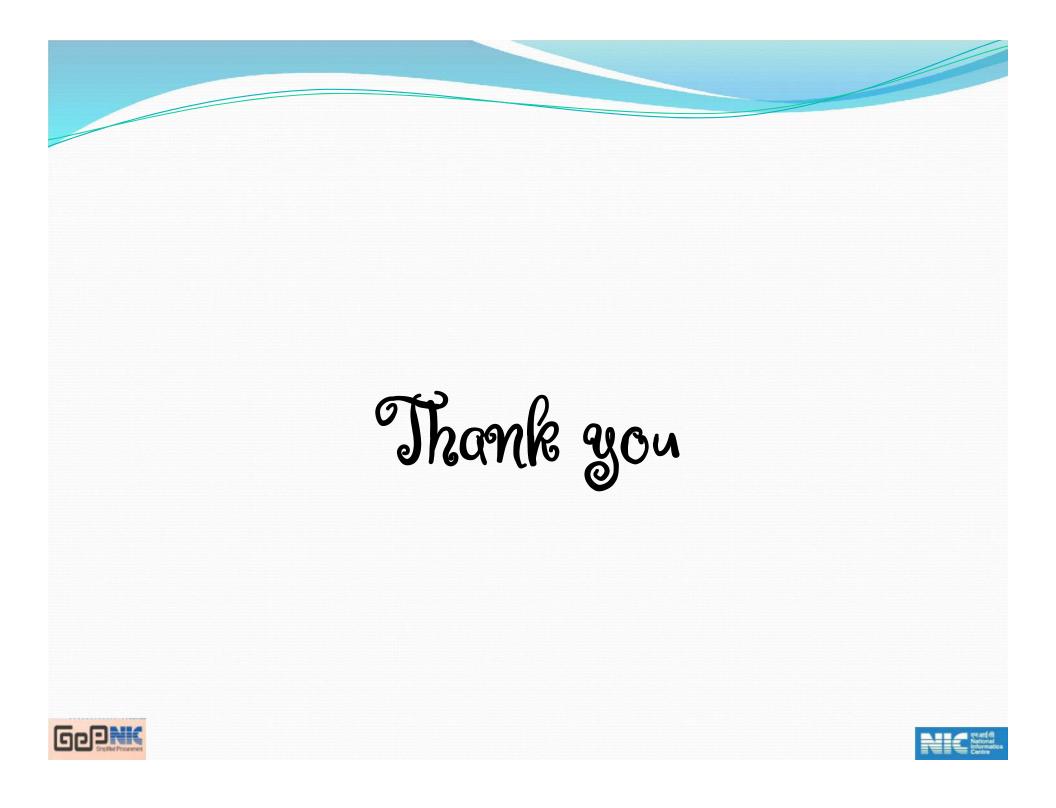


By Clicking the User Profile icon, The bidder can view the profile, Edit the profile, set the profile password which would be asked for editing the profile, the bidder can change the Email id & Mobile number and change the profile image.
 By Clicking the Authentication icon, the bidder can change the password and activate & inactivate the active DSC.
 On Clicking the Communication Ion, the bidder can select the product category for which the SMS and mail can be triggered if tenders are published under the selected product category and also the SMS and mail Notification can be selected by the bidder.
 On selecting the Privileges icon, a provision for registering MSME and Startup India are provided.
 On Clicking the DashBoard, the bidder can view the User Dash board.

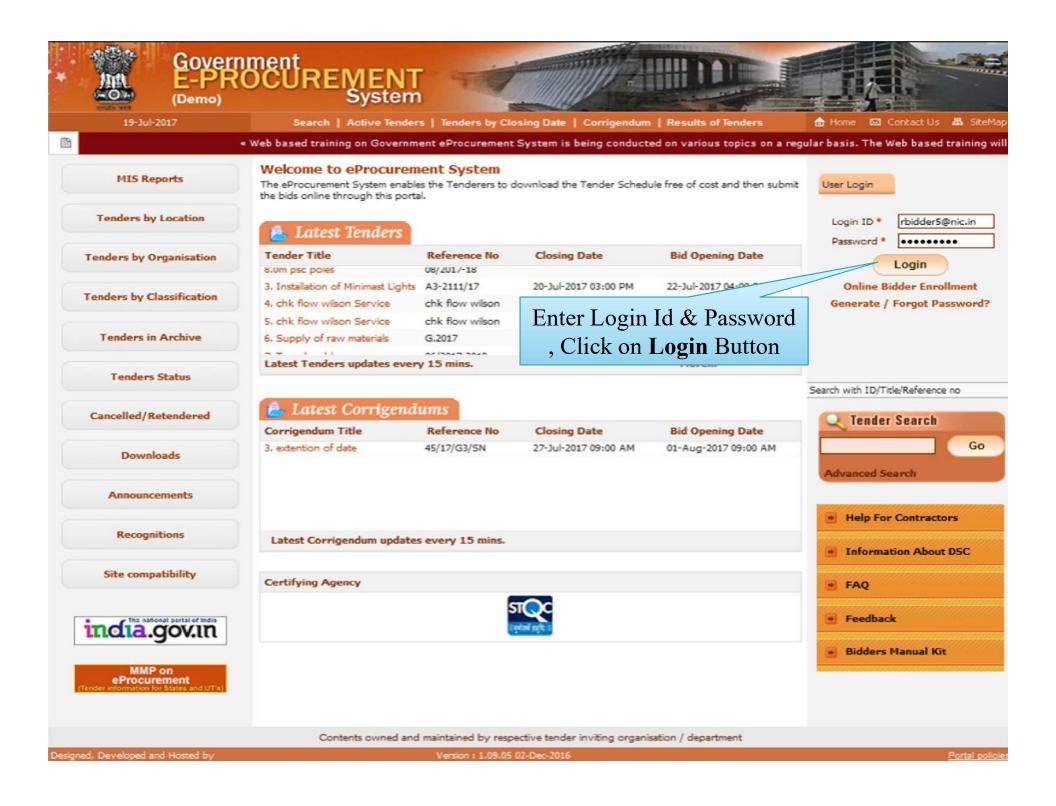
oles : Tenderer				
0	5	<u>هه</u> ۲	MISC	
User Profile	Authentication	Communication	Privileges	DashBoard
内三内三	#_i			
MSME	Startup India			

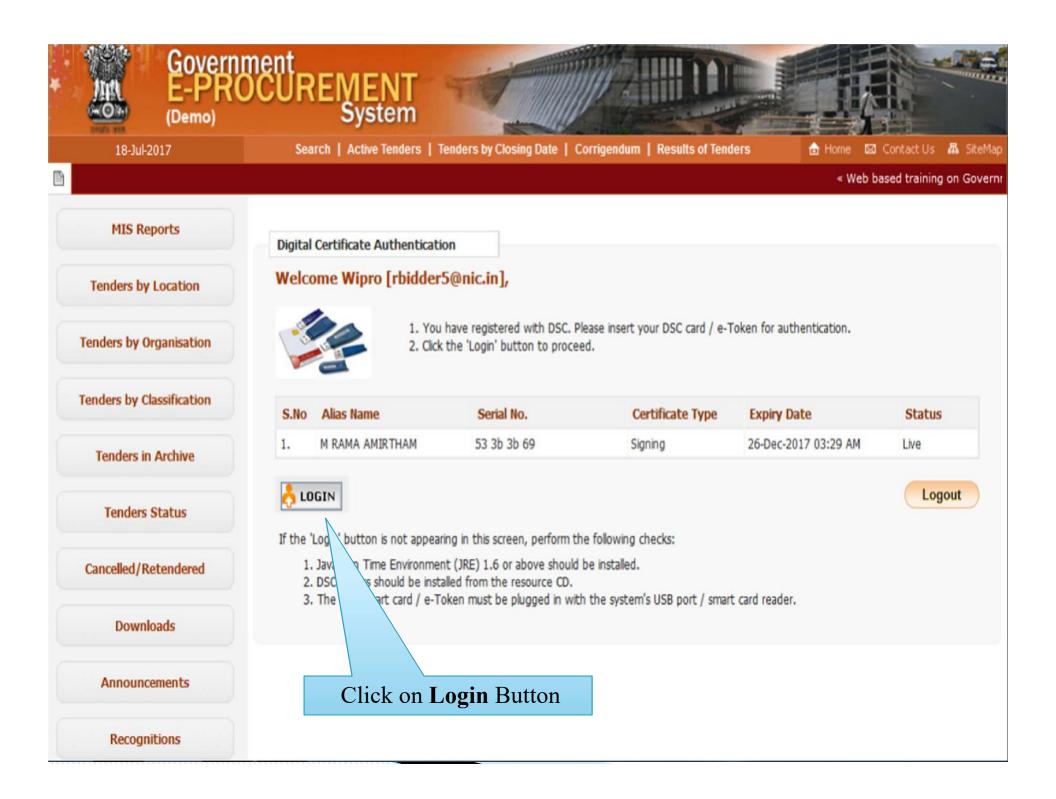


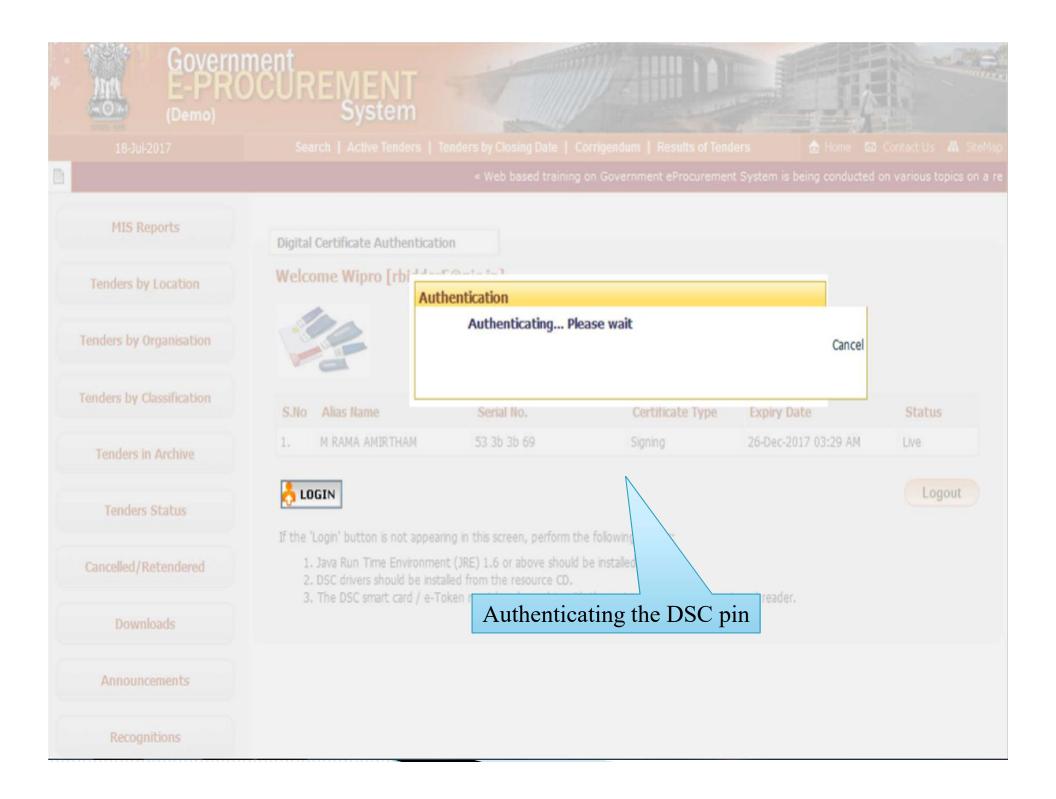




Bid Submission Module







Governr E-PRC (Demo)	nent CUREME Syst	NT				
18-Jul-2017						
conducted on various topics on a						
MIS Reports	Digital Certificate A	uthentication				
Tenders by Location	Welcome Wir	erify User PIN		-		
Tenders by Organisation	12	Now verify your User PIN:			Cancel	
Tenders by Classification		User PIN: ••••••				
	S.No Alias Na	Enable soft ke	yboard	pe Expiry Date		Status
Tenders in Archive	1. M RAMA	Change User PIN Log	in Cancel	26-Dec-2017	03:29 AM	Live
Tenders Status	LOGIN	is not appearing in this screen, p	n the following checks:			Logout
Cancelled/Retendered		e Environment (JRE) 1.6 or abo hould be installed from the reso	d be installed.			
Downloads		it card / e-Token must be plug	the system's USB port /	/ smart card reader.		
Announcements	E	Enter DSC Pin and Login Butto				
Recognitions						

System	V Government er rotarement syste
	DASHBOARD
User Management My Accounts	Welcome Wipro,
My Documents	Roles : Tenderer Dashboard
Auction Management	
My Auctions	
Live Auctions	Announcements
View Auction History	
Bid Management	Web based training on Covernment eDress rement System is being conducted on various tenics on a regular
Search Active Tenders	 Web based training on Government eProcurement System is being conducted on various topics on a regular basis. The Web based training will be conducted on all Central Government working days from 2.30 PM to
My Tenders	4.30 PM in English only.
Clarification	
My Active Bids	Click on Search Active
Bid Opening (Live)	Tenders
Techno Commercial Query	
History Confirmatory Documents	
Short fall Documents	
My Bids History	
Confirmatory Documents	
History Short Fall Documents History	
Archived Clarification	

User Management

Search Tenders

- My Accounts
- My Documents

Auction Management

- My Auctions
- Live Auctions
- View Auction History

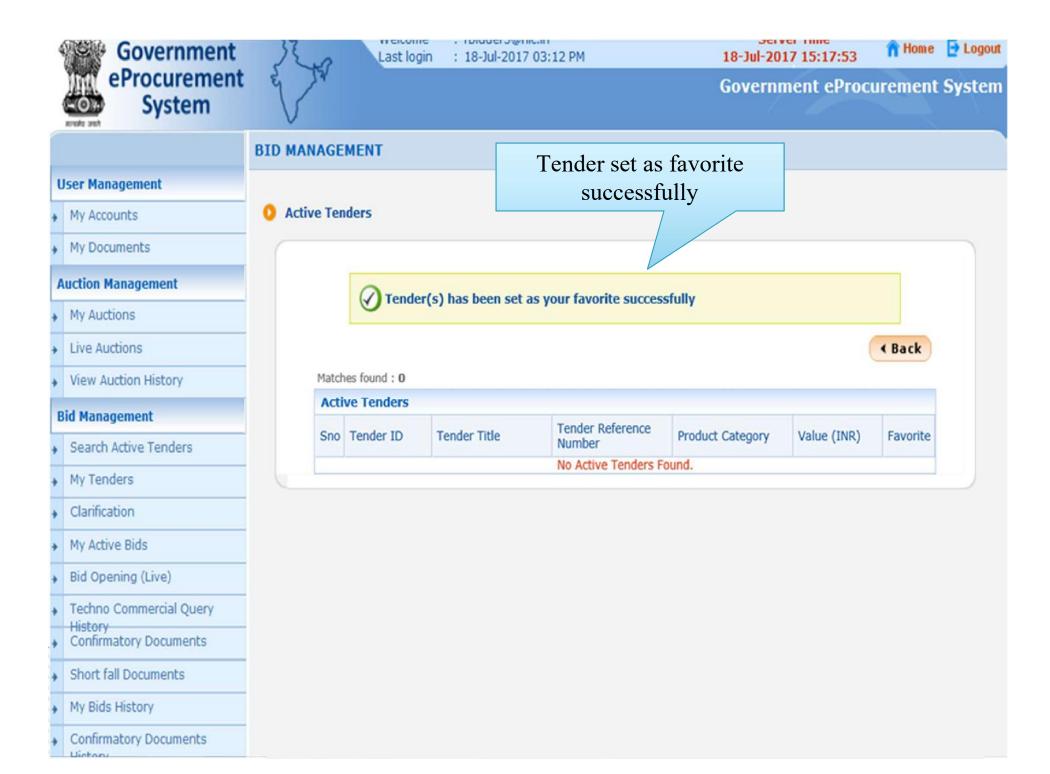
Bid Management

- Search Active Tenders
- My Tenders
- Clarification
- My Active Bids
- Bid Opening (Live)
- Techno Commercial Query
- History
- Confirmatory Documents
- Short fall Documents
- My Bids History
- Confirmatory Documents
 History
- Short Fall Documents History
- Archived Clarification
- Tender Status
- My Withdrawn Bids

Organisation	-Select-	~	Tender ID		
Department	-Select-	~	Keyword #	surgical	
Division	-Select-	×	Tender Category	-Select-	V
Sub Division	-Select-	×	Product Category	-Select-	V
Org Chain					
Location/City					
Tender Type	-Select-	V	Form of Contract	-Select-	V
Value Criteria	-Select-	×	-Select-	v	
Date Criteria	-Select-	V	From	То	
#- Keyword finds	the match in tender title	, work description an	d technical description		
					ancel Subm

Search Active Tenders from the above given option and click on Submit

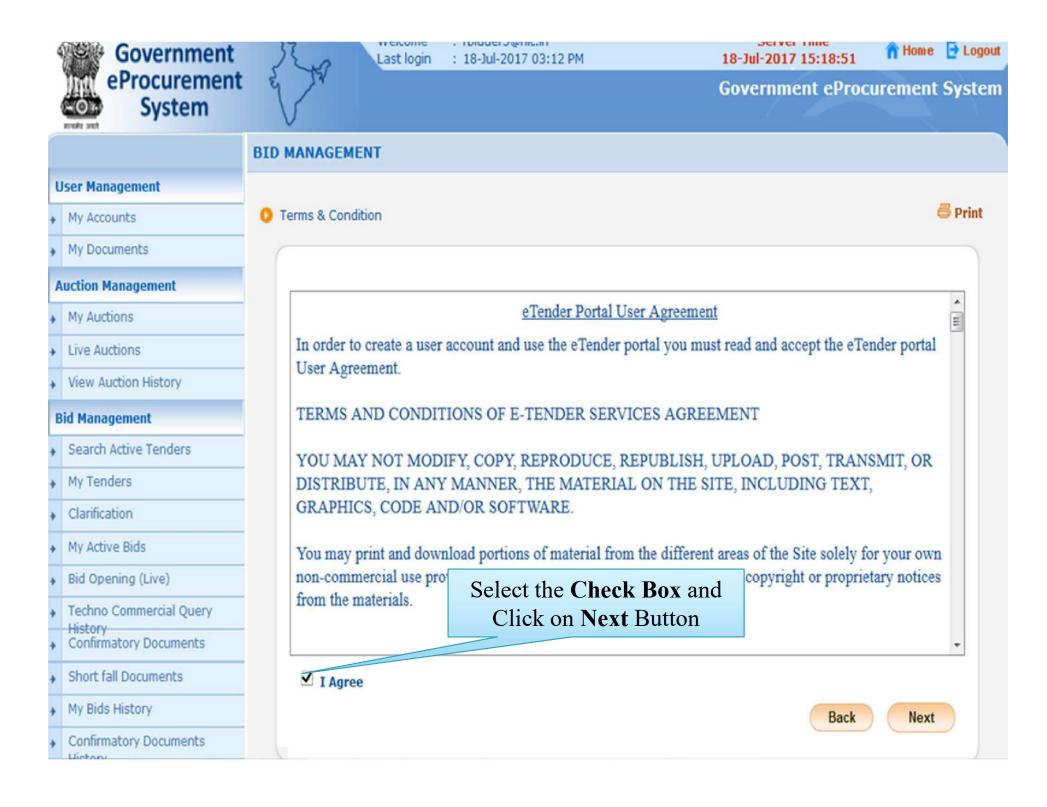
4	Government		S.	2 Last login	: 18-J	ul-2017 03:12	PM	18-Jul-2017		🎢 Home 📑 Logou			
1	eProcurement System	w		1				Governme	ent eProcur	ement Systen			
		BID MANAGEMENT											
u	lser Management	Select the check B						Box					
+	My Accounts	0	Active	Tenders									
+	My Documents	(
A	uction Management									Back			
+	My Auctions		Oper	Open Tenders									
+	Live Auctions		S.No Tender ID		Tender Title		Tender Reference Number	Product Category	Value in ₹	Favorite			
+	View Auction History		1. 2017_NIC_49820_1		Tender for supply of surgical disposable and		XX-97/SO(DO)/Surgical Disposable	Medical Equipments/Waste		⁰ 🗹 🔕			
B	id Management			dressin				Equipments/ waste					
+	Search Active Tenders												
+	My Tenders							Set	t Open Tender a	s Favorite			
+	Clarification												
+	My Active Bids												
+	Bid Opening (Live)												
+	Techno Commercial Query												
+	History Confirmatory Documents						Click on Oper		AS				
+	Short fall Documents	favorite											
+	My Bids History												
+	Confirmatory Documents												



System	
	DASHBOARD
Jser Management	
My Accounts	Welcome Wipro,
My Documents	Roles : Tenderer
Auction Management	
My Auctions	
Live Auctions	Announcements
View Auction History	
Bid Management	Web based training on Covernment observement System is being conducted on various tenics on a regular
Search Active Tenders	 Web based training on Government eProcurement System is being conducted on various topics on a regular basis. The Web based training will be conducted on all Central Government working days from 2.30 PM to
My Tenders	4.30 PM in English only.
Clarification	
My Active Bids	Click on My Tenders
Bid Opening (Live)	
Techno Commercial Query	
History Confirmatory Documents	
Short fall Documents	
My Bids History	
Confirmatory Documents	
History Short Fall Documents History	
Archived Clarification	

4	Government	32	2	Last		: 18-Jul-2017 03			1	8-Jul-2017 15:18:10	A Home	Logout
	eProcurement System	w	74						G	overnment eProc	urement	System
		BID MA	NAGEN	IENT								
ι	Jser Management											
+	My Accounts	O My Te	enders									
+	My Documents											
1	Auction Management		Sear		[1		54 m		1	
+	My Auctions		Tend	er ID				Tender T	litle			
+	Live Auctions									Clear	Search	
+	View Auction History		My T	enders								
E	3id Management		S.No	Tender II	D	Tender Refe	rence Number	Т	ender Title		View	
+	Search Active Tenders		1	2017_NIC	49820_1	XX-97/SO(DO items/2017-18			ender for su nd dressing	pply of surgical disposable items		
+	My Tenders		2	2017_NIC_	_49725_1				hk flow wilso			
+	Clarification											
+	My Active Bids											
+	Bid Opening (Live)											
+	Techno Commercial Query					Click	on View		n for h	id		
+	History Confirmatory Documents					CHCK	submis					
•	Short fall Documents											
	My Bids History											
+	Confirmatory Documents											

	ents						
NIT Document	S.No	Document Name		Description		Document Size (in KB)	
	1	Tendernotice_1.pdf	1	Notice Inviting disposal and dr	Tender for supply of surgical essing items	850.8	
					at the second se	ownload as zip f	
Work Item Documents	S.No	Document Type	Docume	nt Name	Description	Document Size (in KB)	
	1	BOQ	BOQ_461	34.xls	Price Bid	294.0	
	2	Tender Documents	AIIMSTD.	.pdf	Tender document for supply of surgical disposable items and dressing items	2773.7	
Tender Inviting		2534 J					
Name	1	Store Officer					
Address		Room No. 108,1st Floo Delhi-110 029	or, Animal Ho	use Building, Ne	ar Biotechnology Building, A	IIMS, New	



- Live Auctions
- View Auction History

Bid Management

- Search Active Tenders
- My Tenders
- Clarification
- My Active Bids
- Bid Opening (Live)
- Techno Commercial Query
- History
- Confirmatory Documents
- Short fall Documents
- My Bids History
- Confirmatory Documents
- History
- Short Fall Documents History
- Archived Clarification
- Tender Status
- My Withdrawn Bids

Login ID	rbidder5@nic.in		
Company Name	Wipro	Registration Number	ASDAS322
Establishment Year	2016	Nature of Business	Software
Legal Status	Limited Company	Company Category	Others
City	Mumbai	State	Maharashtra
Postal Code	4567789	PAN Number	CESTG2458B

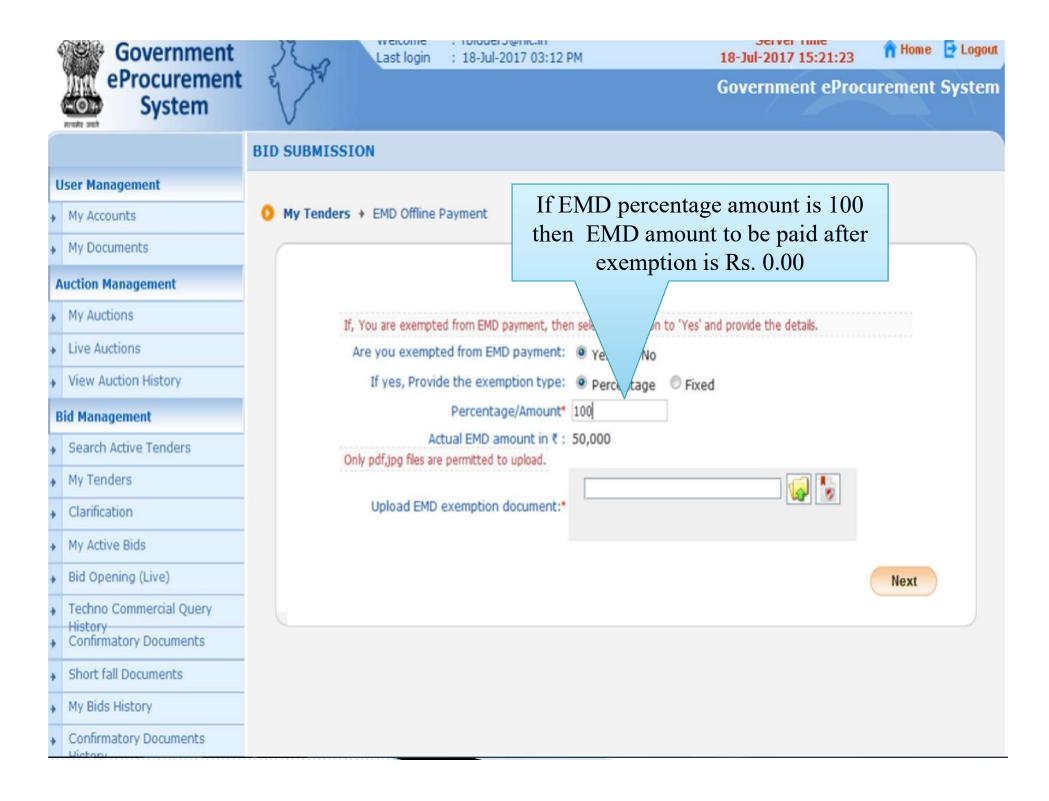
Contact Details				
Title *	Mrs			Enter the Contact details
Contact Name*	Kaniak	Rastogi		and Click on Next Button
Correspondence Email*	shivan	igoel.1405	@gmail.com	
Designation	AGM			
Phone*	91	011	24305770	
Mobile*	97177	21686		
Registered Address*	Mumb	ai		
Name of Partners / Directors				
				Back Next

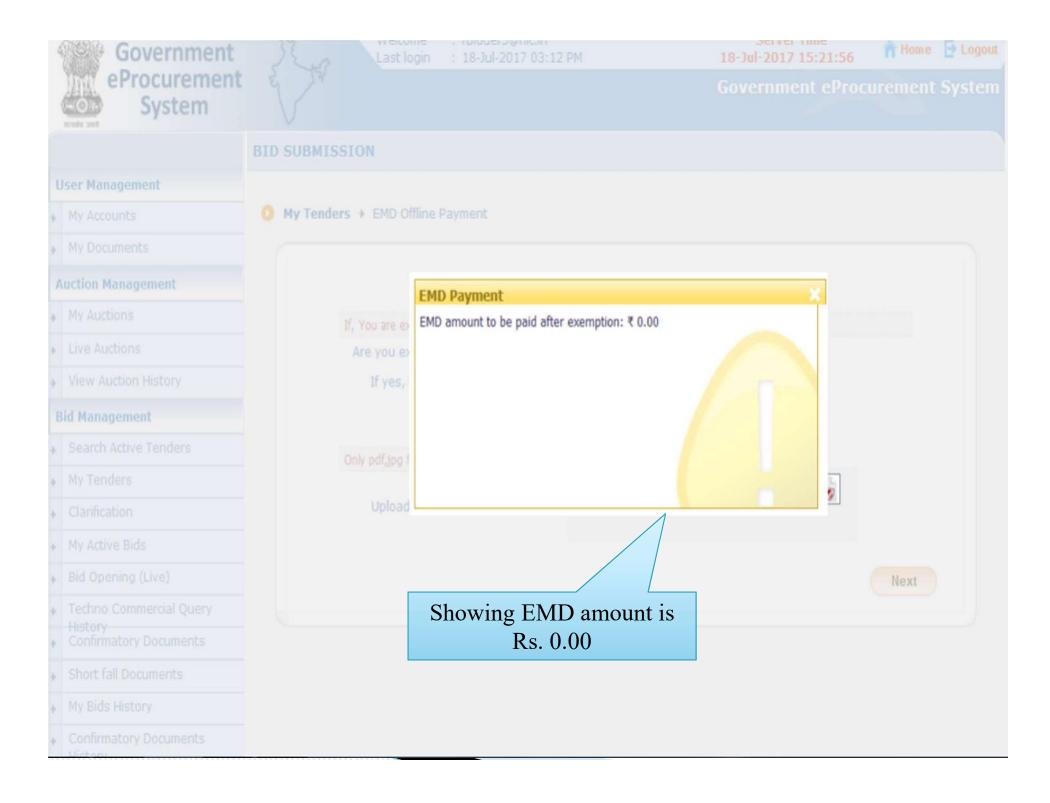
U	lser Management														
	My Accounts	0 M	y Tend	ers	 Offline Fee 	Payment									
	My Documents	C		_					_				_		
A	uction Management						Organis	ation C	hain :	NIC O	rg NIC_Dep	t			
	My Auctions					Ten	der Refere	nce Nur	nber :	XX-97	/SO(DO)/Sur	gical Dispo	osable	e items/201	7-18/St
-								Tende	er ID :	2017_	NIC_49820	_1			
•	Live Auctions							Tender	Title :	Tende	r for supply ng items	of surgical	dispo	osable and	
•	View Auction History														
B	id Management				Fee to I	be paid (In	clusive of	Taxes)	in ₹ :	1,000					
	Search Active Tenders														
	My Tenders				Instruments			_							
•	Clarification				nt Type	DD - Dema	nd Draft	•		Amour	nt *	1,00	0		
,	My Active Bids				nt Number *	54561265			-		Details *	SBI			
	Bid Opening (Live)		Issue	ed Da	ate *	18-Jul-201	7				n Number				
	Techno Commercial Query		Expir	ry Da	ate *	21-Sep-20	17			Accourt	nt Number				
•	History												0	Cancel	Save
•	Confirmatory Documents												0	cuncer	Juit
	Short fall Documents														
•	My Bids History			Deta											
•	Confirmatory Documents		S.No) In	istrument No	•	Name	Issue		tails fo	wind Date	Acc.No		Amount	Delete
	History Short Fall Documents History				Enter	the Ins	strume	nts d			and that				
	Archived Clarification					offline									Next
'						ick on									Inent
	Tender Status	6						Datt							

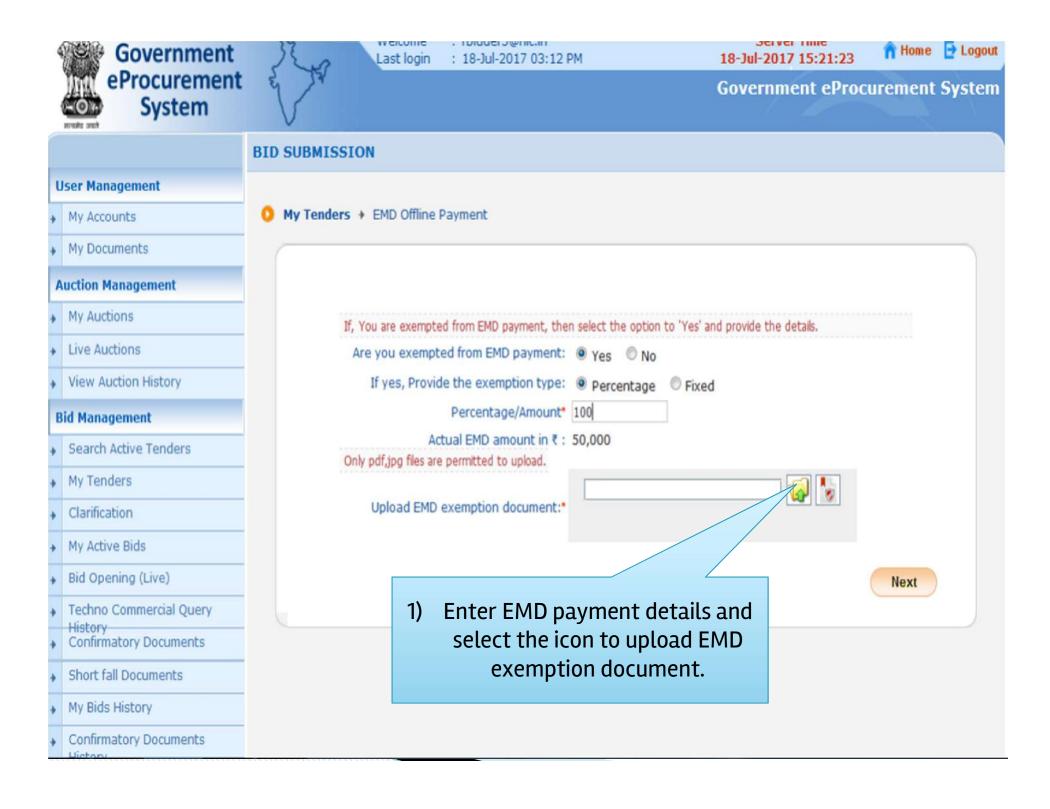
My Withdrawn Bids

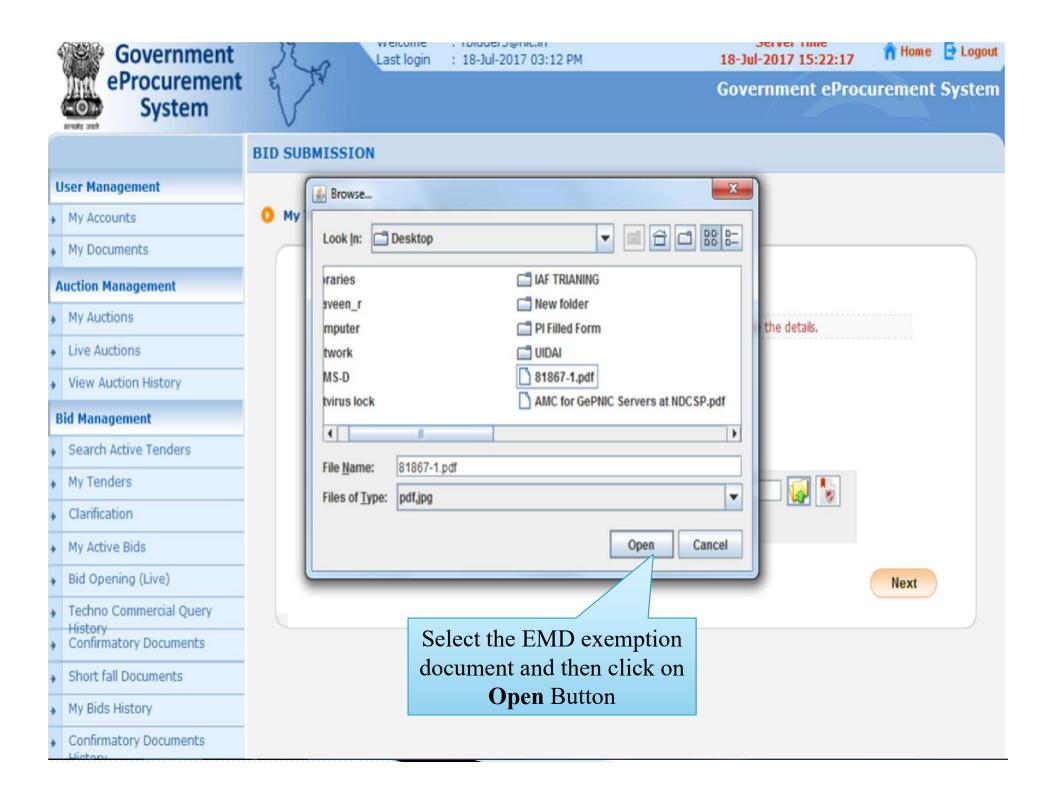
ι	lser Management	
	My Accounts	My Tenders + Offline Fee Payment
,	My Documents	
A	uction Management	Organisation Chain : NIC Org NIC_Dept
,	My Auctions	Tender Reference Number : XX-97/SO(DO)/Surgical Disposable items/2017-18/St
	Live Auctions	Tender ID : 2017_NIC_49820_1
'		Tender Title : Tender for supply of surgical disposable and
•	View Auction History	dressing items
B	id Management	Fee to be paid (Inclusive of Taxes) in ₹: 1,000
,	Search Active Tenders	
	My Tenders	Specify Instruments for Offline Payment :
,	Clarification	Instrument Type DD - Demand Draft Amount *
	My Active Bids	Instrument Number * Issuer Details *
	Bid Opening (Live)	Issued Date Challan Number
1	Techno Commercial Query	Expiry Date * Account Number
	History	After entering details, Click Cancel Save
•	Confirmatory Documents	on Next Button
	Short fall Documents	
	My Bids History	Fee Details
	Confirmatory Documents	S.No Instrument No. Name Issued Date Date Acc.No Amount Delete
	History	1 54561265 DD - Demand Draft 18-Jul-2017 21-Sep-2017 1,000
	Short Fall Documents History	
	Archived Clarification	Delete Next
,	Tender Status	
	My Withdrawn Bids	

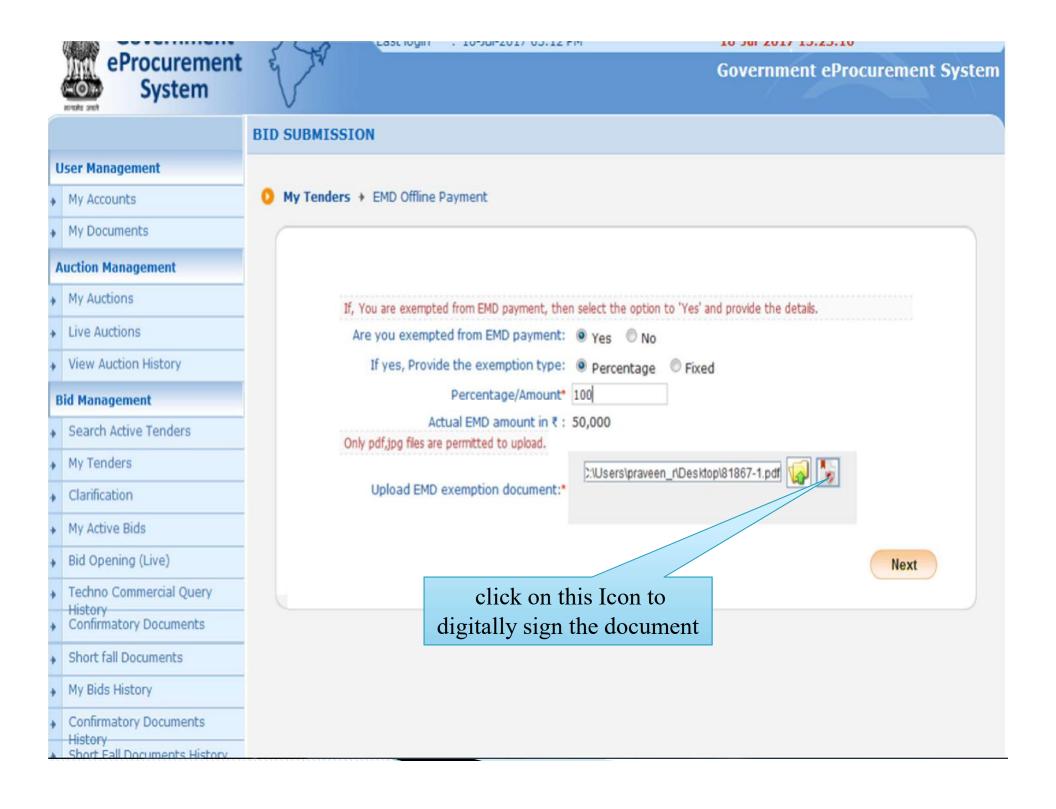
4	Government	No.	Last login	: 18-Jul-2017		18-Jul-2017 15:20:37	n Home	E Logout
	eProcurement System	e sta				Government eProcu	irement	System
		BID SUBMISSI	ON					
ι	lser Management							
+	My Accounts	O My Tenders	EMD Offline	Payment				
+	My Documents							
,	uction Management							
+	My Auctions	If,	You are exempte	d from EMD payr	nent, then select the option to 'Yes' a	ind provide the details.		
+	Live Auctions				ayment: O Yes No			
+	View Auction History							
E	iid Management						Maut	
+	Search Active Tenders						Next	
+	My Tenders							
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+	My Active Bids				the Radio Button			
+	Bid Opening (Live)				ID exemption and n click on Next			
+	Techno Commercial Query							
+	History Confirmatory Documents							
+	Short fall Documents							
+	My Bids History							
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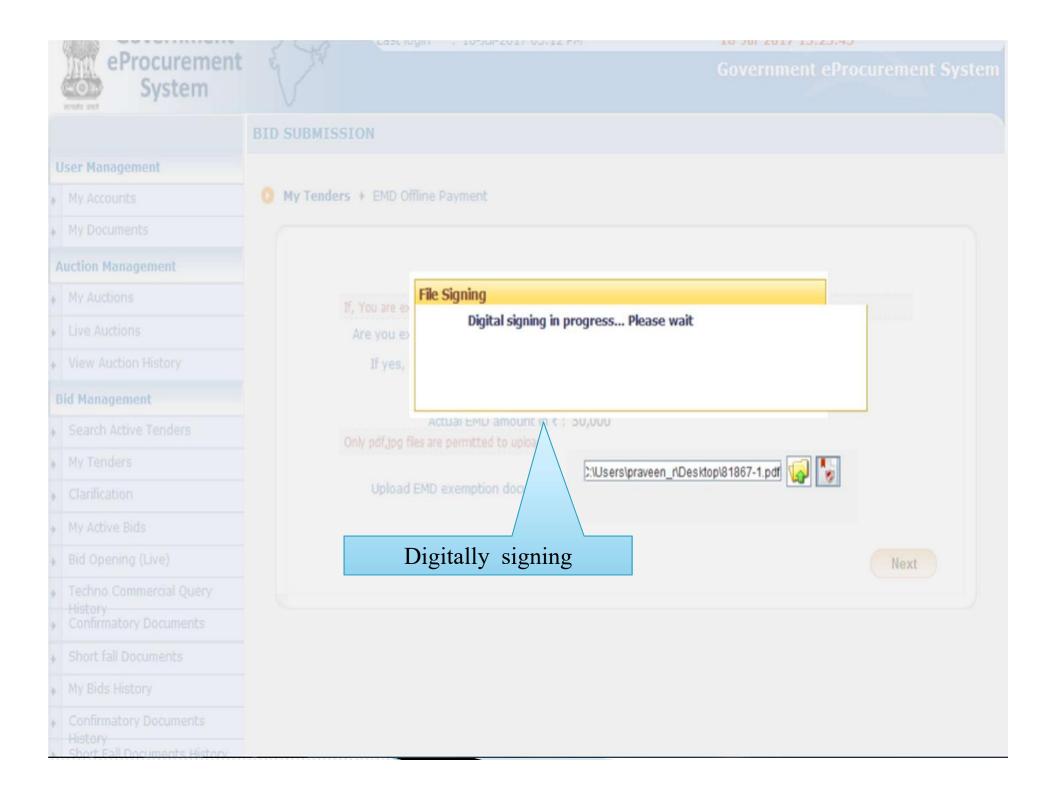


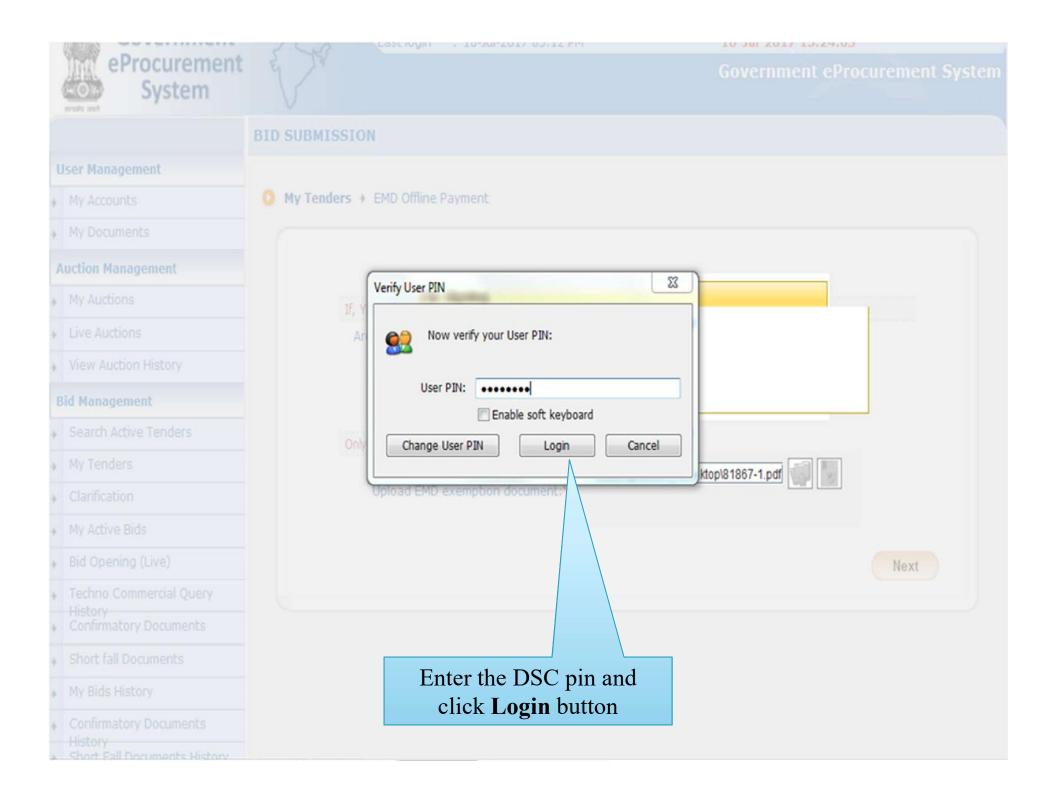


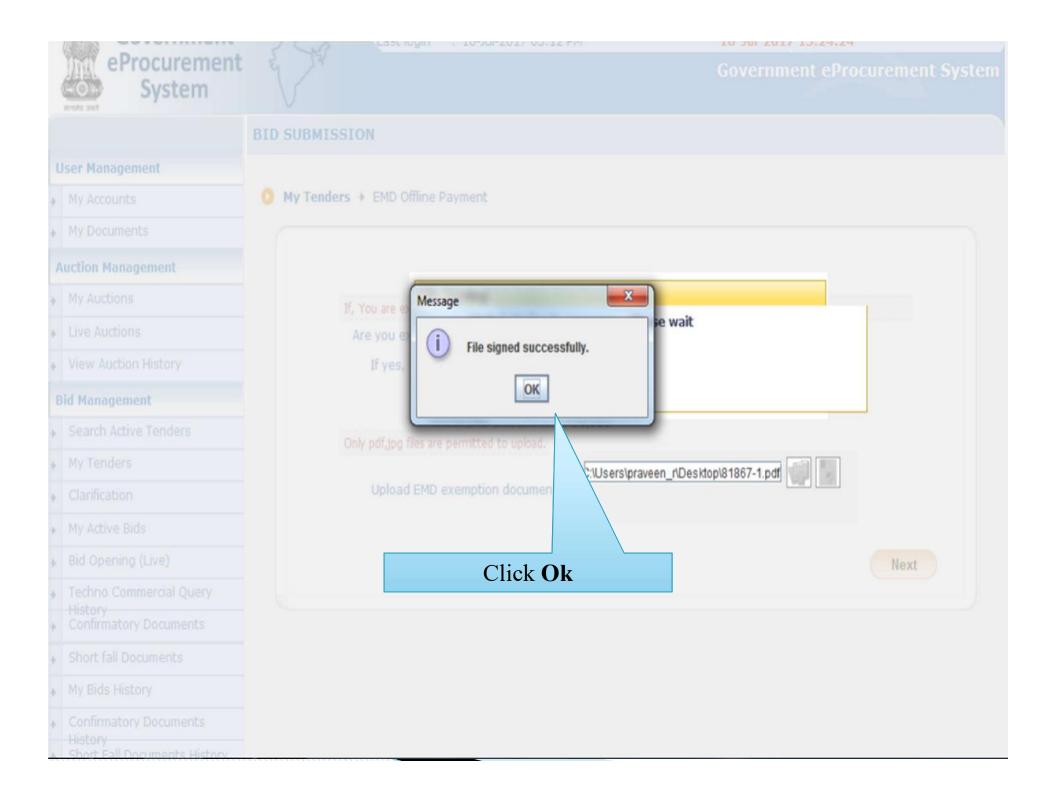


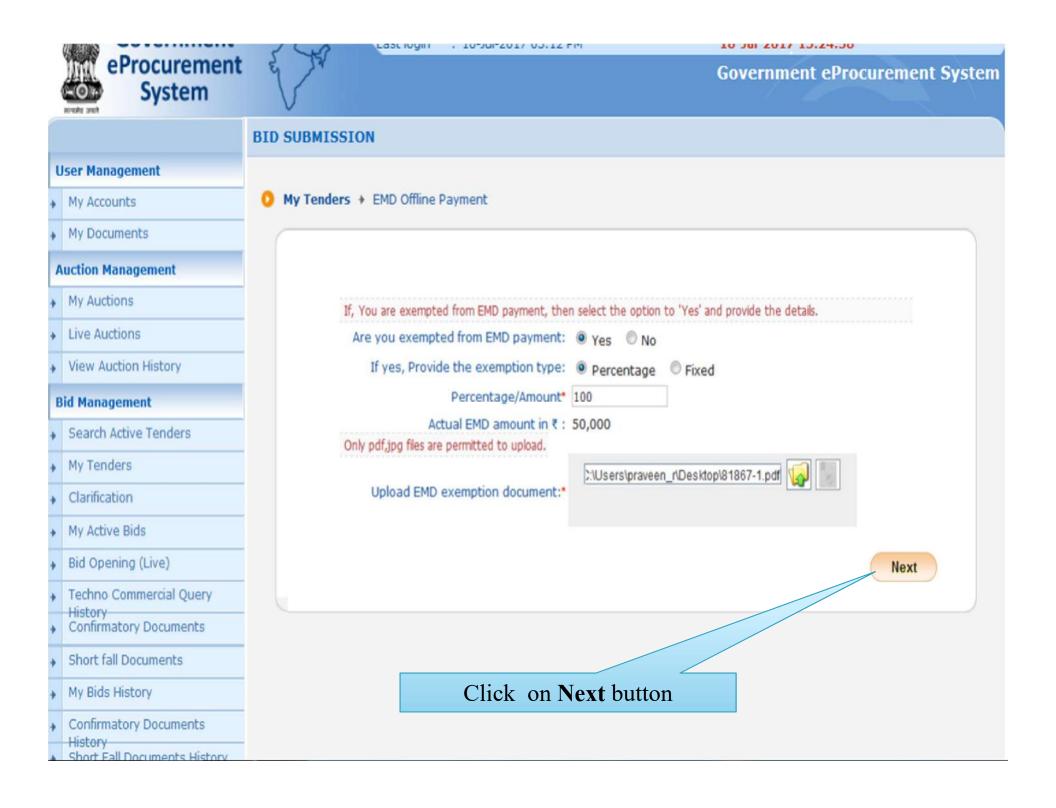












System	· V				Governmen	t eProcuren	nen
	BID MANAGEM	IENT					
Jser Management							
My Accounts	0 My Tenders	+ 2017_NIC	_49820_1 + Transactio	n Message	Click on Act	tion Icon	for
My Documents					entering inte	rested iter	ms
Auction Management			Our chair and the state				
My Auctions		Те	Organization Chain : nder Reference Number :		al Disnosable items/20	117-18	
Live Auctions		i c		2017_NIC_49820_1			
View Auction History					surgical disposable and	d dressin s	
lid Management	pid p	rocess List					
Search Active Tenders							
My Tenders	- S.No	Bid Proce				Action	_
Clarification	2	Profile				<u>9</u> 6	_
My Active Bids							
	-						
Bid Opening (Live)							
Techno Commercial Query	Bid P	ayment Deta	ils				
History Confirmatory Documents	S.No	Fee Type	Actual Fee	Exempted Fee	Fee To Be Paid	Paid Fee	Edi
Short fall Documents	1	Tender Fee	1000.00 (INR)	0.00	0.00	1000.00 (INR)	
	2	Emd Fee	50000.00 (INR)	50000.00 (INR)	0.00	0.00	
My Bids History							-
Confirmatory Documents							
History							

History
 Short Fall Documents History

Encrypt&Upload

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id Opening (Live)	
echno Commercial Query	
listory Confirmatory Documents	
hort fall Documents	
ly Bids History	
confirmatory Documents	
listory hort Fall Documents History	
rchived Clarification	
ender Status	
ly Withdrawn Bids	

1	Item Code	Description Disposable Syringes with Need (Sterilized) (ISO) *Reuse prev	each item to	o show	intere	ed Yes	VINO
1					mere	51	
		plunger syringe with possibility	ention breakable				
2 it	tem1	Size: 1 ml (As and when requir	red)	Nos	1.00	Yes	•
3 it	tem2	Size: 2 ml		Nos	50000.00	Yes	-
4 it	tem3	Size: 5 ml		Nos	50000.00	Yes	•
5 it	tem4	Size: 10 ml		Nos	50000.00	Yes	•
6 it	tem5	Size: 20 ml (As and when requ	ired)	Nos	1.00	Yes	•
7 it	tem6	Size: 50CC		Nos	30000.00	No	•
8		Disposable Syringes without Ne (Sterilized) *Reuse prevention syringe with possibility of multi	breakable plunger				
9 it	tem7	Size: 2 ml		Nos	50000.00	Yes	•
10 it	tem8	Size: 5 ml		Nos	50000.00	Yes	•
11 it	tem9	Size: 10 ml		Nos	50000.00	Yes	•
12 it	tem10	Size: 20 ml (As and when requ	ired)	Nos	1.00	Yes	•
13 it	tem11	Size: 50 ml		Nos	20000.00	Yes	
14 it	tem12	Disposal Syringe with Needle w (Sterlized) (ISI/ISO/CE) Size:		Nos	20000.00	Yes	•
15 it	tem13	Auto destructive disposal Syrin syringe on completing the inject prevent any reuse. Non reusea activated auto disable syringes	tion should lock to ble involuntary	Nos	1.00	Yes	¥

 My Tenders Clarification My Active Bids Bid Opening (Live) Techno Commercial Query History Techno Commercial Query Short fall Documents Short fall Documents My Bids History Confirmatory Documents History Short Fall Documents History Archived Clarification Tender Status My Withdrawn Bids 	+	Search Active Tenders
 My Active Bids Bid Opening (Live) Techno Commercial Query History Confirmatory Documents Short fall Documents My Bids History Confirmatory Documents History Short Fall Documents Archived Clarification Tender Status 	+	My Tenders
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 History Confirmatory Documents Short fall Documents My Bids History Confirmatory Documents Confirmatory Documents Short Fall Documents History Archived Clarification Tender Status 	+	Bid Opening (Live)
 Confirmatory Documents Short fall Documents My Bids History Confirmatory Documents History Short Fall Documents History Archived Clarification Tender Status 	+	
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 History Short Fall Documents History Archived Clarification Tender Status 	+	My Bids History
 Short Fall Documents History Archived Clarification Tender Status 	+	
Tender Status	+	
	+	Archived Clarification
My Withdrawn Bids	+	Tender Status
	+	My Withdrawn Bids

No of sheets :	1	sheet(s) :	13
Eligible item(s) as quoted :	12	Not eligible item(s) as quoted :	1 Click to View

S.No	Sheet Name	Item Code	Description	Units	Quantity	Bidder Value
L	BoQ1	item1	Size: 1 ml (As and when required)	Nos	1.00	Yes
2		item2	Size: 2 ml	Nos	50000.00	Yes
3		item3	Size: 5 ml	Nos	50000.00	Yes
4		item4	Size: 10 ml	Nos	50000.00	Yes
5		item5	Size: 20 ml (As and when required)	Nos	1.00	Yes
5		item6	Size: 50CC	Nos	30000.00	No
7		item7	Size: 2 ml	Nos	50000.00	Yes
3		item8	Size: 5 ml	Nos	50000.00	Yes
÷		item9	Size: 10 ml	Nos	50000.00	Yes
10		item10	Size: 20 ml (As and when required)	Nos	1.00	Yes
11		item11	Size: 50 ml	Nos	20000.00	Yes
12		item12	Disposal Syringe with Needle with Leur Lock (Sterlized) (ISI/ISO/CE) Size: 1CC	Nos	20000.00	Yes
13		item13	Auto destructive disposal Syringes with leur lock. The syringe on completing the injection should lock to prevent any reuse. Non reuseable involuntary activated auto disable syringes Size: 1ml	Nos	1.00	Yes
			Click on Next Button			

Version: 1.09.05 02-Dec-2016

User Management

My Accounts

My Documents

Auction Management

- My Auctions
- Live Auctions
- View Auction History

Bid Management

- Search Active Tenders
- My Tenders
- Clarification
- My Active Bids
- Bid Opening (Live)
- Techno Commercial Query
 History
- Confirmatory Documents
- Short fall Documents
- My Bids History
- Confirmatory Documents History
- Short Fall Documents History
- Archived Clarification
- Tender Status
- My Withdrawn Bids

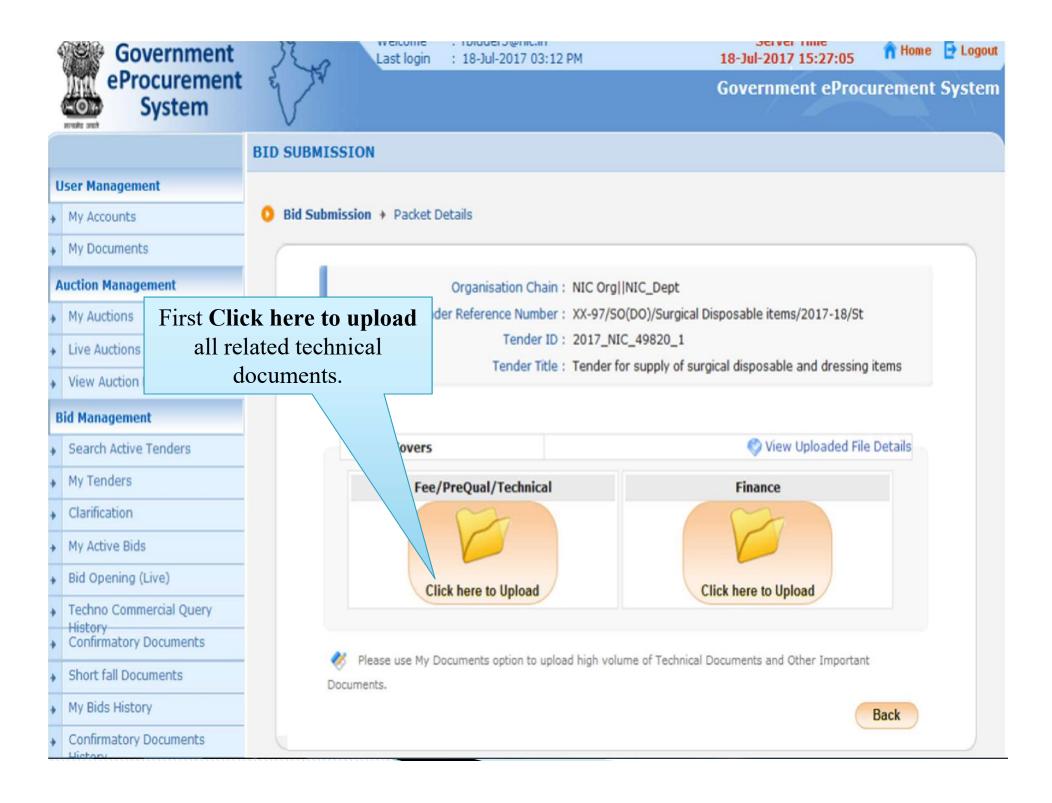
Organization Chain : NIC Org||NIC_Dept Tender Reference Number : XX-97/SO(DO)/Surgical Disposable items/2017-18/St Tender ID : 2017_NIC_49820_1

Tender Title : Tender for supply of surgical disposable and dressing items

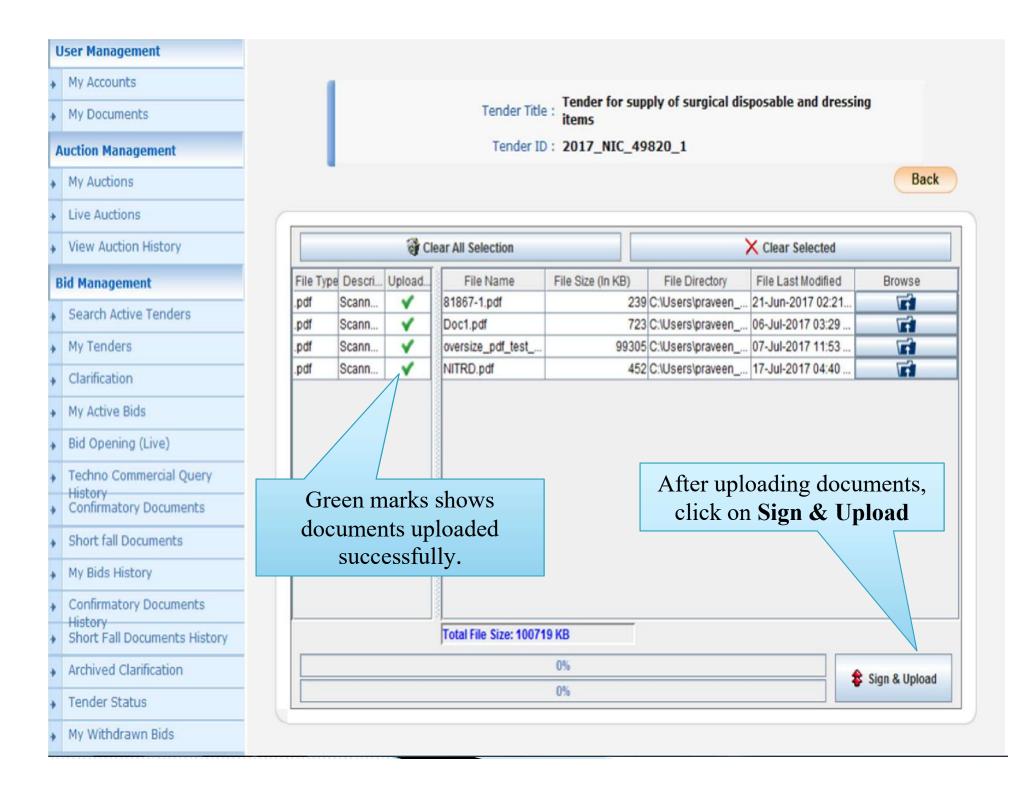
S.No	Bid Process	Action
1	ITE Details	9
2	Profile	۵

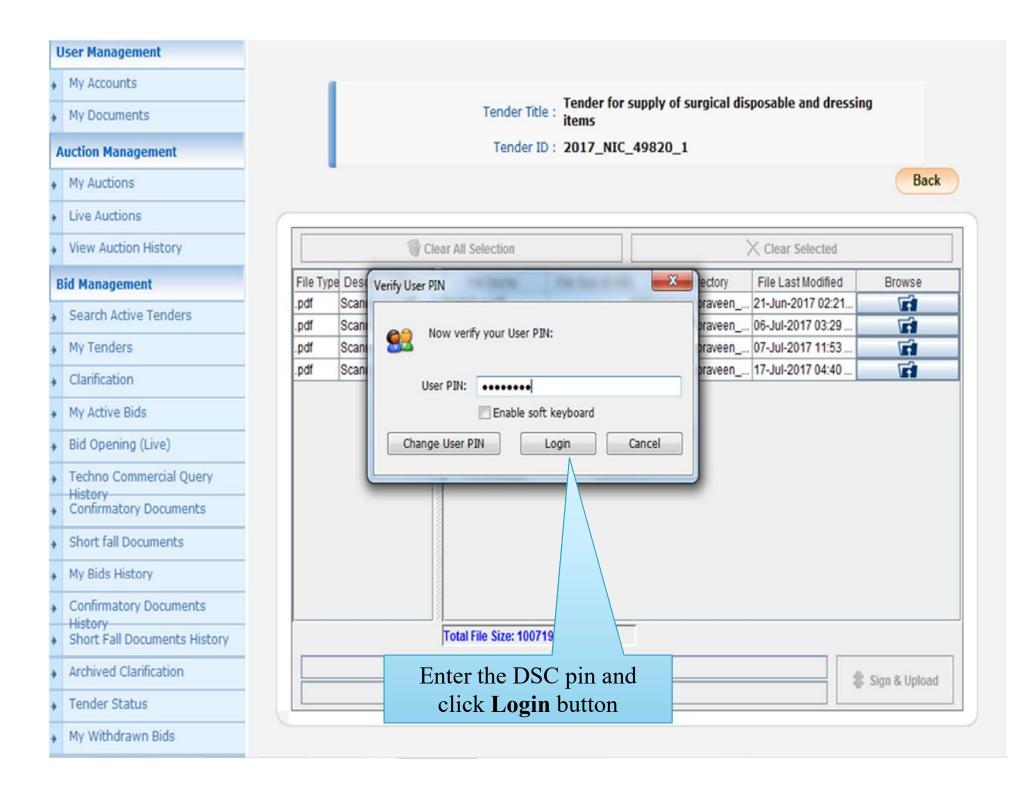
S.No	Fee Type	Actual Fee	Exempted Fee	Fee To Be Paid	Paid Fee	Edit
1	Tender Fee	1000.00 (INR)	0.00	0.00	1000.00 (INR)	
2	Emd Fee	50000.00 (INR)	50000.00 (INR)	0.00	0.00	
					Encrypt&Uploa	a
	C	lick on Encrv i	ot&Upload		Encrypt&Uploa	ad
	C	lick on Encry Buttor	· –		Encrypt&Uploa	ad

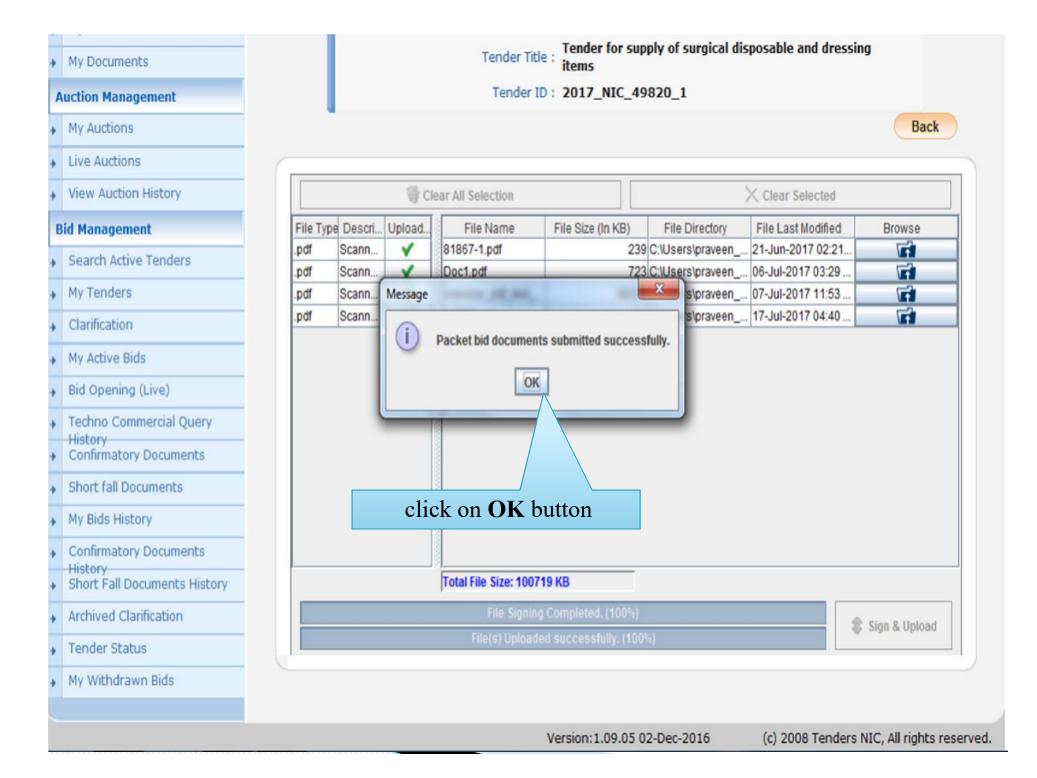
My Tenders + 2017_NIC_49820_1 + Transaction Message

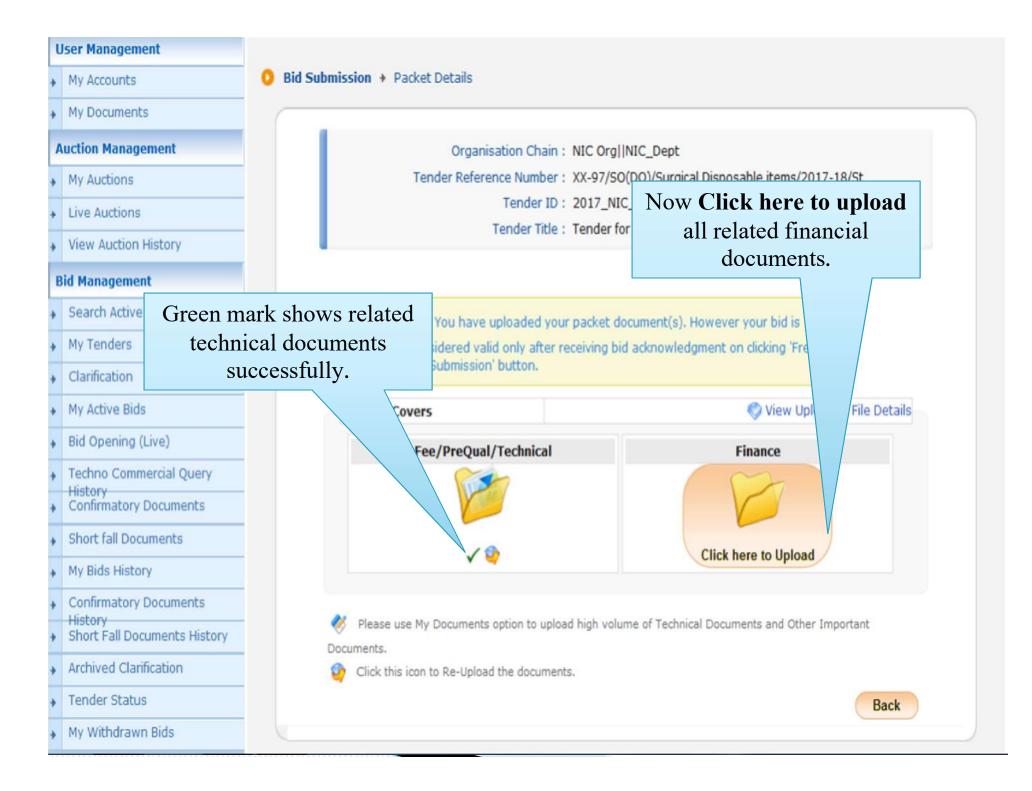


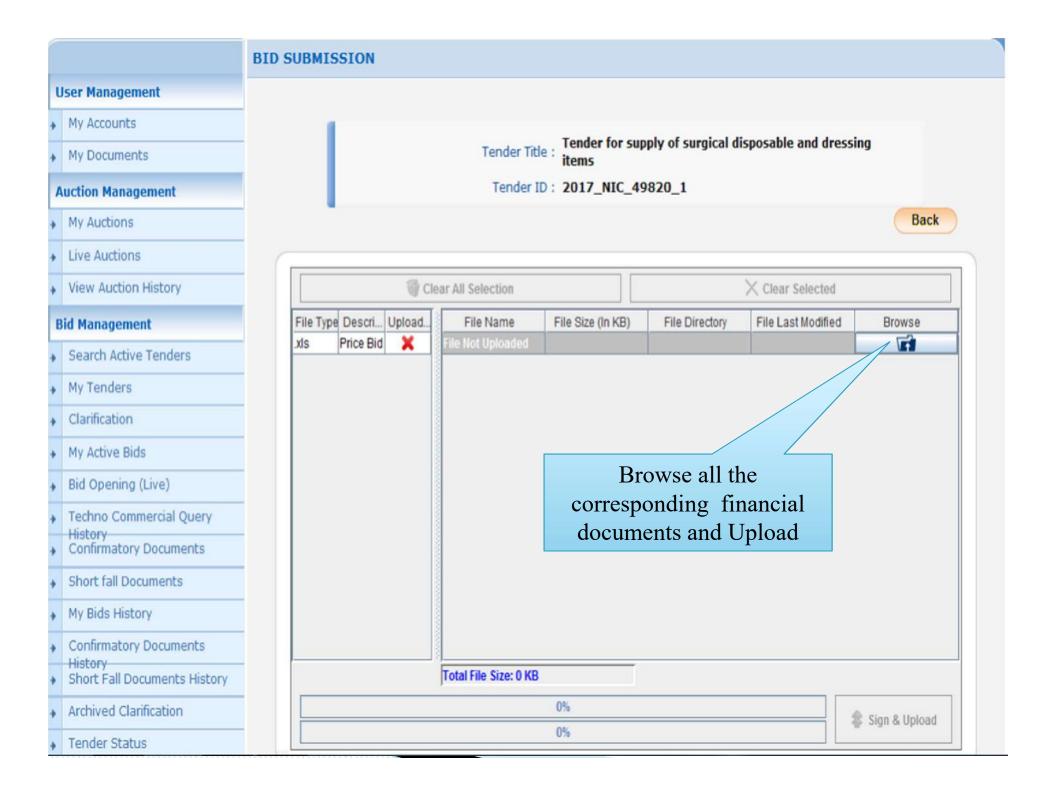






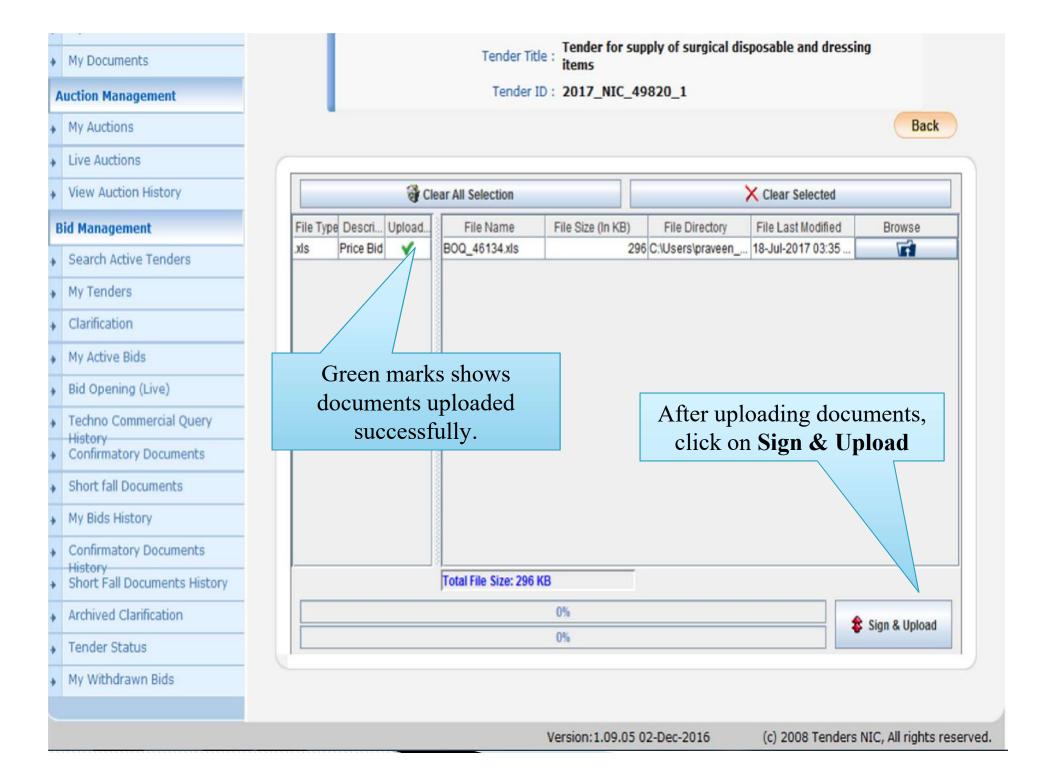


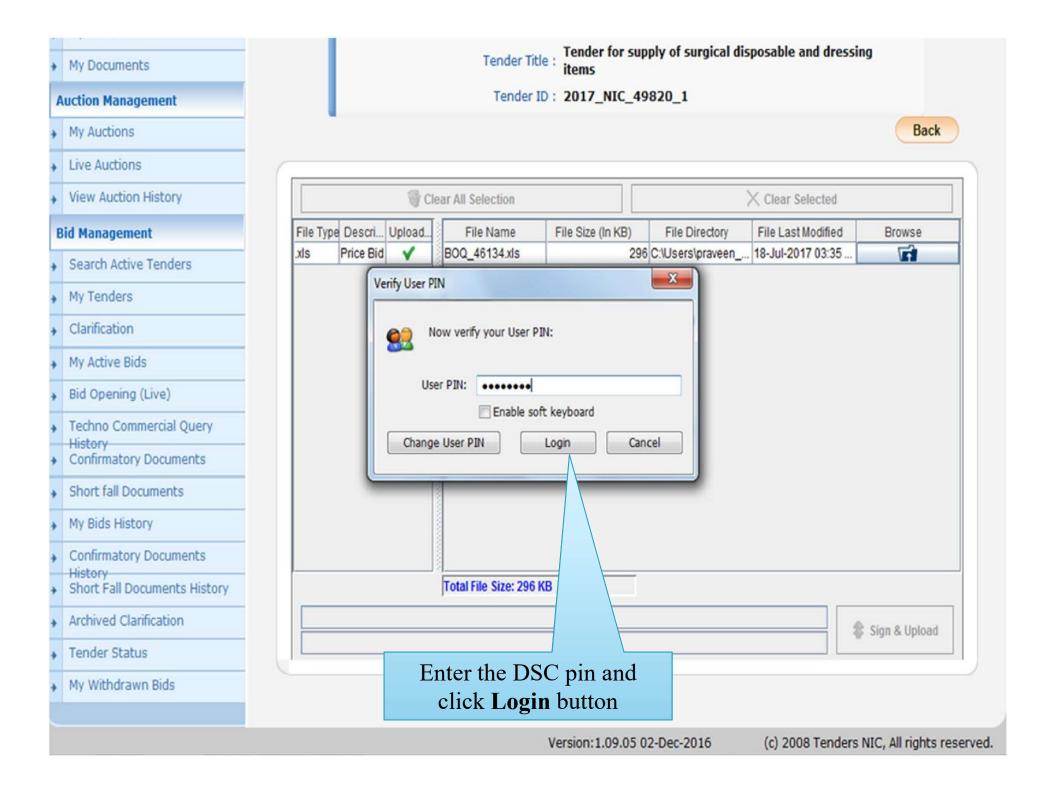


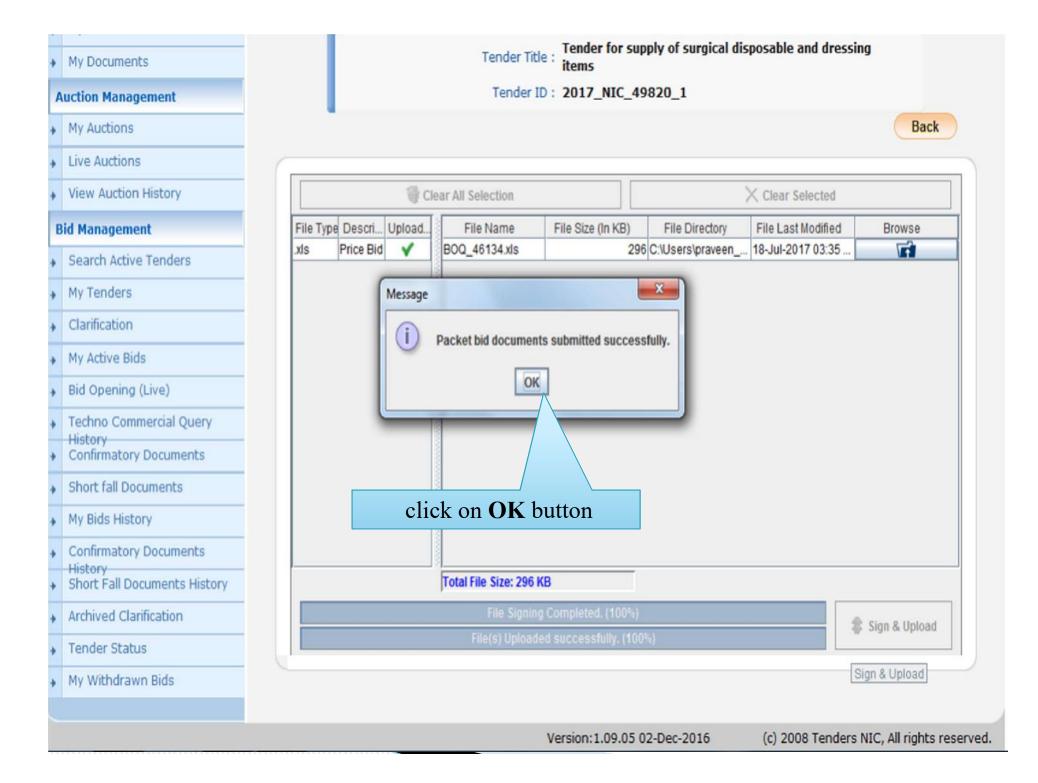


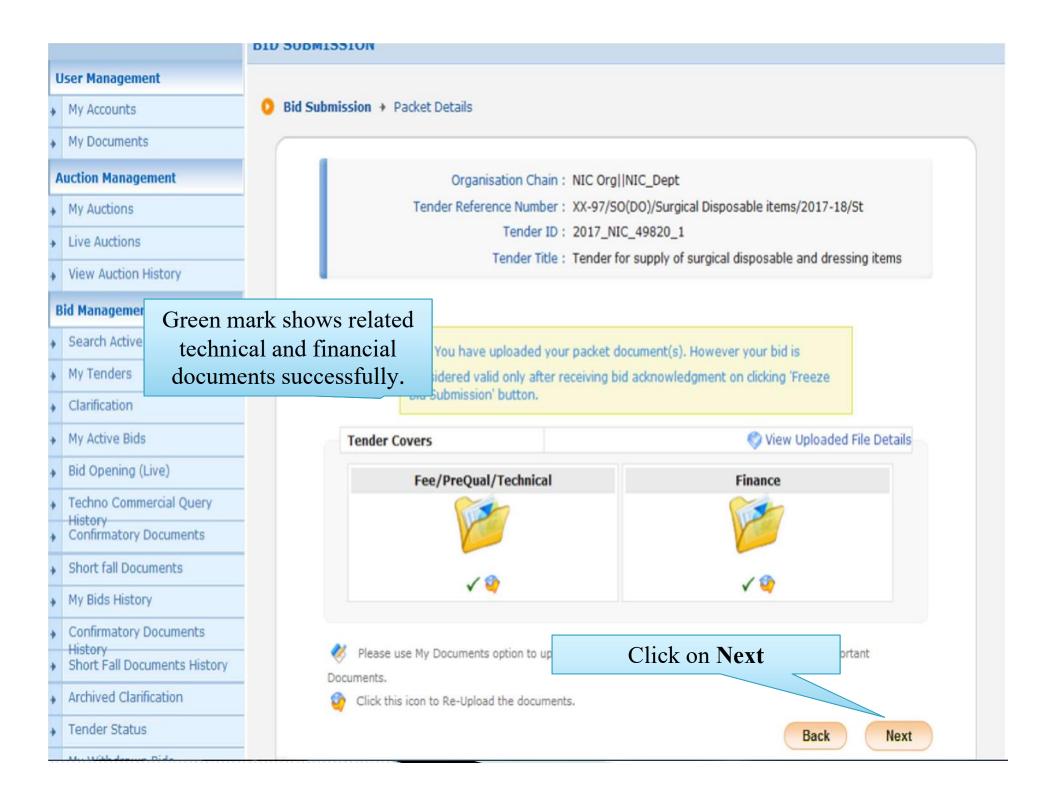
Name of the	Ware				-			
Bidder/	wpro							
Bidding Firm								
/ Company :								
100000000000	PRICE SCHEDULE							
(This BOQ f	(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter						this tender. Bidders are allowed to enter the	
			Bidder Nam	e and Values only	0			
NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER	NUMBER #	NUMBER #	TEXT #
SI.	Item Description	Quantity	Units	Unit RATE In	GST Rates in %	TOTAL	TOTAL AMOUNT	TOTAL AMOUNT
No				Figures To be	on Unit Rates	AMOUNT	With Taxes	In Words

No.				Figures To be entered by the Bidder in Rs. P	on Unit Rates	AMOUNT Without Taxes in Rs. P	With Taxes in Rs. P	In Words
1	2	4	5	13	14	53	54	55
1	Disposable Syringes with Needle with leur lock (Sterilized) (1SO) *Reuse prevention breakable plunger syringe with possibility of multiple	le aspiratio	ons,					
1.01	Size: 1 ml (As and when required)	1	Nos	31.00	5.00	31.00		INR Thirty Two and Paise Fifty Five Only
1.02	Size: 2 ml	50000	Nos	32.00	5.00	1600000.00	1680000.00	INR Sixteen Lakh Eighty Thousand Only
1.03	Size: 5 ml	50000	Nos	35.00	5.00	1750000.00	1837500.00	INR Eighteen Lakh Thirty Seven Thousand Five
1.04	Size: 10 ml	50000	Nos	41.00	5.00	2050000.00	2152500.00	INR Twenty One Lakh Fifty Two Thousand Five
1.05	Size: 20 ml (As and when required)	1	Nos	60.00	5.00	60.00	63.00	INR Sixty Three Only
1.06	Size: 50CC	30000	Nos			0.00	0.00	INR Zero Only
2	Disposable Syringes without Needle without leur lock (Sterilized) *Reuse prevention breakable plunger syringe with possibility of multip	le aspiratio	ons					
2.01	Size: 2 ml	50000	Nos	21.00	5.00	1050000.00	1102500.00	INR Eleven Lakh Two Thousand Five Hundred Only
2.02	Size: 5 ml	50000	Nos	25.00	5.00	1250000.00		INR Thirteen Lakh Twelve Thousand Five Hundred
2.03	Size: 10 ml	50000	Nos	28.00	5.00	1400000.00	1470000.00	INR Fourteen Lakh Seventy Thousand Only
2.04	Size: 20 ml (As and when required)	1	Nos	32.00	and the second se	the second se	the second s	INR Thirty Three and Paise Sixty Only
2.05	Size: 50 ml	20000	Nos	35.00	5.00	NAME AND ADDRESS OF TAXABLE PARTY.		INR Seven Lakh Thirty Five Thousand Only
3	Disposal Syringe with Needle with Leur Lock (Sterlized) (ISVISO/CE) Size: 1CC	20000	Nos	50.00	5.00	1000000.00	1050000.00	INR Ten Lakh Fifty Thousand Only
4	Auto destructive disposal Syringes with leur lock. The syringe on completing the injection should lock to prevent any reuse. Non reuseable involuntary activated auto disable syringes Size: 1ml	1	Nos	65.00	5.00	65.00		INR Sixty Eight and Paise Twenty Five Only
Total in Figur	es					3350031.00	3517532.55	INR Thirty Five Lakh Seventeen Thousand Five Hundred & Thirty Two and Paise Fifty Five Only
Quoted Rate	Quoted Rate in Words		NR Thirty F	ive Lakh Sev	enteen Thou	sand Five Hu	ndred & Thirty	Two and Paise Fifty Five Only









S.No	Packet Type	File Name	Description	File Size (KB)	File Hash
1	Fee/PreQual /Technical	81867-1.pdf	Scanned copy of Tender Fee and EMD	239.00	fPL5m5ErOTCH/y74Cc9IMaTEZZI=
		download.pdf	Scanned copy of Tender form as per section- VII and Documentary evidence form	14416.00	NS2tVnbDwmr2FetPMtabJWTYrjc=
		NITRD.pdf	Scanned copy of Manufacturer Authorisation form , Documents with GIT clause 17 and performance certi	452.00	G+pt5LsvmaAYcvywvmY9rf1ob7k=
		NIT.pdf	Scanned copy of checklist as per section VII	838.00	3mBNAYOKG3exNWUVUNbLWOjWU7U=
2	Finance	BOQ_46134.xls	Price Bid	296.00	0DYJ2PgnJ66alNW6zqrRXOv32Co=



Government	Last login : 18-Jul-2017 (
eProcurement System	e to	Government eProcurement Syste
	BID MANAGEMENT	
User Management		Bid submitted successfully and
My Accounts	0 Bid Acknowledgement	bidder print the bid details for
My Documents		future reference
Auction Management	Bid Acknowledgement	
My Auctions		
Live Auctions		
	Print Bid Details	Print Acknowledgement
View Auction History	Ora	anisation Chain : NIC Org NIC_Dept
Bid Management		Tender Ref No. : XX-97/SO(DO)/Surgical Disposable items/2017-18/St
Search Active Tenders		Tender ID : 2017_NIC_49820_1
My Tenders		Tender Title : Tender for supply of surgical disposable and dressing
Clarification		items
My Active Bids	Bid Sta	art Date & Time: 18-Jul-2017 03:00 PM
	Bid Er	nd Date & Time: 18-Jul-2017 04:00 PM
Bid Opening (Live)		Bid ID : 39190
Techno Commercial Query		Bidder Name : Wipro
History Confirmatory Documents	Bid Submitte	ed Date & Time : 18-Jul-2017 03:38 PM
Short fall Documents	Bio	dder IP Address: 10.1.14.149
My Bids History		
Confirmatory Documents		

Thank you







AN ISO 9001 & 14001 COMPANY

TENDER DOCUMENT

TENDER No: WRO/CON/EMRS/866/330

FOR

Construction of Eklavya Model Residential School (EMRS) in Single- Phase comprise of school building, Boys hostel (240 students), Girls-hostel (240 students), Kitchen & Dinning block, 2 blocks of Type-III quarters including guest house (8+8 Nos), Type-II quarters (10 Nos), Principal Residence, Warden Residence (Boys & Girls), electrical provision, water supply and Sanitary installations, External sewerage system and Drainage facility, Campus development such as road, Compound wall etc. at Vijaynagar in Sabarkantha District of Gujarat State.

VOLUME- II

EXECUTING AGENCY

Engineering Projects (India) Limited Western Regional Office: Mumbai

ADDITIONAL CONDITIONS OF CONTRACT

The following Additional Conditions of Contract shall be read in conjunction with General Conditions of Contract of EPI. If there are any provisions in these Additional Conditions of Contract, which are at variance with the provisions of General Conditions of Contract, the provisions in these Additional Conditions of Contract shall take precedence.

INTRODUCTION

Construction "Eklavya Model Residential schools "(EMRS) at various locations as mentioned in NIT. The following clauses of Additional Conditions of Contract (ACC) shall be applicable for this contract. These Additional Conditions of Contract shall be read in conjunction with General Conditions of Contract, Instructions to Tenderers (ITT)), Notice Inviting Tender (NIT), Bill of Quantities (BOQ), Tender conditions and Technical specifications & Other Tender Documents.

APPROACHES TO WORKSITE

The land is made available to the bidder(s)/contractor(s) free from all encumbrances as National Education Society for Tribal Students (NESTS)" provide to EPI. The contractor shall make his own arrangement for approach to work site including borrow/ disposal area and for movement of men, materials, machineries, other equipment etc. required for carrying out the work under this contract.

The access roads/ path to the work site may not be available at all places and at all time. The contractor shall plan his work as per the availability of access roads/ path at site. All drainage of works area and all-weather truck able haulage roads as required by the contractor shall be constructed and maintained during the construction period by the contractor at his own cost, including portions of the road already existing.

ORDER OF PRECEDENCE:

Clause 42.1 of GCC stands amended as under: In case of difference, contradiction, discrepancy, dispute with regard to Conditions of Contract, Specifications, Drawings, Bill of Quantities and Rates quoted by the Contractor and other documents forming part of the contract, the following shall prevail in order of precedence

- 1) Contract Agreement which includes NIT, Special Instructions to Tenderer, and Memorandum.
- 2) Letter of Intent / detailed letter of Work Order
- 3) Bill of Quantity / Schedule of Quantities
- 4) Additional Conditions of Contract (ACC)
- 5) General Conditions of Contract (EPI GCC).
- 6) Tender Drawings
- 7) Technical Condition of Contract (NESTS),
- 8) Technical Specification (NESTS)
- 9) Methodology for Civil Works
- 10) CPWD technical specifications & DSR latest edition

- 11) National Building Code (Latest Edition)
- 12) BIS specifications
- 13) Environmental, Social, Health and Safety (ESHS) Manuals & COVID-19 Manuals.

A) Provisions under General Conditions of Contract of EPI are modified/ amended as under:-

S. No.	GCC Clause No.	Modified/Amended provisions as per Additional Conditions of Contract			
1.0	1.0	General			
		In addition to Clause no 1.0 of GCC:			
		The Additional Conditions shall be read in conjunction with General Conditions of Contract. Where the provisions of these Additional Conditions are at variance with the provision of the General Conditions of Contract, the provisions of these Additional Conditions shall take precedence.			
2.0	8.0	MOBILIZATION ADVANCE:			
	8.2	EPI GCC no 8.2 is modified under: Interest bearing advance for Mobilization, limited to 10% of the contract value a. The rate of interest Bank rate of State Bank of India prevailing +2% (plus two			
		percentage). b. Mobilization advance 10% of contract value with interest rate as per memorandum. The mobilization advance will be recovered @25% of the value of work done from each running bill till complete mobilization advance recovered.			
3.0	9.0	SECURITY DEPOSIT CUM PERFORMANCE BANK GUARANTEE			
		"The successful bidder shall have to submit SDPBG equivalent to 5.0% (Five Point Zero Percentage) of the contract value of the accepted tender within 21 (twenty-one) days from the date of issue of Letter of intent (LOI). If required, any extension of time beyond 21 days and upto 60 days may be granted by the Competent Authority. However, a penal rate of interest @12% per annum shall be charged for the delay in submission of SDPG after 21 (twenty-one) days i.e., from 22nd day to the date of submission of SDPG but within 60 days after the date of issue of LOI. Further, if 60th day happens to be declared holiday in the concerned office of EPI, submission of SDPBG can be accepted on the next working day. The SDPBG shall be submitted in the form of Bank Guarantee (format enclosed), from any Nationalized bank / Scheduled Bank / Commercial Bank or in the form of insurance Security Bonds or Account Payee Demand Draft or Fixed Deposit Receipt or online Payment in an acceptable form. This SDPBG shall be initially remain valid upto 90 (ninety) days after the end of Defect Liability Period (DLP). In case, the time for completion of work gets extended, the contractor shall get the validity of SDPBG extended to cover such extended time for completion of work plus DLP plus 90 days. In case, even after 60 days from the date of issue of LOI, the Bidder fails to submit the SDPBG of the requisite amount, LOI will stand withdrawn and EMD of the Bidder shall be forfeited."			
		estimated cost put to tender, then the authority inviting tenders/bids shall obtain from the concerned bidder/contractor, the detailed planning regarding execution of the work at such			

		low rates. It shall be ensured that, the work can be executed by the lowest bidder based on the detailed planning of execution submitted by the contractor/bidder. 2. If the lowest bid is below up to 10% of the estimated cost put to tender, then the bidder/contractor shall submit Bank Guarantee or the Demand Draft of 1% of the cost put to tender as a Performance Security in bid/tender envelope no. 2 (Scan Copy) (e.g from the bidder who has quoted 1% to 10% below to the estimated cost-1% of Bid cost). 3. If the cost bid/tender is less than 10% below of the estimated cost put to tender, then (A) Bank Guarantee/DD corresponding to the percentage over and above 10% and as per above 2 may be submitted in envelope no. 2 along with bid/tender (e.g. for Bid Offer of 14%, upto 10% below -1% and 14%-10%=4%, thus total=1%+4%=5%), If this amount is less then Rs. 1000/-, then Bank Guarantee /DD of minimum Rs. 1000/- may be submitted. B) If bid/tender quoted is less than 15% below, then DD amount for the balance percentage over & above 15% be worked out at double rate and the same may be submitted (e.g. if the offer is 19% below, then (19-15=4%x2=8%).			
4.0	10.0	RETENTION MONEY			
		As per Memorandum in NIT (Vol I)			
		The following clauses shall be read in conjunction with Clause no. 10.0 of GCC. 3.11.1 The Retention Money shall be deducted from each running bill of the Contractor at 5% (Five percent only) of the gross value of the Running Account bill. The Retention Money shall be refunded to the Contractor after successful Completion of the defect liability period & taking over by Client whichever is later.			
5.0	13.0	TAXES AND DUTIES			
		 a) The Bidder must be registered with GST in respective state and should have valid GST number. In case the bidder does not have valid GST registration number, the same shall be obtained by the successful bidder within one month from the date of LOI or before release of 1st R/A bill whichever is earlier. 			
		b) The Bidder must submit as a compliance of GST Act, the invoices in GST compliant format failing which the GST amount including interest and penalty if any shall be recovered/ adjusted by EPI without any prior notice from the next invoices or available dues with EPI.			
		c) The Bidders are requested to update/ upload the GST/Taxes data periodically in proper format on GST portal so as to avail ITC credit by EPI failing which it shall be recovered / adjusted by EPI without any prior notice from the next invoices or available dues with EPI.			
		d) Rates to be quoted in this tender inclusive of all taxes & duties including Labor cess, GST and all hidden costs like Labor camps with all Health Rules & Facilities, Cost involved in setting up the Site Office, Testing & Lab Charges, Transportation of Labor& Materials, Officials, all types of approvals from local authorities like Electrical, Water & Sewage disposals etc. GST to be disclosed separately in Price Bid /BOQ.			

7.0	17.0	In addition to clause No.17: -
7.0	17.0	Clause 16.0 of GCC of EPI stands good. No price variation/Escalation is allowed in this contract till completion of work. INSURANCE OF WORKS ETC.
6.0	16.0	Variation:
		In case of any reduction in rate of GST or other taxes in future or the project getting exemption status prior to the last date of bid submission or afterwards, the contractor shall pass on the benefit to EPI immediately, failing which EPI shall have the right to recover the differential amount from the amounts due to the sub-Bidder. Further, in case of any increase in rate of GST or other taxes in future or the project losing exemption status prior to last date of bid submission or afterwards, the said increase of taxes shall be paid / reimbursed to the sub- contractor, subject to the condition that the NESTS (National Education Society for Tribal Students) reimburses the said increased taxes to EPI".
		i) The contractor shall keep necessary books of accounts and other documents as per Govt. of India Guidelines for the purpose of this condition as may be necessary and shall allow inspection of the same by a duly authorized representative of EPI and shall also furnish such other information/document as EPI may require from time to time. In addition to the price bid format, an Annexure to indicate the "breakup of cost and levies such as GST and other taxes" considered in the quoted prices shall be annexed. This Annexure shall have breakup of all taxes/ duties relevant to the contract.
		 h) Royalty Charges: The rate quoted by bidder inclusive of all Royalty if required. The Seignior age charges will be recovered as per rules if applicable from the work bills of the contract or based on the theoretical requirement of material as per GO Ms. No 198 of Industries and commerce (MI) Dept. dated 13-08-2009 at the rates decided by Govt. from time to time
		 g) Labour cess shall be deposited by contractor for the value of work done or as applicable from time to time as per the directions of Government authorities & Challan should be submitted along with each RA- Bills. If contractor fails to deposit labour cess to authority and does not submit the challan to EPI. then EPI shall deduct the same from each RA-Bill of contractor & deposit the same to the authority. All the documentations and labour records shall be maintained properly by the contractor. It shall be produced to EPI / NETS / Govt. Authorities as and when is required.
		 e) Bidder while quoting the rates in the tender must also consider the ITC credit applicable for the works, if any. f) Royalty, ESI, EPF Labour cess challans to be submitted along with running bills. Otherwise recovery will be done from respected RA Bills at applicable rates. ESI & EPF Shall be reimbursed against submission of Proof of Deposit Challan by

8.0	18.0	Contractor is required to take Insurance coverage as stipulated in General Conditions of Contract (GCC) clause no. 17 (Insurance of works), clause no. 18 (Insurance under WCA) and clause no. 19 (Third Party Insurance), CAR policy and it shall be in the joint name of NESTS, EPI and the Contractor for the contract period including extended if any plus 12 months after Successful completion / handling over of work. The Insurance coverage shall be on the total value of work awarded to contractor by EPI. In case any delay in the work insurance should be extended time to time at his own cost.
0.0	18.0	
		The clause '18.0' (Insurance Under WCA) at page 26 of General Conditions of Contract (GCC) shall be replaced and read as under:
		Contractor is required to take insurance cover under the workmen compensation Act, 1923 amended from time to time from an approved insurance company and pay premium charges thereof. Wherever required by EPI, the contractor shall produce the policy or the policies of Insurance and the receipt of payment of current premium. In the event of an accident, any workmen employed by the contractor for execution of the works, suffers an injury or death and is to be compensated under the provisions sub-section (1) of section 12, of the workmen's Compensation Act, 1923 by the contractor and if the contractor fails to compensate, the EPI, shall be entitled to recover from the contractor the amount of the compensation so paid, without prejudice to the rights of the EPI under section 12, sub-section (2), of the said Act.
		EPI / NESTS shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due to the Contractor whether under this contract or otherwise. EPI / NESTS shall not be bound to contest any claim made against it under sub-section (1) Section 12, of the said Act, except security for all cost for which EPI / NESTS might become liable in consequence of contesting such claim.
9.0	21.0	LABOUR LAWS TO BE COMPLIED WITH BY THE CONTRACTOR:
		GCC Clause 21 is replaced as under
		The Contractor shall obtain a valid license under the Contract Labour (Regulation & Abolition) Act 1970 and the Contract Labour Act (R&A) Central Rules 1971 and amended from time to time, and continue to have a valid license until the completion of the work including defect liability period. The Contractor shall also abide by the provision of the Child Labour (Prohibition and Regulation) Act. 1986 and as amended from time to time. Any failure to fulfill this requirement shall attract the penal provisions of this contract arising out of the resultant non-execution of the work.
		The Contractor shall comply with the provisions of the Payment of Wages Act, 1936, Minimum Wages Act, 1948, Code of wage Act 2019, Employer's Liability Act, 1938, Employees Compensation Act, 1923, Maternity Benefit Act, 1961 and Mines Act, 1952, Industrial Disputes Act, 1947 or any modifications thereof or any other law relating thereto and rules made there under from, time to time.

10.0	COMPLIANCE WITH LABOUR REGULATIONS:
	During continuance of the contract, the Contractor and his sub-contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and by e laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye-laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. Salient features of some of the major labour laws that are applicable to construction industry are given below. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non- observance of the provisions stipulated in the notifications / bye laws / Acts / Rules / regulations including amendments, if any, on the part of the Contractor including his amount of performance security. The Employer / Engineer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer. The employees of the Contractor and the Sub- Contractor in no case shall be treated as the employees of the Employer at any point of time.
11.0	INBUILDING AND OTHER CONSTRUCTION WORK.
	SALIENT FEATURES OF SOME MAJOR LABOUR LAWS APPLICABLE TO ESTABLISHMENTS
	ENGAGED IN BUILDING AND OTHER CONSTRUCTION WORK.
	 a) Workmen Compensation Act 1923:- The Act provides for compensation in case of injury by accident arising out of and during the course of employment.
	b) Payment of Gratuity Act 1972:- Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed 5 years' service or more or on death the rate of 15 days wages for every completed year of service. The Act is applicable to all establishments employing 10 or more employees.
	 c) Employees P.F. and Miscellaneous Provision Act 1952: The Act Provides for monthly contributions by the employer plus workers @ 10% or 8.33%. The benefits payable under the Act are: (i) Pension or family pension on retirement or death, as the case may be.
	 (ii) Deposit linked insurance on the death in harness of the worker. (iii) Payment of P.F. accumulation on retirement/death etc. (iv) Contractors are assigned to submit copy of "ECR" Electronic challan fees of the PF Deposited by 20th of next month.
	 d) Maternity Benefit Act 1951:- The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.
	 e) Contract Labour (Regulation & Abolition) Act 1970:- The Act provides for certain welfare measures to be provided by the Contractor to contract labour and in case

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	the Contractor fails to provide, the same are required to be provided, by the
	Principal Employer by Law. The Principal Employer is required to take Certificate of
	Registration and the Contractor is required to take license from the designated
	Officer. The Act is applicable to the establishments or Contractor of Principal
	Employer if they employ 20 or more contract labour.
f)	Minimum Wages Act 1948:- The Employer is supposed to pay not less than the
.,	Minimum Wages fixed by appropriate Government as per provisions of the Act if
	the employment is a scheduled employment. Construction of Buildings, Roads, and
	Runways are scheduled employments.
g)	
	paid, when it will be paid and what deductions can be made from the wages of the workers.
h)	Equal Remuneration Act 1979:- The Act provides for payment of equal wages for
11)	
	work of equal nature to Male and Female workers and for not making discrimination
	against Female employees in the matters of transfers, training and promotions etc.
i)	Payment of Bonus Act 1965:- The Act is applicable to all establishments employing
	20 or more employees. The Act provides for payments of annual bonus subject to a
	minimum of 8.33% of wages and maximum of 20% of wages to employees drawing
	Rs.3500/-per month or less. The bonus to be paid to employees getting Rs.2500/-
	per month or above up to Rs.3500/- per month shall be worked out by taking wages
	as Rs.2500/-per month only. The Act does not apply to certain establishments. The
	newly set-up establishments are exempted for five years in certain circumstances.
	Some of the State Governments have reduced the employment size from 20 to 10
	for the purpose of applicability of this Act.
j)	Industrial Disputes Act 1947:- The Act lays down the machinery and procedure for
	resolution of Industrial disputes, in what situations a strike or lock-out becomes
	illegal and what are the requirements for laying off or retrenching the employees
	or closing down the establishment.
k)	0
	establishments employing 100 or more workmen (employment size reduced by
	some of the States and Central Government to 50). The Act provides for laying
	down rules governing the conditions of employment by the Employer on matters
	provided in the Act and get the same certified by the designated Authority.
l)	Trade Unions Act 1926:- The Act lays down the procedure for registration of trade
	unions of workmen and employers. The Trade Unions registered under the Act have
	been given certain immunities from civil and criminal liabilities.
m)) Child Labour (Prohibition & Regulation) Act 1986:- The Act prohibits employment
	of children below 14 years of age in certain occupations and processes and provides
	for regulation of employment of children in all other occupations and processes.
	Employment of Child Labour is prohibited in Building and Construction Industry.
n)	Inter-State Migrant workmen's (Regulation of Employment & Conditions of Service)
	Act 1979:- The Act is applicable to an establishment which employs 5 or more inter-
	state migrant workmen through an intermediary (who has recruited workmen in
	one state for employment in the establishment situated in another state). The
	Inter-State migrant workmen, in an establishment to which this Act becomes
	applicable, are required to be provided certain facilities such as housing, medical
	aid, travelling expenses from home up to the establishment and back, etc
	מים, נומיכווווא באפרוזבז ווטווו וטוווב עף נט נווב בזנמטווזוווובווג מוע שמנה, פנג

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		 o) The Building and Other Construction workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996:- All the establishments who carry on any building or other construction work and employs 10 or more workers are covered under this Act. All such establishments are required to pay cess at the rate not exceeding 2% of the cost of construction as may be modified by the Government. The Employer of the establishment is required to provide safety measures at the Building or construction work and other welfare measures, such as Canteens, First-Aid facilities, Ambulance, Housing accommodations for workers near the work place etc. The Employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government. p) Factories Act 1948:- The Act lays down the procedure for approval at plans before setting up a factory, health and safety provisions, welfare provisions, working hours, annual earned leave and rendering information regarding accidents or dangerous occurrences to designated authorities. It is applicable to premises employing 10 persons or more with aid of power or 20 or more persons without the aid of power engaged in manufacturing process.
12.0	28.1	LAND FOR LABOUR HUTS/ SITE OFFICE AND STORAGE ACCOMMODATION
		In addition to GCC Clause no 28.1, It is bidder responsibility to acquire the land for on its own cost of following 1. Labour Hutment 2. Cement Godown 3. Storage unit 4. Site Establishment including conference room for review meeting.
13.0	28.3	FACILITIES - GCC clause no. 28.3 is deleted. Vehicle: 1 no. Earmarked vehicle four wheels drive Scorpio VLX vehicle or equivalent with Driver & fuel for 24 hrs for quality checking purpose. In case of break down contractor shall make alternate arrangements immediately failing which Engineer-in-charge will hire similar type vehicle and debit cost to contractor's account. In case of Non-compliance of this recovery at the rate of Rs 60000.00 per month or actual whichever is higher.
14.0	35.0	Secured Advance against Non-Perishable items: - Deleted.
15.0	37.0	PAYMENTS

		GCC Clau	use No: 37 Payment is modified as under		
		SI No.	Milestone	%Payment for Construction on (Project Cost)	Cumulative % payment for Construction (Project Cost)
			Completion of Work		
		1	20% Completion of Work	17%	17%
		2	40% Completion of Work	17%	34%
	3		60% Completion of Work	22%	56%
		4	80% Completion of Work	22%	78%
		5	100% Completion including all clearances and approvals including occupancy certificates	20%	98%
		6	Successful completion of Defect Liability period of 12 months (DLP)	2%	100%
		against e NESTS to a)The bi TDS shal In this re be follow b) The m not be m released	lls not submitted on the prescribed format ma l be deducted on prescribed norms of the Govt. gard, NESTS/EPIL Guidelines amended up to d	f corresponding bil y not be considere enforce time to tim ate for submission on Completion of t he remaining 2% p liability period.	I payment from ed for payment. e from the bills. of RA Bills shall he project shall ayment shall be
				-	red by the client
		(NESTS)	due to any reason whatsoever.		ed by the client
16.0	44.0	· · ·			red by the client
16.0	44.0	WATER A The Cor construc shall be arranger	due to any reason whatsoever.	EPIL is providing ne ontractor shall also upted supply.	ical power for cessary charges

	, 5.0	below.
21.	76.0	Clause no. 74.0 of GCC shall be read as for Defect Liability period of 12 months from the date of completion & handing over of the works to Client NESTS. Other condition of clause 74.0 of GCC will be same. GCC sub clause no. 76.1, 76.2 and 76.3 of Arbitration clause no. 76.0 are amended as given
20.	74	DEFECT LIABILITY PERIOD
		If the contractor fails to maintain the required progress as per ACC Clause B. 10) "COMPLETION SCHEDULE FOR EACH SITE LOCATION" or to complete the work and clear the site on or before the contract or justified extended date of completion as well as any extension granted under relevant clause of the agreement, shall, without prejudice to any other right or remedy available under the law to the Government on account of such breach, pay as compensation the amount calculated at @ 1% (one percent) per month of delay to be computed on per day basis based on quantum of damage suffered due to sated delay on the part of contractor. Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed 10% (ten percent) of the accepted Tendered Value of work".
19.	72.0	The contractor shall make necessary safety arrangement at site including as mentioned in GCC and indemnify EPI against any consequence of accident at site COMPENSATION FOR DELAY AND REMEDIES
		Any recovery, penalty imposed by CTE due to non-performance, non-compliance of agreed condition or otherwise whatsoever the same shall be recovered from RA Bill of contractor.
		The work executed by the CONTRACTOR shall be subject to audit and quality control checks from Quality Control Division & Technical audit of EPI/NESTS third party inspecting Agency of the Client and Chief Technical Examiner of Central Vigilance Commission, Govt. of India. In the eventuality of any defect/substandard works as brought out in the report or noticed otherwise at any time during execution, maintenance period etc., the same shall be made good by the CONTRACTOR without any extra cost. In case the CONTRACTOR fails to rectify the defect/sub- standard work within the time period stipulated by EPI/NESTS, necessary action as deemed fit shall be taken by EPI/NESTS and decision of EPI/NESTS, shall be final and binding on the contractor.
18.0	53.2	
		In addition to clause no. 47.0 of GCC: The contractor shall have to submit the 10 years Guarantee bond against leakages/dampness on Rs.100/- stamp paper to the EPIL/Client NESTS as per proforma specified during execution. 10% of the cost of anti-termite treatment and water proofing work shall be retained from Final bill as additional security deposit &would be released after ten years from the date of completion of the entire work under the agreement. If the performance of the work done is found unsatisfactory and any defects noticed during the guarantee period, same shall be rectified by the contractor within Ten days of receipt of intimation of defects in the work, if the defects pointed out are not attended to within the specified period, the same will be got done from another contractor at the risk & cost of the contractor & cost shall be recovered from the said retained amount.

76.1 Before resorting to arbitration as per the clause given below, the parties if they so agree may explore the possibility of conciliation as per the provisions of Part III of the Arbitration and Conciliation Act, 1996 as amended by Arbitration and Conciliation (Amendment) Act, 2015. When such conciliation has failed, the parties shall adopt the following procedure for arbitration: Except where otherwise provided for in the contract, any disputes and differences i) relating to the meaning of the Specifications, Design, Drawing and Instructions herein before mentioned and as to the quality of workmanship or materials used in the work or as to any other questions, claim, right, matter or things whatsoever in any way arising out of or relating to the Contract, Designs, Drawings, Specifications, Estimates, Instructions, or these conditions or otherwise concerning the works of the execution or failure to execute the same whether arising during the progress of the work or after the completion or abandonment there of shall be referred to the Sole Arbitrator appointed mutually by both the parties as per the provision of Arbitration & Conciliation Act (as amended in 2015 & 2019). The Arbitrator shall be appointed within 30 days of the receipt of letter of invocation of arbitration duly satisfying the requirements of this clause. 76.2 (ii) Subject to any amendment that may be carried out by the Government of India from to time, the procedure to be followed in the arbitration shall be as is contained in D.O. No. F. No. 4(1)/2013-DPE(GM)/FTS-1835 dated 22nd May 2018 of Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises, Government of India or any modification issued in this regard. 76.3 JURISDICTION: The courts in Mumbai alone will have jurisdiction to deal with matters arising from the contract.

B) ADDITIONAL CLAUSES OTHER THAN GCC

- 1) The Client/NESTS reserves the right to inspect the work through its Engineers/Officers of any other agency authorized by the Client/NESTS from time to time. The Client/NESTS shall communicate such observations, if any, for compliance by the Contractor.
- 2) The Client/NESTS reserves the right to get the work including measurement etc. checked with reference to the bills and accounts of contractor audited by its own officers or any other agency appointed by the Client/NESTS for this purpose. Results/findings of Client/NESTS on such checking shall be final and binding upon the contractor.
- **3)** Finalization of Tenders The Competent authority of Client/NESTS to accept the tender of contractor shall evaluate and shall accept the lowest tendered cost. After the approval for the same is conveyed by NESTS. In case the lowest tendered cost is higher than estimated cost, the NESTS to accept the tender with justification. The tender can be accepted only after the receipt of sanction by NESTS/Client.

- 4) The contractor shall be fully responsible for quality technical/structural soundness and effective & efficient construction management of the work. It shall ensure that all drawings issued by EPIL/Client are thoroughly examined as per the prevailing site conditions before actual execution and any deficiency /defect and/ or suggestions for improvement to suit the local conditions may be brought to the notice of EPIL/Client in writing and his approval shall be obtained before execution. No deviation from approved drawings/designs, specifications etc. shall be carried out without written approval of the EPIL. Any deviation from this shall make the contractor fully responsible to bear the extra cost involved, if any.
- **5)** The CONTRCTOR shall be fully responsible to complete the "Works" in workmen like manner to the satisfaction of the Client and EPI by maintaining high standard of quality and precision as per 'Tender Documents,' Agreements, Terms & Conditions, Specifications, Drawings etc. within contractual completion period and within their quoted rates/ amount. The rates quoted/finalized shall remain firm throughout till completion of works including the extend period for which Extension shall be granted by EPI without Levy of L.D & in no case rate shall be revised.
- 6) The CONTRACTOR will not deal directly with Client and all the correspondence in matters regarding bills, claims, interpretation of the specifications, conditions and all matters related to the contract with Client, Client's Consultants, all other agencies including Government and Statutory bodies etc. shall be done through EPI only. CONTRACTOR shall prepare and submit expeditiously all bills, claims, details, clarifications, documents, information, etc. as required by EPI /Client for proper execution and successful completion of the "Works"

7) STATUTORY REQUIRMENTS -

- a. It is the responsibility of the contractor for getting the all approval from the local statutory authorities such as town planning / municipal authorities / electricity board / fire / forest department etc. and other department for the total / entire works executed at site / NESTS premises as per the approved plans and designs etc.
- b. The contractor is responsible for Liaison & obtaining the connection for water supply, sewer connection, electric connection and other connections if any from local authorities/state Electricity board. However, the statuary payments payable to Govt. department shall be paid by EPIL / NESTS directly to the concerned authorities. If any statutory charges/fee to be paid by contractor directly to the local/statutory authorities on behalf of client the same shall be reimbursed to contractor on submission of proper receipt upon reimbursement by client in case of lifts the statutory fees shall in scope of contractor and shall not be reimbursed.
- c. The contractor shall have to obtain all Approvals including excavation by blasting, Connections/ NOCs/Completion Certificates/ Occupancy Certificate, etc from the concerned Local/Statutory authorities for civil & electrical works,

Sewerage works, Water Supply works, Fire Fighting work, Fire Alarm system work, DG set pollution control board, Passenger / Goods lifts etc. at his own cost and nothing extra other than statutory fee/charges shall be payable on this account to the contractor. However, the letters required from the client for the needful stated purposes will be arranged by EPIL from the client as per the request of contractor.

d. The contractor is advised to quote his rates for different works considering the above factors and all conditions given in NIT and ACC, GCC.

8) SITE LABORATORY

- a) As part of the contract the contractor shall provide and maintain a site laboratory for the routine testing of construction material under the direction and general supervision of Engineer-in-charge. The laboratory room shall be constructed and installed with the appropriate facilities. Temperature and humidity controls shall be made available wherever necessary during the testing of samples.
- b) All equipment's shall be provided by the contractor so as to be compatible with the specified testing requirements. The contractor shall maintain the equipment in good working conditions for the duration of the contract.
- c) The Contractor shall provide approved qualified personnel to run the laboratory for the duration of the contract. The number of staff and equipment available must at all times be sufficient to keep pace with the sampling and testing programme as required by Engineer-in-charge. The laboratory Incharge of the contractor shall report to Engineer-in-charge.
- d) The Contractor shall fully service the site laboratory and shall supply everything necessary for its proper functioning, including all transport needed to move equipment and samples to and from sampling points on the site etc.
- e) The Contractor shall re calibrate all measuring devices whenever so required by the Engineer-in-charge and shall submit the results of such measurements without delay.
- f) For all other tests as required by Engineer-in-charge, the Contractor shall get the same carried out / conducted by approved testing Laboratory. In addition, if, EPI /NESTS feels, may direct the Contractor to conduct the tests in the presence of EPI/NESTS representative at site lab / outside labs. All expenses payable for transport of samples and conduction of tests shall be borne by the contractor.

9) PLANT AND MACHINERY

All plant & machinery required for execution of work shall have to be arranged by the contractor at his own cost. It is desired that the contractor has to deploy following minimum plant & machinery in good condition as and when required at each site location immediately after award of work.

S. No.	Description	Minimum Number Required	
1	Fully automatic computerized concrete batching and mixing plant as per the specifications with print outs for admixture, concrete batching and other items. (20 cum/Hr.) or Mobile Batching Plant as required	01 No	
2	Transit Mixer	02 Nos	
3	Total station for surveying work.	01 No.	
4	Winch Machine	01 No.	
5	Vibrators (Petrol / Electrical)	06 Nos	
6	Needles of Vibrator	12 Nos.	
7	Excavator/Poclain	02 No.	
8	Tipper / Dumper (15 cum.)	04 Nos.	
9	DG Set (63 KVA & 125 KVA)	01 No Each	
10	Leveling Instruments	01 No.	
11	Bar Cutting and Bending Machine	06 No	
12	Welding Machine	02 No	
13	Water Tanker with Sprinkler	01 No.	
14	Roller/ Compactor	01 No	
15	Shuttering Materials (Minimum 4000 sqm plates and staging material as per requirement)	4000 sqm	
16	Tractor with trolley for transportation of material	01 No	
17	Core Cutting Machine	1 Set	
18	The contractor shall provide sufficient area lighting for the safe execution of works during night hours through static / mobile arrangements.	As per requirement of site	
19	Laboratory equipment's	As required	

ARRANGEMENT OF CONCRETE

All concrete Works shall be done with Fully automatic computerized concrete batching and mixing plant as per the specifications with printouts for admixture, concrete batching and other items (20cum/Hr.) only. Batching Plant shall be installed at site of work only. The Contractor has to submit the design mix for the work to be executed and other requirements will be as decided by Engineer in charge. Concrete mix design shall be carried out by the contractor at his own cost from IIT/NIT and reputed Government Engineering Colleges only with the approval of Engineer-in-charge before starting the work

<u>Note :</u>

- A successful bidder provides proof of ownership of above plant and equipment's or give lease agreement for the same at the time of signing of agreement with EPI.
- b) In addition to above contractor has to arrange sufficient plant & machineries to complete the work as per completion schedule.
- c) Any other equipment for site test as outlined in CPWD / BIS specification and as directed by the Engineer–in–charge.
- d) The quantities of equipment mentioned above are indicative only and can be increased as per the requirement of quantum work OR as per the direction of Engineer-in-Charge. The above equipment list is indicative and not complete. The contractor has to deploy all the required equipment to complete all the works within stipulated specifications and time period as per contract documents.
- e) The contractor will not be allowed to take out equipment from the site without the written permission of Engineer-in-charge.
- f) In the event of breakdown of any equipment the contractor should immediately mobilize replacement of the said equipment.

S. N.	Description of Milestone (Physical)	Time Allowed (from date of start)
1	1/8 th of the whole of the work	Before 1/4 th of the time allowed
2	3/8 th of the whole of the work	Before ½ of the time allowed
3	3/4 th of the whole of the work	Before 3/4 th of the time allowed
4	Whole of the work	Full time allowed

10) COMPLETION SCHEDULE FOR EACH SITE LOCATION

Failure to achieve one or more milestones or failure to complete the work within stipulated time period or justified extended time period, if any, shall invite action under relevant clauses of the agreement with contractor for delayed performance.

Further Project planning attached as Annexure-I (Project Planning) is part of this NIT and monthly progress both physical and financial is to be achieved as per the planning. Successful bidder has to give <u>undertaking</u> on non-judicial stamp paper of value of Rupees 100/- for completion of work as per the completion chart and the same undertaking is to be part of Agreement between EPI and successful bidder.

11) The contractor shall comply with legal orders, directions and by laws of local bodies / authorities. The contractor shall give to the Municipality, Police, Local Bodies and concerned Governmental authorities all necessary notices relating to works that may be required under the law and obtain all requisite licenses, permissions for temporary obstructions, enclosures, collection and stacking of materials, etc.

The contractor shall pay at his own cost all fees, taxes and charges that may be liable on account of these operations in executing the contract. Nothing extra shall be paid by EPI on this account.

The contractor shall be bound to follow the instructions and restrictions imposed by the administration / Police authorities on the working and / or movement of labour, materials etc. nothing extra shall be payable due to less / restricted working hours at site or any detours in movement of vehicles.

12) TEST CERTIFICATE

a) All manufacturer's certificates of test showing that the all equipment / materials have been tested in accordance with the requirements of the relevant standard specification and the copy of the test certificate as well as standard shall be supplied free of cost to EPI / NESTS also all the required test as per NESTS/EPIL shall be carried out by contractor on his own cost.
b) Bidder has to conduct pile load test as per requirement in presence of Engineer in Charge.

13) LICENSES

The contractor shall arrange for obtaining the license and clearances for the operation. (If required) from the local authorities and statutory bodies at his own cost & nothing extra shall be payable. Certification of various equipment / installations from statutory bodies other agencies as required as per technical specifications, shall be arranged by contractor at his own cost before handing over.

14) SITE ENGINEER OF CONTRACTOR AT EACH SITE LOCATION

The Contractor shall employ at his cost the adequate number of technical staff during the execution of this work depending upon the requirement of work. For this purpose the number of staff to be deployed, their qualification, experience as decided by EPI shall be final and binding on Contractor. The Contractor shall not be entitled for any extra payment in this regard. The technical staff should be deployed on full time basis & available at Site, whenever required by EPI to take instructions. If contractors fails to appoint technical staff as mentioned below, the EPI shall deploy staff as per requirement and same shall be recovered from contractor.

However, Minimum qualifications and experience required for technical representative is given below:

S. No.	Qualification	No.	Minimum Experience	Rate at which recovery shall be made from the contractor in the event of not fulfilling
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1.	Project Manager	1	Graduate Engineer at least 20 years' experience in execution of reputed project of multi-storey residential / commercial / institutional buildings / including external development work etc.	Rs. 60,000/- per month
2.	Deputy Project Manager	1	Graduate Engineer at least 12 years' experience of QA/QC of reputed project of multi-storey residential / commercial / institutional buildings / including external development work etc.	Rs. 40,000/- per month per person
3.	Project/Site Engineer or Diploma Engineer	2 (1+1)	Graduate Engineer at least 5 years' and or Diploma Engineer at least 10 years' experience in execution of reputed project of multi-storey residential / commercial / institutional buildings / including external development work etc.	Rs. 25,000/- per month per person
4.	QA Engineer with degree in civil engineering	1	At least 5 years experience QA/QC work of reputed project of multi-story commercial institutional buildings / institutional etc	Rs. 25,000/- per month per person
5.	Billing Engineer with degree in civil engineering	1	Minimum 5 years experience billing work of reputed project of multi-story commercial institutional buildings / institutional etc.	Rs. 25,000/- per month per person
6.	Electrical Engineer with degree in electrical engineering	1	At least 5 years experience electrical work of reputed project of multi-story commercial/institutional buildings / institute etc.	Rs. 25,000/- per month per person
7.	Project/Site Engineer or Diploma Engineer	2 (1+1)	Graduate Engineer at least 2 years' and or Diploma Engineer at least 5 years' experience in execution of reputed project of multi-storey residential / commercial / institutional buildings / including external development work etc.	Rs. 15,000/- per month per person

15) COMPLIANCE OF CONSTRUCTION & DEMOLITION WASTES MANAGEMENT RULES 2016.

The contractor shall comply all the rules & regulation of Construction & Demolition waste Management Rules 2016 as notified by the Government of India as applicable for the said work and subsequent amendment if any, in the said act notified by the Government time to time. Nothing shall be paid extra.

16) FACILITIES TO BE PROVIDED AT SITE FOR LABOUR WELFARE

All facilities to be provided at site for fulfilling all statuary labour welfare schemes are included in contractor's scope which shall include the following but not limited to the same.

Separate provision / rooms for First Aid Centre & Reset room and for the safety officer, safety supervisors and other personnel to be engaged by the contractor for H.S.E aspects of the project

Erecting sufficient numbers of Urinals, WC's, drinking water, water supply and sanitary arrangements to the supervisory personnel and workmen engaged by them. Canteen facility to workmen engaged by the contractor.

17) Final Bill: -

The final bill will be submitted by the contractor within 60 days from the date of acceptance of completion of work accompanied by the following documents:

a) Completion certificate issued by the Engineer-in-Charge specifying the handing over of the work including list of inventories (fittings & fixtures)

b) Computerized stage wise payment schedule.

c) No claim certificate by the contactor.

d) No claim certificate from the sub-agencies / venders engaged by the contractor.

e) As built' drawings.

f) Periodical services and measurement books.

g) Drawings for layout of underground cables and details showing location of sluice

valves, electric cable joints etc.

h) All operation and maintenance manuals.

i) All statutory approvals from various state / central govt. local bodies, if required for completion & handing over of the work as included in scope of Contractor.

j) Manufacture's guarantee of various machines / equipment's installed as part of works.

- k) NOC from labour department, PF Department.
- 18) For items not covered under any of the specifications mentioned in Tender Documents, the works shall be carried out as per CPWD Specifications / manufacturer's specifications or as per directions of Engineer-in-Charge. The rate for such extra work shall be derived as follows:

a) If the item is available in DSR 2019, contractor has to execute the item as per tender percentage.

b) If the same item is not available in DSR 2019 and similar item is available, rate for such extra work shall be derived from the similar item.

c) If the rate for any item is not possible to derive as mentioned above, the rate shall be derived by analyzing as per the prevailing market rates following CPWD norms.

19) Client's authorized Representative, Third party inspection

NESTS/EPI at his discretion may authorize their representative or appoint agency On behalf of them to supervise and monitor project related all activities. Contractor will extend all necessary assistance required and cooperate.

The Third-Party Quality Assurance will be conducted by Client as per agreed plan with client &contractor has to submit the reports at regular intervals along with RA bill to EPIL.

Contractor will extend all necessary assistance required and cooperate.

Contractor will make sitting arrangements for owner's representative & third party inspector & for their staff if any.

20) All defect notice during the currency of the contract and also during the defect liability period of 12 months after completion of the work except those pertaining to leakage/dampness which are governed by clause mentioned above shall be got completely and satisfactorily rectified by the contractor immediately after notifying the defects without any extra payment for the same. In case the defects are such as cannot be rectified or the contractor fails to rectify these satisfactorily and completely, EPIL/Client reserves his right to accept the work at reduced rates (provided defects are non-structural) or to get the rectification work done at the risk and cost of the contractor.

The decision of the Client, in this regard, shall be final and binding on the contractor.

21) Alterations, Additions and Omissions

EPI/NESTS can make any variation of the form, quality or quantity of the works or any part thereof that may, in their opinion be necessary and for that purpose, or if for any other reason it shall in his opinion be desirable, they shall have power to order in writing to the contractor to do and the contractor shall do any of the following :

- i. Increase or decrease in the quantity of any work included in the contract in which case the value of contract may be increased or decreased.
- ii. Omit any such work.
- iii. Change the levels, .lines, position and dimension of any part of the works and
- iv. Execute additional work of any kind necessary for the completion of the works and no such variation shall in any way vitiate or invalidate the contract, but the value, if any of all such variations shall be taken into account to ascertain the amount of the Contract Price.
- v. The contractor shall not effect any of the aforementioned changes without the written order of EPI / NESTS.

22) Agency shall ensure strict Quality Control measures and monitoring to ensure quality and timely construction.

(i) TPQA (Third Party Quality Assurance) - The Construction Agency shall in consultation with NESTS/EPIL before commencement of work. TPQA shall be conducted by EPIL & NESTS appointed NIT as per TPQA Guidelines. No work shall be permitted without TPQA agency.

(ii) The Quality plan and Design Mix Shall be available before the time of commencement.

(iii) Agency shall ensure thorough checking/cross checking of reinforcements before casting of RCC, casting of all RCC work in presence of Site engineer, mandatory testing of materials at prescribed frequencies as per Quality Plan, etc. to ensure quality construction.

(iv) The important activities like layout and positioning of Columns, Beams, Brick Work shall be marked properly as per architectural drawings to avoid any deviation.

(v) The Critical Activities like DPC, water proofing for sunken portion of toilets and terrace must be done with specialized agency to avoid future leakage, water seepage, etc.

(vi) The regular monitoring and frequent site visit by engineering team including zonal head is absolutely necessary to ensure quality and reinforcement, structure is being done as per approved architectural and vetted structural drawings. Agency must ensure that the site engineer must be stationed at site.

(vii) Photograph of ongoing construction: - Agency shall continuously share the geotagged photographs of ongoing construction to EPIL. The photographs need to be shared in every stage of construction for important items and milestones like foundation reinforcement, RCC casting of foundations, columns, beams & Slab, masonry work, etc as well along with each running bill.

(viii) Manpower Deployment: Agency shall share the details of Site Engineers, project engineer for each location with name designation, experience immediately. No work shall be permitted without availability of a regular, technically qualified and experienced site engineer as per MoU.

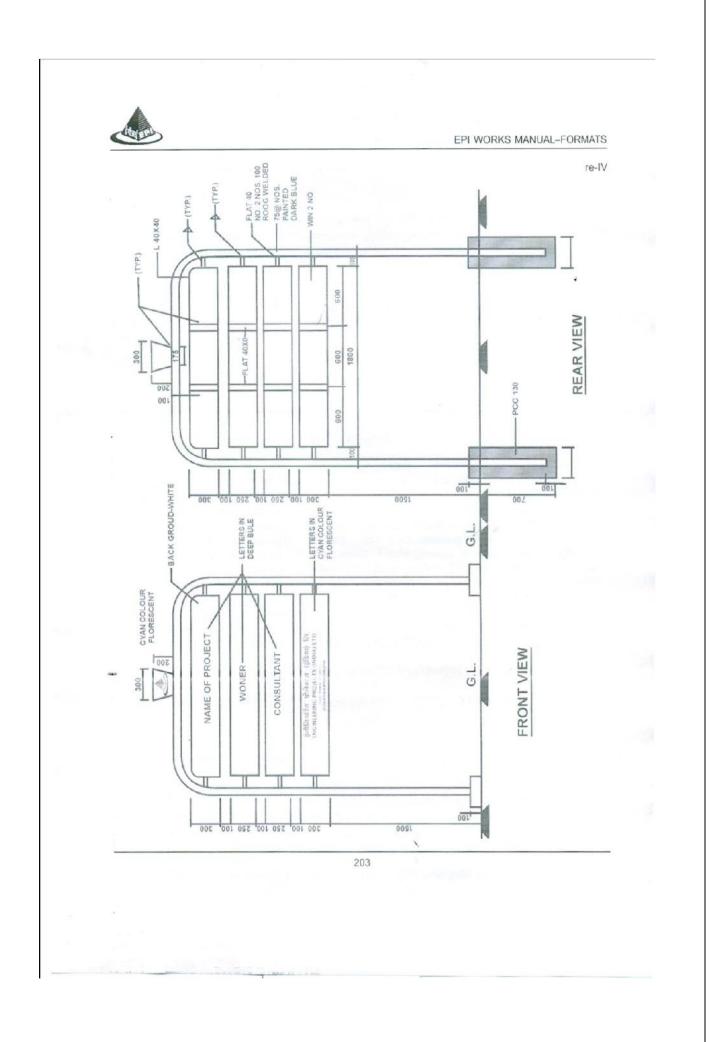
23) Barricading: -The height of barricading should be mini. 2.0 M or more as per SPCB rules from the EGL on MS frame with G.I Sheet.

C) Provisions under Model Rules for the Protection of Health and Sanitary Arrangements for Workers of EPI are modified/ amended as under: -

S. No.	Clause No.	Modified/Amended provisions as per Additional Conditions of Contract
1		Following clause shall be added in the Model Rules:
		 11. Precautionary/Preventive Measures against dissemination/spread of COVID-19 A. Mandatory for every labourer/worker to undergo a health checkup and remain quarantined for a fortnight before beginning work at the site.

B.	All construction material entering the site would be left undisturbed for
	three days to eliminate the threat of COVID-19 Contamination.
C.	Keep in-person meetings (including toolbox talks and safety meetings) as
	short as possible, limit the number of workers in attendance, and use
	social distancing practices.
D.	Provide employees with access to soap, clean running water, and
	materials for drying their hands, or if soap and water are not readily
	available provide alcohol-based hand sanitizers containing at least 60%
	alcohol at stations around the establishment for use by workers.
E.	Coordinate site deliveries in line with the employer's minimal contact and
	cleaning protocols. Delivery personnel should remain in their vehicles if
	at all possible.
F.	Adopt staggered work schedules, e.g., provide alternating workdays or
	extra shifts, to reduce the total number of employees on a job site at
	any given time and to ensure physical distancing.
G.	Train construction workers on:
	I. The signs and symptoms of COVID-19 and an explanation of how
	the disease is potentially spread, including the fact that infected
	people can spread the virus even if they do not have symptoms.
	II. All policies and procedures that are applicable to the employee's duties as they relate to potential exposures to COVID-19. It is
	helpful to provide employees with a written copy of those
	standard operating procedures.
	III. Information on appropriate social distancing and hygiene
	practices, including:
	a. Avoiding physical contact with others and maintaining a
	distance of at least 6 feet from customers and other
	individuals, whenever possible, including inside work trailers.
	b. Appropriate cleaning practices (i.e., washing hands frequently
	with soap and water for at least 20 seconds, or, if soap and
	water are not immediately available, using alcohol-based hand
	sanitizer that contains at least 60% alcohol and rubbing hands
	until they are dry; sanitizing all surfaces workers will touch).
	c. The proper way to cover coughs and sneezes (i.e., sneezing or
	coughing into a tissue or into the upper sleeve).
	d. Importance of workers not touching their own faces (mouth,
	nose, eyes).
	e. The benefits of driving to work sites or parking areas
	individually, when possible, without passengers or carpools.
	IV. The importance of staying home if they are sick.
	V. Wearing masks over their noses and mouths to prevent them
	from spreading the virus.
H.	Ensure clean toilet and hand washing facilities. Clean and disinfect
	portable job site toilets regularly. Fill hand sanitizer dispensers regularly.
	Disinfect frequently touched items (i.e., door pulls and toilet seats)
	regularly.

 Persons having flu-like symptoms should not come to work site and should seek medical attention from local health authorities. If they test positive for Covid-19, they should inform the authorities concerned in the office immediately.
J. If one or two cases are reported in the office, places visited by the patient over the last 48 hours will be disinfected. Work will only be resumed after disinfection.
K. Every construction site would have weekly doctor visits. An isolation facility would also be created at the work site in case a labourer develops cough, cold or other symptoms.



E) Preferred Makes:

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Steel Reinforcement: Thermo mechanically treated bars Fe500 grade confirming to IS 1786:2008 from approved brands i.e. SAIL, TISCO, RINL, SHYAM Steel industries, JSW steel ltd. JINDAL.

	LI LI	ST OF PREFERRED MAK	E OF MATERIALS (CIVIL)
S. No.	Material / Article	Confirming IS Code	Manufacturers/ Agencies/ Brand make
1	Cement (OPC 43 grade)/PPC	IS 8112:1989/ IS 1489 (Part-1) 2015	A.C.C., Jaypee Cament, Ultratech, Shri Cement, Gujrat Ambuja Cement and cement Corporation of india., Dalmia InfraPro (Dalmia Bhara Cement)
2	Ready Mix Concrete	*	Ultra Tech (Ultra Tech Cement Ltd.), ACC (ACC Cements Ltd), RMC (India), RMC (India) Pvt. Ltd.
3	AAC Blocks	-	Kiralita (Ultra Tech Cement Ltd), Areocon (HIL), Nuci (Green Way building materials India Pvt. Ltd.), Magicrete (Magicrete Precast), NCL
4	Structural Steel	IS 2082 2011	SAIL, TISCO, RINL, JSW Steel Ltd. JINDAL
5	Stainless Steel	-	JINDAL SS Ltd (JSL), Salem (SAIL), SAIL (SAIL)
6	Corrugated GI Sheets	IS 277:2003	TATA, SAIL, JSW, JSPL, BHUSAN
7	Colour coaled profile sheet	-	TATA, JINDAL
8	AlumInium extruded sections	IS 733:1983 & IS 1285:2002	Jinda', Hindalco, Indian Aluminium Co NALCO
9	Aluminium plain sheets	IS 733:1983 & IS 1285:2002	Jindal, Hindalco, Indian Aluminium Co. NALCO
10	Factory made Machine pressed laminated flush door shutter	IS 2202 (Part 1) : 1999 and relevant IS code	Century, Greenply, Kilply, Duroply, Merino
11	Block Board	IS 1659:2004	Century, Greenply, Kitply, Duroply, Merino.
12	Flush door shutter	IS 2202 (Part 1): 1999	Greenply, Century, Kitply, Duraply Merino,
13	Boiling Water proof plywood, Block board, Commercial plywood	IS 303:1989	Greenply, Century, Kitply, Duroply Merino,
14	Aluminium door & window fittings	Relevant IS Code	Jyoti, Argent, Everest
15	PVC rigid foam sheet	-	Raishri or equivalent
16	Hydraulic Floor Spring	IS 6315:1992	Dorma, Hardwin, Ozone, Dorsel
17	Door Closure	IS : 3564	Dorma, Hardwin, Ozone, Dorset
18	Float Glass		Saint Gobain (Saint Gobain India Pvt Ltd.), Modiguai (Gujarat Guardian Ltd.), Asahi (Asahi India Glass Itd.)
19	SWR uPVC pipe & filting	IS 4985:2000 & IS 14233:1999	Supreme, Finolex, Prince, Astral, Prakash, Ashirwad
20	CPVC Pipe & fittings	IS 16088: 2012,IS 15778:2007	Supreme, Finolex, Prince, Astral, Prakash, Ashirwad,
21	Ceramic glazed wall tiles	IS 13712:1993	Kajaria, Orientbell, Somany, NITCO, HR Johnson,
22	Vitrified Tiles	IS: 15622; 2006	Johnson.
23	Bitumen VG-30, VG-10 etc.	IS:73:2013	As per particular specification of IOCL, BPCL, HPCL.
24	Admixtures	IS: 9103.1999	FOSROC, SIKKA, CICO Technologies Ltd., Pidilite
25	Mild Steel Tubes	IS: 1239:1990	As per IS Code
26	Ist quality acrylic distemper (Ready mix)		Bison (Lewis Berger), Beauty (NEROLAC), Tractor Uno (Asian Paints)

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S. No.	Material /Article	Confirming IS Code	Manufacturers/ Agencies/ Brand make
27	Premium Acrylic smooth exterior Paint with silicon additives		ULTIMA (Asian paint), Premium Exterior Emulsion (Dulux), Weather coat long life 7 (Berger)
28	Paints	IS:101:1986	Lewis Berger, Asian Paints, Nerolac, Dulux
29	Steel/Wood Primer paints	IS:14177.1994	Lewis Berger, Asian Paints, Nerolac, Dulux
30	Factory made C.C. Interlocking Paver Blocks	IS: 15658.2006	NITCO, KK, NTC
31	Bitumen 85/25	IS:702:1988	HPCI, IOCL
32	Water Proofing Compound	IS:2645:2003	FOSROC, Dr. FIXIT, BASF, CICO, SIKKA
33	Crystalline Waterproofing Compound	IS 2645:2003	FOSROC, Dr FIXIT, BASF. SIKA
34	G. I. Pipes	IS:1239	TATA, Jindal Hissar
35	PVC Water Storage Tanks	IS: 12701;1996	Sintex, Plasto
36	P.T.M.T. Accessories	IS:9763	Prayag, Prakash
37	Mirror		Saint Gobain (Saint Gobain India Pvt. Ltd.), Modiguard (Gujarat Guardian Ltd.), Asahi (Asahi India Glass Itd.), Atul (Autl Glass Industries Ltd.)
38	Stainless Steel Sink	IS: 13983:1994	Hindware, NIRALI, CERA, JAYNA
39	Sanitaryware/ Chinaware	As per IS Code	Cera, Parryware, Hindware, Jaquar
40	C.P. Fittings and accessories for bathroom / toilets	IS:7784:1993	Jaquar, Gem, Parko, Hindware, Cera, Parryware
41	RCC Pipes	Confirming to IS Specification	Indian Hume Pipes (Indian Hume Pipe Ltd.), Jain & Co (Jain spun pipes Co)
42	SFRC Cover and grating	IS 12592(2002)	KK (KK Manhole and gratings Co Pvt Ltd.)
43	CI Manhole cover	IS 1726 (1991)	RPFM (M/s Raj Pattern Makers & founders Pvt. Ltd.), BIC (Bengal iron corporation), Neco (Jayaswal Neco Ltd)
44	Foot Rest (for manhole)		KGM (KGM Exports), Accurate Buildcon (AccurateBuildconcompany),Neco (Jayaswał Neco Ltd)
45	Water stops		Hydrotite (Sika India), Dr. Fixit (Pidilite industries), Ferrous Crete (Ferrous Crete (India) Pvt Ltd.)
46	Aluminium doors/windows sections	IS 733 & IS 1285	Hindalco (Hindalco Industries Ltd.), Jindal (iindal Aluminium Ltd.)
47	Glass Reinforced Concrete (GRC) Jali		Terrafirma (Terrafirma GRC Industries), Ecovision (Ecovision Industries Pvt ltd.), Mahesh GRC (Mahesh Prefab Pvt Ltd.)
48	SS Doors & Windows Hardware & Fittings		JINDAL, Dorma, KICH, Godrej, Ozone
49	Wall Putty		Dalmia, JK . Birla, Asian

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S.	Material /Article	MAKE OF MATERIALS (ELECTRICAL) Manufacturers/ Agencies/ Brand make
No.		manufacturers, Agencies, Drand make
1	Engine	Ashok Leyland /Cummins/ Cater pillar /KOEL Mahindra &
		Mahindra /Escorts
2	Alternator	Kirloskar/KEL/Crompton Greaves (AL. series) / KEC /
		Stamford
3	Battery (Lead Acid /Mntc. Free)	Amara Raja / Exide/Crompton Greaves/Prestolite/Pace
	, (contract free)	Setter/Standard/
4	HV Switchgear	Crompton / Kirloskar /Voltas/ C & S Electric
5	LT Switchgear	L&T/ Schneider Electric / Siemens//Legrand/Havells
6	Vaccum Circuit Breaker	GE/Siemens/ C & S Electric
7	Transformer (Oil filled / Dry type)	ABB / Crompton Greaves /
	(/Kirloskar /Siemens/ Alstom/Uttam
8	HT Panels	ABB/Siemens/L&T/Schneider/Kirloskar
9	Air Circuit Breaker	L&T/ Schneider Electric / Siemens/Havells
10	MCCB (Ics=Icu)	L &T/ Schneider Electric / Siemens/Legrand/Havells
11		TTA/CPRI Fabricators with panels cleared by CPRI
12	SDF units	L&T/ Schneider Electric / Siemens/ Havells/ Legrand
13	Power Contactors	L&T/ Schneider Electric / Siemens/BCH/GE/ Power Controls
14	Change Over Switch	L & T/ HPL / Havells / Standard/Control & Switch gears
15	Air Brake Switch	National/Kiran/Pactil/Atlas/Power grid switchgears
16	Pin and Disc Insulator	Jayshree/WS/IEC/BHEL/Bharat Industries
17	11 KV Horn Gap Arrestor	Sahal/Pactil/GEC/SEW
18	Lightning Arrestor	Atlas/GE/Elaro/Lamco/International/Oblum/Elpro
19	Drop out Fuses	National/Kiran/Pactil
20	GI/MS Pipe (ISI Marked)	ATC / ATL / BST / GSI / ITC / ITS / IIA /JST / Jindal /TTA /
		Tata/Zenith
21	APFC Relay	L&T/ Schneider Electric / Neptune Ducati/Syntron/Trinity
		Electronics
22	IDMT Relay	AVKC/SEGC
23	C.T./P.T.	AE/MP/Marshal/Pactil/Kappa/L&T/Ashmor/Waco/Meco/Gilb
_		rt/Trio/Indotech/Indo coil
24	Selector Switch	L&T/Kaycee/IMP/Vaishno/Seizer/rass control
25	Indicating Lamp (LED Type) and Push But	Vaishno/Siemens/L&T/AE/IMP/Rass
26	Power Capacitors (MPP/APP)	Khatau/Junkar/L&T/EPCOS(Siemens)/ABB/Crompton/Schnei
_		er Electric/Neptune Ducati
27	Digital Panel Meters i/c Multi Function	Conzerv/Schneider Electric/ AE/ Digitron / IMP/Meco /
	Meter	Rishabh /Universal/HPL/L&T/ABB
28	Ammeter/Voltmeter	AE/Universal/Rishabh/Kaycee/Meco/Enercom
29	Cold shrink HT/LT Cable Joint Kit	Denson / 3M(M-Seal)/ Raychem
30	Rubber Matting (ISI Marked)	Jyoti Rubber Udyog/Raychem/Padmini/Dozz
31	AVM Pads	Dunlop/Poly Bond
32	MCB/ isolator/ELCB/RCCB/ Distribution	Crompton / Havells / MDS Legrand/ L&T / Schneider
	Board	Electric/Siemens / Polycab/ C&S/ (makes of DBs and circuit
		breakers shall be same)
33	TPN Switches & HRC Fuses	Crompton / Havells / MDS Legrand/ L&T / Schneider
		Electric/Siemens / Polycab/ C&S/ (makes of DBs and circuit
_		breakers shall be same)
34	PVC Conduits (ISI Marked) Colour :	AKG/Polycab/Avon Plast/Precision

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35	Steel Conduits (ISI Marked)	BEC/Bharat/Gupta/AKG/RMCON/Steel Krafts
36		Legrand/Havells/Polycab/ Schneider/Anchor
37	and the second	MEM/Bharti/Ratan/Slotco/Profab
38	Cable Glands	MCI. Comet/Jainson/Dowells
39	Thimbles/Lugs	Jainson/Dowells/Ascon
40		Finolex/Havelis/Polycab//KEI
41	Fire Survival cable	Finolex/Havells/Polycab//KEI
42	Wires (PVC insulated copper conductor cable FRLS - ISI marked)/Telephone Cables / Submersible cables/Co-axial/TV cables	Finolex/Havells/Polycab//KEI
43	Fans and Exhaust fans (All Types)	Khaitan/Havells/Crompton/Orient/Bajaj/Usha/Polycab
44		Khaitan/Havells/Crompton/Orient/Bajaj/Usha/Polycab
45	LAN Cables	Panduit/Legrand/Schneider//Polycab
46	Centrifugal Pump	BE Power / Beacon /Crompton / Kirloskar / KSB
47	Submersible Pump	BE Power / Beacon /Crompton / Kirloskar / KSB
48	Motors	Crompton Greaves /Schneider Electric / Kirloskar/ Siemens
49	Motor Starter	L&T/Siemens/BCH/GE Power Control/Schneider Electric
50		Khaitan/Havells/Crompton/Orient/Bajaj/Usha/Polycab
51	Single Phase Preventer/Overload Unit	L&T / Minilec / Siemens
52	Timers	L&T / Minilec / Siemens /AE
53	Gate Valve/Foot Valve/NRV/Butter Fly Valve	Advance/Audco/Johnson Controls/Zoloto/Annapurna / Fountai /Kirloskar / Leader / Sant / Trishul/Kartar/Inter Valve
54	Single/Double Headed GM Landing Valve	New Age (Mumbai)/Safex/Ceasefire/Padmini/Life guard
55	Hydrant Valve	New Age (Mumbai)/Safex/Ceasefire/Kalpana/L&T valves Ltd./Life guard
56	Sprinkler/ Hose Reel & Hose Pipe (ISI Marked)	Safex/Agni/Newage/Ceasefire/Life Guard/Omex
57	Fire Extinguisher (ISI Marked)	Minimax/Lifeguard/Safeguard/Safex/Omex
58	Water Purifier	Eureka Forbes/Kent/Ion Exchange/LG
59	Inverter System	Sukam/Microtek/Luminous
60	Electrical Water Storage Heater	Racold/Crompton/Havells/Bajaj/Polycab

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ADDITIONAL PREFERRED MAKE LIST OF MATERIAL

S.No	Material	Confirming IS code	Manufacturers/Agencies/Brand Make
1	Steel Reinforcement		Thermo mechanically treated bars Fe500 grade confirming to IS 1786:2008 from approved brands i.e. SAIL, TISCO, RINL, JSW steel Itd. & JINDAL PANTHER, SHYAM.

Certified that materials are confirm to relevant IS provisions and BIS standard & specifications.

Additional Preferred Make list as per NESTS's EMRS Guidelines dated 14.03.2023

S. No.	Material/Article	Relevant IS Code	Manufacturers/ Agencies/Brand Make
1	Factory Made steel Glazed / Gauged windows and ventilators	IS:1038-1983	SKS Steel Industries (HAVLOX)/Madhu Industries/ MULTIWIN/M/s Classic Engineers and Fabricators
2	Solar Lighting System	ECBC-2017	WIPRO/Anchor-Panasonic/ Philips/TATA BP Solar
3	CP brass Fittings/Fixtures	IS:8931	Jaquar, Kohlar, Marc (Premium Quality), Hindware

Note: -

For the items which are not covered in above preferred make list, the successful bidder has to take prior proposed make/ Manufacture's Approval from client and EPIL before procurement for such items and these item's specification should be as per BOQ technical specification of tender documents.

ANNEXURE I

PROJECT PLANNING

S. No.	Item of Work	No. of Days	M-1	M-2	M-3	M-4	M-5	M-6	M-7	M-8	M-9	M-10	M-11	M-12	M-13	M-14	M-15	M-16	M-17	M-18
	Construction of EMRS (Ph 1 & PH 2)	548.00																		
1	SCHOOL																			
	Earth Work, Foundation & Plinth Beams of school bldg	90.00																		
1.1																				
1.2	Ground Floor Slab, Starting of compound wall	90.00																		
1.3	Ist Floor Slab of School Bldg,Terrace Floor + Mumty Slab	90.00																		
	of School Bldg																			
1.4	Brick work GF to FF of school bldg,MEP, internal plastering,	210.00																		
	flooring, internal finishing																			
1.5	Brick work FF to Mumty all complete of school bldg,	210.00																		
	MEP, internal and external																			
	plastering, flooring.																			
1.6	Doors , Windows & Grill fitting	180.00																		
	work in all floors,	102.00																		\mid
1.7	Roofing and water proffing, finishing in all floors.	135.00																		

S. No.	Item of Work	No. of Days	M-1	M-2	M-3	M-4	M-5	M-6	M-7	M-8	M-9	M-10	M-11	M-12	M-13	M-14	M-15	M-16	M-17	M-1 8
	Road work and all miscellaneous works, Completion of boundry wall	90.00																		
2	Hostels For Boys																			
2.1	Earth Work, Foundation & Plinth Beams .	90.00																		
2.2	Ground Floor Slab, Starting of	90.00																		
2.2	compound wall	90.00																		
2.3	Ist Floor Slab of School Bldg,Terrace Floor + Mumty Slab	90.00																		
2.4	Brick work GF to FF of school bldg,MEP, internal plastering,	210.00																		
	flooring, internal finishing																			
2.5	Brick work FF to Mumty all complete of school bldg, MEP,internal and external	210.00																		
	plastering, flooring.																			
2.6	Doors , Windows & Grill fitting work in all floors,	180.00										1								
2.7	Roofing and water proffing, finishing in all floors.	135.00																		

S. No.	Item of Work	No. of Days	M-1	M-2	M-3	M-4	M-5	M-6	M-7	M-8	M-9	M-10	M-11	M-12	M-13	M-14	M-15	M-16	M-17	M-18
2.8	Road work and all miscellaneous works, Completion of boundry wall	90.00																		
																				<u> </u>
3	Hostels For Girls]]	I	<u> </u>	1]		1	<u> </u>]			
•							1	1	1			l	1	1						
	Earth Work, Foundation & Plinth	90.00																		
3.1	Beams .																			
3.2	Ground Floor Slab, Starting of compound wall	90.00																		
3.3	Ist Floor Slab of School	90.00																		
	Bldg,Terrace Floor + Mumty Slab																			
3.4	Brick work GF to FF of school	210.00																		
0.1	bldg,MEP, internal plastering,	210.00																		
	flooring, internal finishing																			
3.5	Brick work FF to Mumty all	210.00																		
5.5	complete of school bldg,	210.00																		
	MEP,internal and external plastering, flooring.																			
	plactoring, nooring.																			
3.6	Doors , Windows & Grill fitting work in all floors,	180.00																		
3.7	Roofing and water proffing,	125.00																		
3.1	finishing in all floors.	135.00																		

S. No.	Item of Work	No. of Days	M-1	M-2	M-3	M-4	M-5	M-6	M-7	M-8	M-9	M-10	M-11	M-12	M-13	M-14	M-15	M-16	M-17	M-1 8
	Road work and all miscellaneous works, Completion of boundry	90.00																		
	wall																			

	Dinning & Kitchen,
	Security Cabin, Entrance
•	Gate, ESS Building,
6	UnderGround tank &
	Pump House

	Earth Work, Foundation & Plinth Beams of dining and kitchen, security cabin,entrance gate,ESS building, UG water tank and pump house. All complete up to	120.00										
	PL.											
6.2	Ground Floor Slab of dining and kitchen, security cabin, ESS building and pump house. All					1						
	RCC work of UG water tank and entrance gate.	120.00										

S. No.	Item of Work	No. of Days	M-1	M-2	M-3	M-4	M-5	M-6	M-7	M-8	M-9	M-10	M-11	M-12	M-13	M-14	M-15	M-16	M-17	M-18
6.3	Brick work at GF, MEP, door, window and grill fitting,internal plastering, flooring , internal finishing of dining and kitchen, security cabin,,ESS building and pump house.	240.00																		
		240.00																		
6.4	External plaster, external finishing ,roofing and water proffing of dining and kitchen, security cabin, ESS building and																			
	pump house.	180.00																		
6.5	Fitting and fixing of entrance gate and all miscellaneous works																			
		120.00																		
7	Hostels For Boys Phase- II																			

7.1	Earth Work, Foundation & Plinth Beams .	90.00									
	Ground Floor Slab, Starting of compound wall	90.00									
7.3	Ist Floor Slab of School Bldg,Terrace Floor + Mumty Slab	90.00		1							
	•										

S. No.	Item of Work	No. of Days	M-1	M-2	M-3	M-4	M-5	M-6	M-7	M-8	M-9	M-10	M-11	M-12	M-13	M-14	M-15	M-16	M-17	M-18
7.4	Brick work GF to FF of school bldg,MEP, internal plastering, flooring, internal finishing	210.00											1							
7.5	Brick work FF to Mumty all complete of school bldg, MEP,internal and external plastering, flooring.	210.00																		
3.6	Doors , Windows & Grill fitting	180.00																		
	work in all floors,																			
3.7	Roofing and water proffing, finishing in all floors.	135.00																		
3.8	Road work and all miscellaneous	90.00																		
	works, Completion of boundry wall																			
8	Hostels For Girls Phase-II																			
	Earth Work, Foundation & Plinth	90.00																		
8.1	Beams .																			
0.1																				
8.2	Ground Floor Slab, Starting of compound wall	90.00																		
8.3	Ist Floor Slab of School Bldg,Terrace Floor + Mumty Slab	90.00																		

S. No.	Item of Work	No. of Days	M-1	M-2	M-3	M-4	M-5	M-6	M-7	M-8	M-9	M-10	M-11	M-12	M-13	M-14	M-15	M-16	M-17	M-18
8.4	Brick work GF to FF of school bldg,MEP, internal plastering, flooring, internal finishing	210.00																		
8.5	Brick work FF to Mumty all complete of school bldg,	210.00																		
	MEP,internal and external plastering, flooring.																			
8.6	Doors , Windows & Grill fitting work in all floors,	180.00																		
8.7	Roofing and water proffing, finishing in all floors.	135.00																		
8.8	Road work and all miscellaneous works, Completion of boundry	90.00																		
	wall																			

9	Septic Tank	100.00										
10	Compound Wall	210.00	I	-								
11	Road	150.00										
12	Site development - Site Levelling & Retaining wall	120.00										
13	Plumbing work & Sanitary Works	337.00										

S. No.	Item of Work	No. of Days	M-1	M-2	M-3	M-4	M-5	M-6	M-7	M-8	M-9	M-10	M-11	M-12	M-13	M-14	M-15	M-16	M-17	M-1 8
14	Fire fighting works	210.00																		
15	Electrical works (internal)	323.00																		
											ļ		ļ	ļ	L					
16	Electrical works (external)	225.00																		
Tentativ	e Monthwise Billing for above work:	30.00 Crs		1.5	1.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.5	1.5	1.5	1.5	1.0



ENGINEERING PROJECTS (INDIA) LIMITED

(A Govt. of India Enterprise)

INSTRUCTIONS TO TENDERERS AND

GENERAL CONDITIONS OF CONTRACT

DECEMBER, 2007

VOLUME-I

Issued to : M/s. _____



ENGINEERING PROJECTS (INDIA) LIMITED (A Govt. of India Enterprise)

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ENGINEERING PROJECTS (INDIA) LIMITED (A Govt. of India Enterprise)

INSTRUCTIONS TO TENDERERS

ENGINEERING PROJECTS (INDIA) LIMITED

(A Govt. of India Enterprise)

INSTRUCTIONS TO TENDERERS

1.0 MODE OF SUBMISSION

The Tender is to be submitted in two separate sealed covers marked as under :

ENVELOPE-1 :-

This ENVELOPE shall contain the following :

- i) Earnest Money Deposit as per clause 2.0 of 'Instructions to Tenderers' (ITT).
- ii) Letter of Undertaking for un-conditional acceptance of the tender conditions as per proforma given in ITT.
- iii) Pre-Qualification Documents and Credentials as per clause 19.0 of ITT.
- iv) Volume-I (ITT, General Conditions of Contract),
 - Volume-II (Notice Inviting Tender, Additional Conditions of Contract, Specifications, Drawings) and Corrigendum/ Addendum, if any, duly filled in, signed and stamped on each page by tenderer. Cutting or over-writing, if any, shall be signed and stamped by the person signing the Tender. All pro-forma forming part of Tender Documents shall be filled in, signed and stamped by the tenderer.
- v) Copy of power of attorney / partnership deed, duly attested by Notary Public authorizing the person who signs the Tender.
- vi) Any other information as required to be submitted along-with the Tender.

This envelope shall be marked as :

ENVELOPE-1 "**TECHNO-COMMERCIAL BID**" **FOR** (Name of work as mentioned in "Notice Inviting Tender")

NIT No. :	
DUE ON :	
FROM :	(Name of the Contractor)

ENVELOPE – 2 :-

This ENVELOPE shall contain only the Volume-III comprising of PRICE-BID.

This envelope shall be marked as :

ENVELOPE-2 : '**PRICE-BID**' **FOR** (Name of Work as mentioned in "Notice Inviting Tender")

NIT No.	:	
DUE ON	:	
FROM	:	(Name of the Contractor)

Both the envelopes / packets shall be individually sealed and kept in an outer envelope marked as :

TENDER FOR (Name of Work as mentioned in "Notice Inviting Tender")

NIT No. :	

- DUE ON : _____
- **FROM** : (Name of the Contractor)

The outer envelope shall be duly sealed and shall be delivered at place of submission of Tender by the date and time fixed for receipt of Tender as mentioned in "Notice Inviting Tender". The Tenders received after the date and time of Tender receipt shall not be considered and shall be returned to the tenderer unopened. EPI shall not be responsible for any postal or other delays, whatsoever and tenderer should take care to ensure the submission of Tender at place of receipt of Tender by due date and time fixed for Tender receipt. **All the envelopes shall be addressed to the** authority who has invited the Tender as mentioned in "Notice Inviting Tender".

- 1.1 First the Envelope-1 of the tenderer shall be opened. Tenderers who unconditionally accept the tender conditions, deposit the required Earnest Money and whose Techno-Commercial Bid along with PQ Documents is found suitable shall be considered for the opening of their Price Bid and Envelope-2 of such tenderers shall only be opened. The Tenders not accompanied by requisite Earnest Money and / or not conveying un-conditional acceptance of tender conditions or whose Techno-Commercial Bid and PQ Documents are not found suitable, shall be rejected and such tenderer shall not be allowed to attend Price Bid opening i.e. opening of Envelope-2.
- 1.2 Once the tenderer has given an unconditional acceptance to the tender conditions in its entirety, he is not permitted to put any remark(s) / condition(s) (except unconditional rebate on price, if any) in / along with the 'Price-Bid' / Tender.
- 1.3 In case the condition 1.2 mentioned above is found violated at any time after opening of Tender, the Tender shall be summarily rejected and EPI shall, without prejudice to any other right or remedy, be at liberty to forfeit the full said Earnest Money absolutely.

2.0 EARNEST MONEY DEPOSIT

Earnest Money Deposit of amount as mentioned in "NIT/ITT/Memorandum" to "Form of Tender" required to be submitted alongwith the Tender shall be in the form of Demand Draft payable at place as mentioned in "NIT/ITT" in favour of EPI Limited from any Nationalized / Scheduled Bank or in the form of Bank Guarantee from any Nationalized / Scheduled Bank in enclosed format. The EMD Bank Guarantee shall be valid for a minimum period of 150 (One Hundred Fifty) days from last day of submission of Tender. The EMD shall be governed by Clause 7.0 of General Conditions of Contract.

3.0 EPI reserves the right to reject any or all the Tenders in part or full without assigning any reason whatsoever thereof. EPI does not bind themselves to

accept the lowest Tender. EPI reserves the right to award the work to a single party or to split the work amongst two or more parties as deemed necessary without assigning any reason thereof. The Contractor is bound to accept the portion of work as offered by EPI after split up at the quoted / negotiated rates.

4.1 FOR ITEM RATE TENDERS

- 4.1.1 The tenderers should quote the rates for items tendered by them in figures as well as in words and the amounts in figures only. The amount for each item should be worked out and the requisite totals and page totals given.
- 4.1.2 All corrections/cuttings should be signed by the tenderer. Each page of the Tender should be signed by the tenderer. In the event of discrepancy between rate in figures and words the rate quoted in words shall be treated as correct. In case there is discrepancy between rate and amount worked out, the rate quoted shall be taken as correct and not the amount.
- 4.1.3 Price shall be entered against each item in Bill of Quantities where quantities or LS (lump-sump) has been mentioned. The cost of item against which the Contractor has failed to enter a rate or price shall be deemed to be covered by rates and prices of other items in the Bill of Quantities and no payment shall be made for the quantities executed for items against which rate has not been quoted by Contractor. No rate is to be quoted against items for which no quantity is given. However, the Contractor has to quote rate against "LS" items.

4.2 FOR PERCENTAGE RATE TENDERS

- 4.2.1. In case of Percentage Rate Tenders, tenderer shall fill up in the Schedule / Bill of Quantities, percentage Below/Above/Par (in figures as well as in words) to total estimated cost given in Schedule / Bill of Quantities, he will be willing to execute the work. The tenderer should quote a unique single percentage plus / minus over the total estimated amount given in Schedule / Bill of Quantities. In case more than one schedule is given, stipulating quoting of separate percentages (plus or minus) over the estimated amount of each schedule, the tenderer can quote separate percentages for each such schedule. Under no circumstances, tenderer is allowed to quote separate percentages for individual items, trades or group of items. In case tenderer quotes separate percentages for individual items, trades or group of items instead of to the total amount of schedule(s), the Tender shall be rejected and earnest money of the tenderer shall be forfeited in totality.
- 4.2.2 In case of Percentage Rate Tenders, the tenderer shall also work out the total amount of his offer after adding percentage (plus or minus) over the total schedule amount and the same should be written in figures as well as in words in such a way that no interpolation is possible.
- 4.2.3 In case of Percentage Rate Tenders, only percentage quoted shall be considered. Any tender containing item rates is liable to be rejected. Percentage quoted by the tenderer in Percentage Rate Tender shall be accurately filled in figures and words. All corrections/cuttings should be signed by the tenderer. Each page of the Tender should be signed by the tenderer. In the event of discrepancy between percentage rate in figures and words, the percentage rate

quoted in words shall be treated as correct. In case there is discrepancy between percentage rate and amount worked out the percentage rate quoted shall be taken as correct and not the amount. For any other discrepancy, the decision of Tender Scrutiny Committee of EPI shall be final & binding on the tenderer including rejection of Tender and forfeiture of EMD.

- 5.0 The Tenders shall be strictly as per the conditions of contract. Tenders with any additional condition(s)/modification(s) shall be rejected.
- 6.0 The witnesses to the Tender / Contract Agreement shall be other than the tenderer / tenderers competing for this work and must indicate full name, address, status/occupation with dated signatures.
- 7.0 The acceptance of Tender will rest with EPI. Tenders in which any of the prescribed conditions are not fulfilled or found incomplete in any respect are liable to be rejected.
- 8.0 Canvassing whether directly or indirectly in connection with Tenders is strictly prohibited and the Tenders submitted by the Contractors who resort to canvassing will be liable to rejection.
- 9.0 On acceptance of Tender, the name of the accredited representative(s) of the Contractor who would be responsible for taking instructions from Engineer-In-Charge or its authorised representative shall be intimated by the Contractor with in 07 days of issue date of telegram / letter / telex / fax of Intent by EPI.
- 10.0 The tenderer shall not be permitted to Tender for works if his near relative is posted as an Assistant Manager or any higher ranks in the concerned Regional Office of EPI. The Contractor 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 of the officers in EPI. Any breach of this condition by the tenderer would render him liable to the withdrawal of the work awarded to him and forfeiture of Earnest Money and Security Deposit. This may also debar the Contractor from tendering for future works under EPI.
- 11.0 No employee of EPI of the rank of Assistant Manager and above is allowed to work as a Contractor or as an employee of a Contractor having interest in EPI for a period of two years after his retirement/relief from the service of EPI, without the prior permission of EPI in writing. This contract is liable to be cancelled if either the Contractor or any of his employee is found at any time to be such a person who had not obtained the permission of EPI as aforesaid before submission of the Tender or engagement in the Contractor's service.
- 12.0 The time of completion of the entire work, as contained in contract shall be as mentioned in "Memorandum" to "Form of Tender", which shall be reckoned from the 10th day from issue of the Letter / Telex / Telegram / Fax of Intent by the EPI.
- 13.0 The Tender award, execution and completion of work shall be governed by Tender Documents consisting of (but not limited to) Letter of Intent / Letter of work Order, Bill of Quantities, Additional Conditions of Contract, General Conditions of Contract, Specifications, Drawings, etc. The tenderers shall be

deemed to have gone through the various conditions and clauses of the Tender and visited the Site and satisfied itself with Site conditions including sub-soil water conditions, topography of the land, drainage and accessibility etc. or any other condition which in the opinion of Contractor will affect his price / rates before quoting their rates. No claim whatsoever against the foregoing shall be entertained by EPI.

- 14.0 The Drawings given with the Tender Documents are TENDER DRAWINGS and are indicative only.
- 15.0 Transfer of bid documents purchased by one intending bidder to another is not permissible.
- 16.0 Tenders must be duly signed with date and sealed. An attested copy of power of attorney/affidavit/Board Resolution executed as under shall accompany the 'Tender Documents'.
 - a) In case of Sole Proprietorship, an affidavit of Sole Proprietorship and if the Tender is signed by any other person Power of Attorney by the Sole Proprietor in favour of signatory.
 - b) In case of Partnership firm, if Tender is not signed by all the partners, Power of Attorney in favour of the Partner/person signing the tender/documents by all the partners authorizing him to sign the tender/documents.
 - c) In case of Company, copy of the Board Resolution authorizing the signatory to sign on behalf of the Company.
- 17.0 Tenders with following discrepancies are liable for rejection:
 - a) Tenders with over-written or erased rates, percentages, amounts or rates, percentages not written in both figures and words.
 - b) Tender that is incomplete, ambiguous, and not accompanied by the documents asked for or submitted without EMD or with inadequate EMD.
 - c) Tender received after specified date/time whether due to postal or other delays.
 - d) Tender in respect of which canvassing in any form is resorted to by the tenderer whatsoever.
 - e) If the tenderer deliberately gives wrong information in his tender or resorts to unfair methods in creating circumstances for the acceptance of his tender, EPI reserves the right to reject such tender at any stage.
- 18.0 Submission of a tender by the tenderer implies that he has read the complete contract documents and has made himself aware of the scope, terms & conditions and specifications of the work to be done and of conditions at which stores, tools, plant, etc. will be issued to him by EPI (if any), local conditions and

political situations and other factors having bearing on the execution of the works. No claim of Contractor whatsoever, within the purview of this clause, shall be entertained at any stage of the project.

- 19.0 Tenderer shall submit the following documents along with their Tenders in the first envelope (Techno-Commercial Bid) :
 - a) List of works executed during the last 5 years indicating name of the Client, value, date of start and completion.
 - b) List of works under execution indicating name of the Client, Total Contract Value, Value of balance work in hand, date of start and completion.
 - c) Details of similar works executed.
 - d) Audited balance sheets and profit and loss accounts alongwith schedules for the last 3 years.
 - e) Copy of latest income-tax returns filed along with PAN.
 - f) Details of manpower available.
 - g) Details of equipments, tools and plant available.
 - h) Credentials and completion certificates.
 - i) Registration Certificate/Memorandum and Articles of Association/Partnership Deed/ Affidavit.
 - j) Copy of Provident Fund Number allotted by PF authorities.
 - k) Copy of letters of registration with various authorities like CPWD, State PWD, MES and Public Sector Undertakings, etc.
 - I) Latest Solvency certificate from Nationalised/Scheduled Bank.
 - m) Latest Sales Tax Registratin and Clearance Certificate.
 - n) Any other document as stipulated above and in "Tender Documents'
- 20. Purchase Preference may be granted to the Central Public Sector Enterprises as per the applicable guidelines in force in this regard issued by the Government of India.

LETTER OF UNDERTAKING

(TO BE ENCLOSED IN ENVELOPE-1 ALONGWITH EMD)

ENGINEERING PROJECTS (INDIA) LIMITED

(Address of submission as mentioned in "Notice Inviting Tender")

REF. : TENDER FOR (Name of Work as mentioned in "Notice Inviting Tender")

NIT No. : _____

Sir,

UNDERTAKING FOR ACCEPTANCE OF TENDER CONDITIONS

- The Tender Documents for the work as mentioned in "Memorandum" to "Form of Tender" have been issued to me / us by ENGINEERING PROJECTS (INDIA) LIMITED and I / We hereby unconditionally accept the tender conditions and Tender Documents in its entirety for the above work.
- 2. The contents of clause 1.2 and 1.3 of the Tender Documents (Instructions to Tenderers) have been noted wherein it is clarified that after unconditionally accepting the tender conditions in its entirety, it is not permissible to put any remark(s) / condition(s) (except unconditional rebate on price, if any) in the 'Price-Bid' enclosed in "Envelope-2" and the same has been followed in the present case. In case this provision of the Tender is found violated at any time after opening "Envelope-2", I / We agree that my/our tender shall be summarily rejected and EPI shall, without prejudice to any other right or remedy be at liberty to forfeit the full said Earnest Money absolutely.
- 3. The required Earnest Money for this work is enclosed herewith.

Yours faithfully,

(Signature of the Tenderer)

Seal of Tenderer

Dated :_____

FORM OF TENDER

To,

Engineering Projects (India) Limited (Address of submission as mentioned in "Notice Inviting Tender")

REF. : TENDER FOR (Name of Work as mentioned in "Notice Inviting Tender")

NIT No. : _____

- 1. I/We hereby tender for execution of work as mentioned in "Memorandum" to this "Form of Tender" as per Tender Documents within the time schedule of completion of work as per separately signed and accepted rates in the Bill of Quantities quoted by me / us for the whole work in accordance with the Notice Inviting Tender, Conditions of Contract, Specifications of materials and workmanship, Bill of Quantities Drawings, Time Schedule for completion of jobs, and other documents and papers, all as detailed in Tender Documents.
- 2. It is agreed that the time stipulated for jobs and completion of works in all respects and in different stages mentioned in the "Time Schedule for completion of jobs" and signed and accepted by me/us is the essence of the contract. I/We agree that in case of failure on my/our part to strictly observe the time of completion mentioned for jobs and the final completion of works in all respects according to the schedule set out in the said "Time Schedule for completion of jobs" and stipulations contained in the contract, the recovery shall be made from me/us as specified therein. In exceptional circumstances extension of time which shall always be in writing may, however be granted by EPI at its entire discretion for some items, and I/We agree that such extension of time will not be counted for the final completion of work as stipulated in the said "Time schedule of completion of jobs".
- 3. I/We agree to pay the Earnest Money, Security Deposit cum Performance Guarantee, Retention Money and accept the terms and conditions as laid down in the "Memorandum" to this "Form of Tender".
- 4. Should this Tender be accepted, I/We agree to abide by and fulfill all terms and conditions referred to above and as contained in Tender Documents elsewhere and in default thereof, allow EPI to forfeit and pay EPI, or its successors or its authorized nominees such sums of money as are stipulated in the Tender Documents.
- 5. I/We hereby pay the earnest money amount as mentioned in the "Memorandum" to this "Form of Tender" in favour of Engineering Projects (India) Limited payable at place as mentioned in the "NIT/ITT".

- 6. If I/we fail to commence the work within 10 days of the date of issue of Letter of Intent and / or I/We fail to sign the agreement as per Clause 84 of General Conditions of Contract and/or I/We fail to submit Security Deposit cum Performance Guarantee as per Clause 9.0 & 9.1 of General Conditions of Contract, I/We agree that EPI shall, without prejudice to any other right or remedy, be at liberty to cancel the Letter of Intent and to forfeit the said earnest money as specified above.
- 7. I/We are also enclosing herewith the Letter of Undertaking on the prescribed proforma as referred to in condition of NIT.

Date the	day of	
SIGNATURE OF TENDERER		
NAME (CAPITAL LETTERS) :		
OCCUPATION		
ADDRESS		

SEAL OF TENDERER

MEMORANDUM

(ENCLOSURE TO FORM OF TENDER)

REF. : TENDER FOR (Name of Work as mentioned in "Notice Inviting Tender")

NIT No. : _____

SI. No.	Description	CI. No.	Values / Description to be applicable for relevant clause(s)
i)	Name of work		
ii)	Owner/Client / Employer		
iii)	Type of Tender		
iv)	Earnest Money Deposit	NIT	Rs (Rupees only).
V)	Estimated Cost	NIT	Rs (Rupees only).
vi)	Time for completion of work	NIT	Total work to be completed in () in accordance with the time schedule of completion of work in the Tender Documents.
vii)	Mobilization Advance	8.0	% (Percent) of Contract Value.
viii)	Interest Rate on Mobilization Advance	8.0	Simple Interest Rate of%(percent only) per annum.
ix)	Number of Instalments for recovery of Mobilisation	8.0	
x)	Advance Schedule of Rates applicable	69.0	Civil Works : Sanitary Works : Electrical Works :
xi)	Validity of Tender	4.0	90 (Ninety) Days
xii)	Security Deposit cum Performance Guarantee	9.0	5.00% (Five Percent only) of Contract Value within 10 days from the date of issue of telegram / letter / telex / FAX of Intent of acceptance of Tender.

xiii)	Retention Money	10.0	5.00% (Five percent only) of the contract amount, which shall be deducted in the manner set out in this contract.
xiv)	Time allowed for starting the work	43.0	The date of start of contract shall be reckoned 10 days from the date of issue of telegram / letter / telex / FAX of Intent of acceptance of Tender.
xv)	Defect Liability Period	74.0	12 (Twelve) Months from the date of taking over of works.
xvi)	Arbitration	76	Arbitration shall be as per provisions of Clause no.76 of GCC. The Venue of Arbitration shall be
xvii)	Jurisdiction	76.3	Courts in

SIGNATURE OF TENDERER

NAME (CAPITAL LETTERS) :

OCCUPATION

ADDRESS

SEAL OF TENDERER



ENGINEERING PROJECTS (INDIA) LIMITED (A Govt. of India Enterprise)

GENERAL CONDITIONS OF CONTRACT <u>AND</u> <u>LABOUR SAFETY PROVISIONS, MODEL RULES</u> <u>CONTRACTOR'S LABOUR REGULATIONS</u> <u>& PRESCRIBED PROFORMAS</u>

GENERAL CONDITIONS OF CONTRACT

1.0 GENERAL

The Contract means the documents forming the Tender and acceptance thereof and the formal agreement executed between the competent authority on behalf of EPI and the Contractor, together with the documents referred to therein including these conditions, the Specifications, Designs, Drawings and Instructions issued from time to time by the Engineer-In-Charge and all these documents taken together, shall be deemed to form one contract and shall be complementary to one another.

- 1.1 In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them.
- 1.2 Engineering Projects (India) Limited, hereinafter called 'EPI' proposes to get the works executed as mentioned in the Contract on behalf of Owner/ Client.
- 1.3 The work will be executed as per Drawings "GOOD FOR CONSTRUCTION" to be released by EPI unless otherwise specified elsewhere in the Tender Documents.

1.4 OTHER DEFINITIONS

- a) ENGINEER-IN-CHARGE means the Regional Office In-Charge of EPI himself or an engineer of EPI nominated by the Regional Office In-Charge for supervision and/or project management of the project from time to time.
- b) WORKS OR WORK The expression works or work shall unless there be something either in the subject or context repugnant to such construction, be construed and taken to mean the works by or by virtue of the contract contracted to be executed whether temporary or permanent, and whether original, altered, substituted or additional.
- c) CONTRACTOR The Contractor shall mean the individual, firm or company, whether incorporated or not, undertaking the works and shall include the legal personal representative of such individual or the persons composing such firm or company, or the successors of such firm or company and the permitted assignees of such individual, firm or company.
- d) DRAWINGS mean the Drawings referred to in the Bill of Quantities, specifications and any modifications of such Drawings or such other Drawings as may from time to time be approved or furnished by EPI.
- e) SITE means the lands and other places on, under, in or through which the works are to be executed or carried out and any other lands or places provided by EPI or used for the purpose of the agreement.
- f) APPROVAL means approved in writing including subsequent written confirmation of previous verbal approval.

- g) WRITING means any manuscript typed, written or printed statement under or over signature and/or seal as the case may be.
- h) MONTH means English Calendar month. 'Day' means a Calendar day of 24 Hrs each.
- i) CONTRACT VALUE means the sum for which the Tender is accepted as per the Agreement/ Letter of Acceptance/ Letter of Intent.
- j) LANGUAGE: All documents and correspondence in respect of this contract shall be in English Language. In case of any discrepancy between the English version and the Hindi version of these documents, the provisions contained in the English version shall be applicable.
- k) BILL OF QUANTITIES or SCHEDULE OF QUANTITIES means the priced and completed Bill of Quantities or Schedule of Quantities forming part of the Tender.
- I) OWNER/ CLIENT / EMPLOYER means the Government, Organization, Authority, Company, Ministry, Department, Society, Cooperative etc. who has awarded the work/ project to EPI and/ or appointed EPI as Implementing / Executing Agency/ Project Manager and/ or for whom EPI is acting as an agent and on whose behalf EPI is entering into the contract and getting the work executed.
- m) IMPLEMENTING/ EXECUTING AGENCY means EPI
- n) TENDER means the Contractor's priced offer to EPI for the execution and completion of the work and the remedying of any defects therein in accordance with the provisions of the Contract, as accepted by the Letter of Intent or Award letter. The word TENDER is synonymous with Bid and the word TENDER DOCUMENTS with "Bidding Documents" or "offer documents".
- The headings in the clauses/ conditions of Tender Documents are for convenience only and shall not be used for interpretation of the clause/ condition.
- p) Words imparting the singular meaning only also include the plurals and vice versa where the context requires. Words imparting persons or parties shall include firms and corporations and organizations having legal capacities.
- q) APPROVED INSURANCE COMPANY means any Insurance Company registered with 'Insurance Regulatory & Development Authority' (IRDA) of India and meeting insurance needs of the projects of EPI.

2.0 SITE VISIT AND COLLECTING LOCAL INFORMATION

Before tendering, the tenderer is advised to visit the Site, its surroundings to assess and satisfy themselves about the local conditions such as the working and other constraints at Site, approach roads to the Site, availability of water & power supply, applicability of taxes, duties and levies etc., nature of ground, soil and sub-soil condition, underground water table level, accommodations they may require etc., river regime, river water levels, other details of river, streams & any other relevant information required by them to execute the complete scope of work. The tenderer may obtain all necessary information as to risks, weather conditions, contingencies & other circumstances (insurgencies etc.) which may influence or affect their tender prices. Tenderer shall be deemed to have considered Site conditions whether he has inspected it or not and to have satisfied himself in all respects before quoting his rates and no claim or extra charges whatsoever in this regard shall be entertained / payable by EPI at a later date.

2.1 ACCESS BY ROAD

Contractor, if necessary, shall build temporary access roads to the actual Site of construction for the works at his own cost to make the Site accessible. The Contractor shall maintain the same in motorable condition at all times as directed by Engineer-In-Charge at his own cost. The Contractor shall be required to permit the use of any roads so constructed by him for vehicles of EPI or any other agencies/ Contractors who may be engaged on the project Site, free of cost.

Non-availability of access roads or approach to Site, for the use of the Contractor shall in no case condone any delay in the execution of work nor be the cause for any claim for compensation.

2.2 HANDING OVER & CLEARING OF SITE

- 2.2.1 The Contractor should note that area for construction may be made available in phases as per availability and in conjunction with pace of actual progress of work at Site. The work may be required to be carried out in constrained situations. The work is to be carried out in such a way that the traffic, people movement, if any, is kept operative and nothing extra shall be payable to the Contractor due to this phasing / sequencing of the work. The Contractor is required to arrange the resources to complete the entire project within total stipulated time. Traffic diversion, if required, is to be done and maintained as per specification by the Contractor at his own cost and the Contractor shall not be entitled for any extra payment, whatsoever, in this regard.
- 2.2.2 Efforts will be made by EPI to handover the Site to the Contractor free of encumbrances. However, in case of any delay in handing over of the Site to the Contractor, EPI shall only consider suitable extension of time for the execution of the work. It should be clearly understood that EPI shall not consider any revision in contract price or any other compensation whatsoever viz. towards idleness of Contractor's labour, equipment etc.
- 2.2.3 The Contractor shall be responsible for removal of all over-ground and underground structures (permanent, semi-permanent and temporary) and constructions from the Site. The cost to be incurred in this regard shall be deemed to be included in the quoted rates of Bill of Quantities items and Contractor shall not be entitled for any extra payment whatsoever, in this regard. Old structures on the proposed Site, if required, shall be demolished by the Contractor properly. The useful material obtained from demolition of structures &

services shall be the property of the Owner/EPI and these materials shall be stacked in workmanship like manner at the place specified by the Engineer- in-charge.

- 2.2.4 If required, the Contractor has to do site clearance, enabling work, barricading, diversion of Roads, shifting/ realignment of existing utility services, drains, nallahs etc. at his own cost as per direction of Engineer-In-Charge and the Contractor shall not be entitled for any extra payment whatsoever in this regard.
- 2.2.5 Necessary arrangements including its maintenance are to be made by the Contractor for temporary diversion of flow of existing drain and road, as the case may be. The existing drain, road would be demolished, wherever required, with the progress of work under the scope of proposed project. The existing Road and Drain, which are not in the alignment of the said project but are affected and/ or need to be demolished during execution for smooth progress of the project, shall be restored to its original status and condition (including black topping) by the Contractor at his own. The cost to be incurred by Contractor in these regards shall be deemed to be included in the quoted rates of the Bill of Quantities items and Contractor shall not be entitled for any extra payment whatsoever, in these regards.
- 2.2.6 The Contractor shall be responsible to co-ordinate with service provider/ concerned authorities for cutting of trees, shifting of utilities and removal of encroachments etc. and making the Site unhindered for completion of work. This shall include initial and frequent follow up meetings/ actions/ discussions with each involved service provider/ concerned authorities. The Contractor shall not be entitled for any additional compensation for delay in cutting of trees, shifting of utilities and removal of encroachments by the service provider/ concerned authorities.
- 2.2.7 The information about the public utilities (whether over ground or underground) like electrical/ telephone/ water supply lines, OFC Cables, sewer lines, open drains etc. is the responsibility of Contractor who has to ascertain the utilities that are to be affected by the works through the site investigation and collection of information from the concerned utility Owners.
- 2.2.8 The Contractor shall be responsible to obtain necessary approval from the respective authorities for shifting/ re-alignment of existing public utilities. EPI shall only provide necessary letters required for liaisoning by the Contractor in obtaining the approval from the concerned authorities.
- 2.2.9 Any services affected by the works must be temporarily supported by the Contractor who must also take all measures reasonably required by the various bodies to protect their services and property during the progress of works. It shall be deemed to be the part of the contract and no extra payment shall be made to the Contractor for the same. Shifting/ re-alignment of public utilities should be done without disturbing the existing one. New service lines should be laid and connected before dismantling the existing one.
- 2.2.10 Shifting/ re-alignment of existing public utilities shall be done by the Contractor as per technical requirement of respective bodies or as per direction of Engineer-In-Charge. Shifting/ re-alignment of public utilities includes all materials, labours,

tools and plants and any other expenses whatsoever for the same. The cost to be incurred in this regard shall be deemed to be included in his quoted rates of BOQ items and the Contractor shall not be entitled for any extra payment, whatsoever, in this regard. In case any of these services are shifted by the State Govt/ local authorities themselves for which deposit as per their estimates is to be made to them, the Contractor shall deposit the same and the Contractor shall be paid only at the rates quoted by him in BOQ for quantity specified in the BOQ, if such items are included in the BOQ irrespective of amount paid by him to the State Govt./ local authorities for execution of these works. In case such provision is not made in the BOQ or the quantity exceeds those specified in the BOQ, the same is deemed to be included in the rates quoted by him for other items in BOQ and nothing extra shall be payable to Contractor on this account.

3.0 SCOPE OF WORK

- 3.1 The scope of work covered in this Tender shall be as per the Bill of Quantities, Specifications, Drawings, Instructions, Orders issued to the Contractor from time to time during the pendency of work. The Drawings for this work, which may be referred for tendering, provide general idea only about the work to be performed under the scope of this contract. These may not be the final drawings and may not indicate the full range of the work under the scope of this contract. The work will be executed according to the Drawings to be released as "GOOD FOR CONSTRUCTION" from time to time by the Engineer-In-Charge of EPI and according to any additions/ modifications/ alterations/deletions made from time to time, as required by any other drawings that would be issued to the Contractor progressively during execution of work. It shall be the responsibility of the Contractor to incorporate the changes that may be in the scope of work, envisaged at the time of tendering and as actually required to be executed.
- 3.2 The quantities of various items as entered in the "BILL OF QUANTITIES" are indicative only and may vary depending upon the actual requirement. The Contractor shall be bound to carry out and complete the stipulated work irrespective of the variation in individual items specified in the Bill of Quantities. The variation of quantities will be governed as per clause No.69 of GCC.

4.0 VALIDITY OF TENDER

The Tender for the works shall remain open for acceptance for a period of ninety days from the date of opening of Price Bid of Tenders. The earnest money will be forfeited without any prejudice to any right or remedy, in case the Contractor withdraws his Tender during the validity period or in case he changes his offer to his benefits, which are not acceptable to EPI. The validity period may be extended on mutual consent.

5.0 ACCEPTANCE OF TENDER

EPI reserves to itself the authority to reject any or all the Tenders received without assigning any reason. The acceptance of a Tender shall be effective w.e.f. the date on which the telegram/ letter of intent or acceptance of the Tender is put in the communication by EPI. EPI also reserves the right to split the work

among two or more parties at lowest negotiated rate without assigning any reason thereof. The Contractor is bound to accept the portion of work as offered by EPI after split up at the quoted/ negotiated rates.

6.0 SET OF TENDER DOCUMENTS:

The following documents will complete a set of Tender Documents.

- A) VOLUME I :
 - a) Instructions to tenderers
 - b) General Conditions of Contract
- B) VOLUME II :
 - a) Notice Inviting Tenders
 - b) Additional Conditions of Contract
 - c) Technical Specifications (General, Additional & Technical specifications)
 - d) Tender Drawings
- C) VOLUME III :

a) Schedule of Rates/ Bills of quantities (Price-Bid)

7.0 EARNEST MONEY DEPOSIT

Earnest Money Deposit (EMD) of amount as mentioned in "Memorandum" to "Form of Tender" required to be submitted along with the Tender shall be in the form of Demand Draft payable at place as mentioned in "Notice Inviting Tender"/ "Instructions to Tenderers" in favour of 'Engineering Projects (India) Limited' from any Nationalised bank / Scheduled Bank or in the form of Bank Guarantee from any Nationalised bank / Scheduled Bank as per the enclosed format. The EMD shall be valid for minimum period of 150 days (One hundred fifty Days) from last day of submission of Tender.

- 7.1 EMD shall accompany the offer and placed in the sealed envelope cover of the offer as detailed in Instructions to Tenderer. Any tender not accompanied with the requisite Earnest Money Deposit alongwith 'Letter of Undertaking' shall be rejected and such tenderer(s) will not be allowed to attend the opening of bids.
- 7.2 The EMD of all unsuccessful tenderers (i.e. except evaluated lowest tenderer) shall be returned within Seven (7) days of the opening of price bids by EPI. Subject to clause 7.6 herein below, EMD of successful tenderer shall be refunded after submission of Security Deposit cum Performance Guarantee by him.
- 7.3 Once the tenderer has given an unconditional acceptance to the tender conditions in its entirety, he is not permitted to put any remark(s)/conditions(s) (except unconditional rebate on price, if any) in/ along-with the Tender.
- 7.4 In case the condition 7.3 mentioned above is found violated at any time after opening of Tender, the Tender shall be summarily rejected and EPI shall, without

prejudice to any other right or remedy, be at liberty to forfeit the full said Earnest Money absolutely.

- 7.5 No interest will be payable by EPI on the said amount covered under EMD/Other security documents.
- 7.6 EMD of successful tenderer, if deposited in the form of Demand Draft, shall be treated as part of Retention Money.
- 7.7 At any time after the due date of the Tender, if any tenderer alters /modifies/withdraws his tender within the validity period (or the extended validity period) of his tender or fails to furnish the "Security Deposit cum Performance Guarantee" or the "Additional Performance Guarantee" or fails to execute the "Contract Agreement" within the prescribed time period after the placement of LOI on him, EPI without prejudice to any other rights or remedies shall be at liberty to forfeit the Earnest Money deposited by the tenderer. In the event of retender, such tenderer shall not be allowed to submit tender

8.0 MOBILIZATION ADVANCE

- 8.1 Mobilization advance up to maximum of amount as mentioned in the "Memorandum" to the "Form of Tender" shall be paid to the Contractor on submission of non-revocable and unconditional Bank Guarantee of an equivalent amount in case of interest free Mobilization Advance or for an amount equal to 110% of the Mobilization Advance in case of interest bearing Mobilization Advance, from a Nationalized Bank / Scheduled Bank as per the enclosed Performa subject to conditions given hereunder. The Mobilization Advance shall be at the Interest Rate as mentioned in the "Memorandum" to the "Form of Tender". This advance shall be paid in three installments as follows:
 - i) First Installment of fifty percent of total mobilization advance shall be paid after fulfillment of the following conditions:
 - a) Signing of the agreement.
 - b) Submission of Security Deposit cum Performance Guarantee as per Clause No. 9.
 - ii) Second installment of twenty five percent of total mobilization advance will be paid after the setting up of site office and providing facilities to EPI as per contract, and completion of enabling works required for taking up the construction. These include construction of store, labour hutments, etc.
 - iii) The balance twenty five percent of total mobilization advance shall be paid on mobilization of manpower, plant & equipment etc. to the satisfaction of Engineer-In-Charge of EPI.
- 8.2 The Advance shall be recovered on monthly installment basis. The installments shall commence when 20% of the scheduled contract period has elapsed and fully recovered when 80% of the scheduled contract period is over, both from

date of start. (The month of start & completion of recovery of mobilization advance to be rounded off to nearest full month).

- 8.3 Part 'Bank Guarantees' (BGs) against mobilization advance shall be furnished in as many numbers as the number of recovery installments as given in "Memorandum" to the "Form of Tender" and should be equivalent to the amount of each recovery installment. At any point of time, if the Contractor's payable amount on account of work done is not available with EPI or the amount payable is less than the recovery installment, recovery of such advance shall be effected by encashing the BG of equivalent recovery amount. The decision of EPI in this regard shall be final and binding on the Contractor. The validity period for the part BGs shall be till three months after the end of the month in which instalment is due to be recovered with further three months claim period.
- 8.4 In case recovery of Mobilization Advance is delayed, interest shall be charged @12% (Twelve percent) per annum on delayed recoveries due to late submission of bills by the Contractor or due to delayed encashment of Bank Guarantee, as stated above or due to any other reasons whatsoever.
- 8.5 Contractor is required to furnish the Utilization Certificate for each installment of mobilization advance to the satisfaction of Engineer-In-Charge. Subsequent installments of mobilization advance shall be released only after getting satisfactory utilisation certificate from the Contractor for the earlier released installment.
- 8.6 Notwithstanding what is contained in aforesaid clauses, no mobilization advance whatsoever shall be payable, if payment of mobilization advance is not mentioned in the "Memorandum" to the "Form of Tender".

9.0 SECURITY DEPOSIT CUM PERFORMANCE GUARANTEE

"Within 10 (ten) days from the date of issue of letter of Intent or within such extended time as may be granted by EPI in writing, the Contractor shall submit to EPI a Security Deposit cum Performance Bank Guarantee in the form appended, from any Nationalised bank / Scheduled Bank equivalent to 5% (five percent only) of the Contract Value for the due and proper execution of the contract. This bank guarantee shall remain valid up to 90 (ninety) days after the end of defects liability period.

In case the Contractor fails to submit the Security Deposit cum Performance Guarantee of the requisite amount within the stipulated period or extended period, letter of intent will stand withdrawn and EMD of Contractor shall be forfeited.

9.1 ADDITIONAL PERFORMANCE GUARANTEE FOR EXISTING CONTRACTORS

In case bidder is a working Contractor of EPI at the time of issuance of Letter of Intent (LOI) for the work, the bidder has to furnish an additional Performance Guarantee of 1% (One Percent) of the Contract Value of the work, in case working capacity of the bidder is less than the aggregate of balance work-load of all the works of the bidder with EPI as on date of placement of LOI for this work. The balance workload shall also include the value of work awarded but not yet started and finally approved value of this work. This additional Performance Guarantee shall be in addition to the Security Deposit cum Performance Guarantee of the works to be furnished by the bidder as specified in the clause no. 9 of General Conditions of Contract. Further, no relaxation in Security Deposit cum Performance Guarantee as in clause no. 9 of General Conditions of Contract shall be made in case working capacity works-out to be more than the balance value of works as mentioned above. The working capacity of the Contractor shall be calculated as under:

WORKING CAPACITY = 2.5 X (Average Turnover of the party as per latest three audited Balance Sheets).

NOTE: The decision of amount of additional Performance Guarantee as above shall be taken by EPI and shall be final & binding to the Contractor.

In case the Contractor fails to submit the additional performance guarantee of the requisite amount within 10 days from the date of issue of letter of Intent or within such extended time as may be granted by EPI in writing, the letter of intent will stand withdrawn and EMD of the Contractor shall be forfeited.

9.2 ABNORMALLY HIGH AND LOW RATED ITEMS

For item rate tenders if, the rates quoted by the lowest bidder for certain items of the Bill of Quantities of the Tender are found to be abnormally high or low in comparison to the Market Rate analysis of the item done by EPI and/or in comparison to EPI's method of working out market rate justification for the items, the same shall be governed as under: -

For Abnormally High Rated items (AHR), the progressive payment shall be 80% (Eighty percent) of the payment due to the Contractor against execution of the AHR items. The balance withheld 20% (twenty percent) payment shall be released after 80% of total value of the original contract is completed in financial terms in order to ensure that the Abnormally Low Rated (ALR) items identified at the time of Award of work have been executed as per requirement of project and as per terms of Contract. Further, deviation limit for AHR items shall be nil on plus side and 100% on minus side. The provision of deviation limit of clause 69.1(v) shall not apply to AHR items. In case of deviation of quantities given in schedule of quantities for AHR items on plus side, the same shall be governed by clause 69.2. The decision of Engineer-In-Charge of EPI in this regard shall be final and binding on the Contractor.

The provision of para 9.2 shall not be applicable on tenders invited on Percentage Rate/lump Sum basis.

The decision of EPI on identification/marking of AHR and ALR items is final and binding on the Contractor. In case the Contractor does not agree to the identified AHR and ALR items, at the time of award of works, the EMD/Security Deposit cum Performance Guarantee of the Contractor shall be forfeited and decision of EPI in this regard shall be final & binding on the Contractor.

10.0 RETENTION MONEY

The Retention Money shall be deducted from each running bill of the Contractor at 5% (five percent only) of the gross value of the Running Account bill. The Earnest Money Deposited by the tenderer in the form of Demand Draft will be treated as part of the Retention Money. The Retention Money shall be refunded to the Contractor after expiry of defects liability period (referred to in Clause No. 74) or on payment of the amount of the final bill whichever is later. If the amount of Retention Money deduction in cash is more than Rs.10.00 lakhs (Rupees Ten lakhs only), the excess amount can be refunded to Contractor against submission of Bank Guarantee of equivalent amount from a Nationalised bank / Scheduled Bank in the prescribed proforma of Performance Guarantee of EPI.

11.0 MOBILIZATION OF MEN, MATERIALS AND MACHINERY:

- 11.1 All expenses towards mobilization at Site and de-mobilization including bringing in equipment, work force, materials, dismantling the equipments, clearing the Site etc. shall be deemed to be included in prices quoted and no separate payment on account of such expenses shall be entertained.
- 11.2 It shall be entirely the Contractor's responsibility to provide, operate and maintain all necessary construction equipments, scaffoldings and safety gadget, lifting tackles, tools and appliances to perform the work in a workman like and efficient manner and complete all jobs as per the specifications and within the schedule time of completion of work. Further, Contractor shall also be responsible for obtaining temporary electric and water connection for all purposes. The Contractor shall also make standby arrangement for water & electricity to ensure un-interrupted supply.
- 11.3 It shall be the responsibility of the Contractor to obtain the approval for any revision and/ or modification desired by him from EPI before implementation. Also such revisions and/or modifications if accepted / approved by EPI shall be carried at no extra cost to EPI.
- 11.4 The procurement and supply in sequence and at the appropriate time of all materials and consumable shall be entirely the Contractor's responsibility and his rates for execution of work shall be inclusive of supply of all these items.

- 11.5 It is mandatory for the Contractor to provide safety equipments and gadgets to its all workers, supervisory and Technical staff engaged in the execution of the work while working. The minimum requirement (but not limited to) shall be gumboots, safety helmets, Rubber hand gloves, facemasks, safety nets, belts, goggles etc. as per work requirements. Sufficient nos. of these equipments and gadgets shall also be provided to EPI by the Contractor at his own cost for use of EPI Officials and/ or workforce while working/ supervision at Site. No staff/ worker shall be allowed to enter the Site without these equipments/ gadgets. The cost of the above equipments/ gadgets are deemed to be included in the rates quoted by the Contractor for the items & works as per Bill of Quantities and Contractor shall not be entitled for any extra cost in these regard. The above norm is to be strictly complied with at Site. In case the Contractor is found to be deficient in providing Safety Equipments/ Gadgets in the opinion of Engineer-In-Charge, the Engineer-In-Charge at his option can procure the same at the risk & cost of Contractor and provide the same for the use of worksite and shall make the recoveries from the bills of the Contractor for the same. The decision of the Engineer-In-Charge shall be final and binding on Contractor in this regard.
- 11.6 All Designs, Drawings, Bill of Quantities, etc. (except Bar Bending Schedule, Shop & Fabrication Drawings) for all works shall be supplied to the Contractor for all buildings services and development works by EPI in phased manner as the works progress. However it shall be the duty and responsibility of the Contractor to bring to the notice of EPI in writing as to any variation, discrepancy or any other changes required and to obtain revised drawings and designs and / or approval of EPI in writing for the same.
- 11.7 One copy of contract documents including Drawings furnished to the Contractor shall be kept at the Site and the same shall at all reasonable times be available for inspection.
- 11.8 All materials, construction plants and equipments etc. once brought by the Contractor within the project area, will not be allowed to be removed from the premises without the written permission of EPI. Similarly all enabling works built by the Contractor for the main construction undertaken by him, shall not be dismantled and removed without the written authority of EPI.
- 11.9 Contractor shall have to prepare the Bar Bending Schedule, Shop and Fabrication Drawings free of cost, if required for any of the items of work. Five copies of these Drawings each including for revision will be submitted to EPI for approval. Before executing the item, Bar Bending Schedule, Shop & Fabrication Drawings should be got approved from EPI.

12.0 INCOME TAX DEDUCTION

Income tax deductions shall be made from all payments made to the Contractor including advances against work done, in accordance with the Income Tax act prevailing from time to time.

13.0 TAXES AND DUTIES

- 13.1 The Contractor shall be responsible for the payment, wherever payable, at his own cost of all taxes such as excise duty, custom duty, sales tax, including the purchase tax, consignment tax, work contract tax, service tax, VAT or any other similar tax in the state concerned, turnover tax, toll tax, octroi charges, royalty, cess, levy and other tax (es) or duty (ies) which may be specified by local/ state/ central government from time to time on all materials, articles which may be used for this work. The rates quoted by him in the Tender in Bill of Quantities shall be inclusive of all such taxes, duties, etc. The imposition of any new and/ or increase in the aforesaid taxes, duties, levies (including fresh imposition of Work Contract Tax, Turnover Tax, Sales Tax on Work Contract, VAT or any other similar Tax) etc. during the currency of the contract shall be borne by Contractor and shall not be paid or reimbursed to the Contractor by EPI. In the event of nonpayment/default in payment of any octroi, royalty, cess, turnover tax, sales tax, including the purchase tax, consignment tax, work contract tax, VAT, Service Tax or any other similar tax in the state concerned, customs, excise or any other levy/tax including labour dues etc. by Contractor, EPI reserves the right to withhold the dues/ payments of Contractor and make payment to local/state/ Central Government authorities or to labourers as may be applicable. The Contractor should submit along with the Tender Registration Certificates with Sales Tax on works contract authority etc. other wise appropriate recovery shall be made from his bills.
- 13.2 The rate quoted by the Contractor shall be deemed to be inclusive of all Taxes and duties as mentioned in clause no.13.1 given above or any other tax as applicable and the same shall not be reimbursed by EPI. Tax deductions at source shall be made as per laws prevalent in the State.
- 13.3 The stamp duty and registration charges, if any, on the contract agreement levied by the Government or any other statutory body, shall be paid by the Contractor.
- 13.4 It will be incumbent upon the Contractor to obtain a registration certificate as a dealer under the Local Sales Tax Act and the Central Sales Tax Act, Service Tax, etc. and necessary evidence to this effect shall be furnished by the Contractor to EPI. Sales Tax on the transactions between the Contractor and his Sub-Contractor/Vendors etc. shall be borne by the Contractor. The Contractor shall be responsible for any taxes that may be levied hereunder on the transaction between Contractor and EPI.
- 13.5 The bidder shall quote his rates inclusive of Turnover Tax/ Sales Tax on Works Contract payable to State Govt. along-with other taxes, duties, levies etc. in conjunction with other terms and conditions. In case, the Turnover Tax/ Sales Tax on Works Contract on execution of works is waived off by the State Govt. at later stage for this project, the equivalent amount from the date of waiver of such tax (as per prevailing rate as on the date of waiver of Turnover Tax/ Sales Tax on Works Contract) shall be deducted from the amount payable to the Contractor from subsequent RA Bills.

13.6 VALUE ADDED TAX (VAT)

The consideration agreed for the execution of said contract shall include the taxes, duties, cess, etc. such as excise duty, service tax, VAT, which is leviable or may be levied in future under any State Law or the Central Law on execution of said contract, such taxes shall be borne by the Contractor and shall not be reimbursed by EPI. Further, if due to any variance in such tax, duties, cess etc. there is any increase in the taxes, the same shall also be borne by the Contractor. Where under any of the State or the Central Law, there is requirement of deduction of tax at source, the same shall be deducted from the amount paid or payable to the Contractor pursuant to this contract and shall be deposited to the Government authorities by EPI. EPI shall issue the documents/forms/ certificate as prescribed under the relevant law, in respect of the amount so deducted from the amount paid or payable to the Contractor. EPI shall have full rights to withhold the amount payable to the Contractor in pursuant to this contract, if Contractor does not fulfill his obligation under any State or Central Law relating to execution of said contract, in case the amount has already been paid by EPI, EPI has the right to recover such payments from the Contractor.

14.0 ROYALTY ON MATERIALS:

The Contractor shall deposit royalty and obtain necessary permit for supply of bajri, stone, kankar, sand, etc. from the local authorities and quoted rates shall be inclusive of royalty.

15.0 RATES TO BE FIRM

- 15.1 The rates quoted by the tenderer shall be firm and fixed for the entire period of completion and till handing over of the work. No revision to rates or any escalation shall be allowed on account of any increase in prices of materials, labour, POL and Overheads etc or any other statutory increase during the entire contract period or extended contract period.
- 15.2 The Contractor shall be deemed to have inspected the Site, its surrounding and acquainted itself with the nature of the ground, accessibility of the Site and full extent and nature of all operations necessary for the full and proper execution of the contract, space for storage of materials, construction plant, temporary works, restrictions of working time, restrictions on the plying of heavy vehicles in area, supply and use of labour, materials, plant, equipment and laws, rules and regulations, if any, imposed by the local authorities.
- 15.3 The rates and prices to be tendered in the Bill of Quantities are for completed and finished items of works complete in all respects. It will be deemed to include all construction plant, labour, supervision, materials, transport, all temporary works, erection, maintenance, Contractor's profit and establishment/ overheads, together with preparation of designs & drawings pertaining to casting yard, shop drawing, fabrication drawing (if required), staging form work, stacking yard, etc. all general risk, taxes, royalty, duties, cess, octroi and other levies, insurance,

liabilities and obligations set out or implied in the Tender Documents and contract.

- 15.4 Unless otherwise specified in the Bill of Quantities (BOQ), the Contractor has to make his own arrangement for dewatering/ bailing out of water, effluent including strutting, shoring etc at every stage of work wherever required (including Tunnel work) including working under foul condition as per direction of Engineer-In-Charge at his own cost and the Contractor shall not be entitled for any extra payment, whatsoever, in this regard.
- 15.5 If required to make work site suitable for execution, Contractor shall have to clear jungle including of rank vegetation, grass, trees etc., clear & clean existing drains/ canals (including strutting, shoring and packing cavities) and dispose them out of the Site up-to any lead and lift as per direction of Engineer-In-Charge. The Contractor should inspect the Site of work from this point of view. Unless otherwise specified in the Bill of Quantities, the cost to be incurred in this regard shall be deemed to be included in his quoted rates of BOQ items and the Contractor shall not be entitled for any extra payment in this regard.
- 15.6 If any temporary/ permanent structure is encountered or safety of such structure in the vicinity is endangered due to execution of the project, the Contractor has to protect the structures by any means as per direction of Engineer - in – Charge. If any damage caused to any temporary or permanent structure(s) in the vicinity is caused due to execution of the project, the Contractor has to make good the same by any means as per direction of Engineer - in – Charge. The Contractor should inspect the Site of work from this point of view. The cost to be incurred in this regard shall be deemed to be included in his quoted rates of BOQ items and the Contractor shall not be entitled for any extra payment in this regard.

16.0 ESCALATION / PRICE VARIATION

No claim on account of any Price Variation / Escalation on whatsoever ground shall be entertained at any stage of works. All rates as per Bill of Quantities (BOQ)/Price-Bid quoted by Contractor shall be firm and fixed for entire contract period as well as extended period for completion of the works. No escalation/price variation clause shall be applicable on this contract.

17.0 INSURANCE OF WORKS ETC.

Contractor is required to take Contractor's All Risk Policy or Erection All Risk Policy (as the case may be) including Marine Insurance from an Approved Insurance Company in the joint name with EPI and bear all costs towards the same for the full period of execution of works including the defect liability period for the full amount of contract against all loss or damage from whatever cause arising for which he is responsible under the terms of the contract and in such manner that EPI and the Contractor are covered during the period of construction of works and/or also covered during the period of defect liability for the loss or damage as under:

a. The work and the temporary works to the full value of such works.

b. The materials, construction plant, centering, shuttering and scaffolding materials and other things brought to the Site for their full value. Whenever required by EPI, the Contractor shall produce the policy or the policies of insurance and the receipts for payment of the current premiums.

18.0 INSURANCE UNDER WORKMEN'S COMPENSATION ACT

Contractor is required to take insurance cover as per requirement of the Workmen's Compensation Act, 1923 amended from time to time from an Approved Insurance Company and pay premium charges thereof. Wherever required by EPI the Contractor shall produce the policy or the policies of Insurance and the receipt of payment of the current premiums.

19.0 THIRD PARTY INSURANCE

Contractor is required to take third party insurance cover for an amount of 5% (five percent) of Contract Value from an Approved Insurance Company for insurance against any damage, injury or loss which may occur to any person or property including that of EPI, arising out of the execution of the works or temporary works. Wherever required by EPI the Contractor shall produce the policy or the policies of Insurance and the receipt of payment of the current premiums.

In case of failure of the Contractor to obtain insurance for works, insurance under Workman Compensation Act and Third Party insurance as described above within one month from the date of commencement of work, running account payments of the Contractor shall be withheld till such time the aforesaid insurance covers are obtained by the Contractor.

20.0 INDEMNITY AGAINST PATENT RIGHTS

The Contractor shall fully indemnify EPI from and against all claims and proceedings for or on account of any infringement of any patent rights, design, trademark or name or other protected rights in respect of any construction plant, machine, work or material used for in connection with the works or temporary works.

21.0 LABOUR LAWS TO BE COMPLIED WITH BY THE CONTRACTOR

The Contractor shall obtain a valid licence under the contract labour (Regulation & Abolition) Act 1970 and the Contract Labour Act (R&A) Central Rules 1971 and amended from time to time, and continue to have a valid licence until the completion of the work including defect liability period. The Contractor shall also abide by the provision of the child labour (Prohibition and Regulation) Act. 1986 and as amended from time to time. Any failure to fulfill this requirement shall attract the penal provisions of this contract arising out of the resultant non-execution of the work.

The Contractor shall comply with the provisions of the payment of Wages Act, 1936, Minimum Wages Act, 1948, Employer's Liability Act, 1938, Workmen's Compensation Act, 1923, Maternity Benefit Act, 1961 and Mines Act -1932, Industrial Disputes Act, 1947 or any modifications thereof or any other law relating thereto and rules made there under from, time to time.

21.1 No labour below the age of 18 years shall be employed on the work.

22.0 LABOUR SAFETY PROVISION

The Contractor shall be fully responsible to observe the labour safety provisions.

23.0 OBSERVANCE OF LABOUR LAWS

- 23.1 The Contractor shall be fully responsible for observance of all labour laws applicable including local laws and other laws applicable in this matter and shall Indemnify and keep indemnified EPI against effect of non observance of any such laws. The Contractor shall be liable to make payment to all its employees, workers and sub-Contractors and make compliance with labour laws. If EPI or the Client/ Owner/ Employer is held liable as "Principal Employer" to pay any amount or contributions etc. under legislation of Govt. or Court decision in respect of the employees of the Contractor, then the Contractor would reimburse the amount of such payments, contribution etc. to EPI and/ or same shall be deducted from the payments, Retention Money etc. of the Contractor.
- 23.2 The Contractor shall submit proof of having valid EPF registration certificate. In absence of the said certificate payment to the extent of 4.70% (four point seven percent) of the value of all the Running Account bills may be withheld by EPI and shall be released only after the production of the EPF registration certificate from the concerned authorities. If it is incumbent upon EPI to deposit withheld amount with EPF authorities, the withheld amount shall be deposited by EPI with EPF authorities. In such a case EPI shall not refund this withheld amount to the Contractor even after the production of EPF registration certificate.
- 23.3 The Contractor shall be liable to pay cess levied under the Building and other Construction Workers Welfare Cess Act, 1996, at such rates as may be notified by the Government from time to time. EPI shall deduct at source from every Running Account Bill of the Contractor, the said cess, at such rates for the time being prevailing, which shall not exceed 2% (two percent) but not be less than 1% (one percent) of the cost of construction incurred by EPI.

24.0 LAWS GOVERNING THE CONTRACT

This contract shall be governed by the Indian Laws for the time being in force and amended from time to time.

25.0 LAWS, BYE LAWS RELATING TO THE WORK

The Contractor shall strictly abide by the provisions, for the time being in force, of law relating to works or any regulations and bye laws made by any local authority or any water & lighting agencies or any undertakings within the limits of the jurisdiction of which the work is proposed to be executed. The Contractor shall be bound to give to the authorities concerned such notices and take all approvals as may be provided in the law, regulations or bye laws as aforesaid, and to pay all fees and taxes payable to such authorities in respect thereof.

26.0 EMPLOYMENT OF PERSONNEL

- 26.1 The Contractor shall employ only Indian Nationals as his representatives, servants and workmen after verifying their antecedents and loyalty. He shall ensure that no personnel of doubtful antecedents & integrity and any other nationality in any way are associated with the works.
- 26.2 EPI shall have full power to get removed immediately any representative, agent, servant and workmen or employees of the Contractor on account of misconduct, negligence or incompetence or whose continued employment may in the opinion of the Engineer-In-Charge be undesirable without assigning any reason for the removal. The Contractor shall not be allowed any compensation on this account whatsoever.

27.0 TECHNICAL STAFF FOR WORK

- 27.1 The Contractor shall employ at his cost the adequate number of technical staff during the execution of this work depending upon the requirement of work. For this purpose the numbers to be deployed, their qualification, experience as decided by EPI shall be final and binding on Contractor. The Contractor shall not be entitled for any extra payment in this regard. The technical staff should be available at Site, whenever required by EPI to take instructions.
- 27.2 Within 15 days from the date of letter of intent, the Contractor shall submit a site organizational chart and Resume including details of experience of the Project-in-Charge and other staff proposed by him and shall depute them on the Project after getting approval from Engineer-In-Charge. If desired by the Contractor at later date, the Project-in-Charge and other staff whose resume is approved by EPI can be replaced with prior written approval of EPI and replacement shall be with equivalent or superior candidate only. Decision of Engineer-In-Charge shall be final and binding on the Contractor.

Even after approving the site organizational chart, the Engineer-In-Charge due to nature and exigency of work can direct the Contractor to depute such additional staff as in view of Engineer-In-Charge is necessary and having qualification and experience as approved by the Engineer-In-Charge. The removal of such additional staff from the Site shall only be with the prior written approval of Engineer-In-Charge. The Contractor shall not be paid anything extra whatsoever on account of deployment of additional staff and decision of the Engineer-In-Charge shall be final and binding on the Contractor.

27.3 In case the Contractor fails to employ the staff as aforesaid, he shall be liable to pay a reasonable amount not exceeding a sum of Rs. 25,000 (Rupees Twenty Five Thousand only) for each month of default in the case of each person. The

decision of the Engineer-In-Charge as to number of Technical Staff to be adequate for the project and the period for which the required technical staff was not employed by the Contractor and as to the reasonableness of the amount to be deducted on this account shall be final and binding on the Contractor.

28.0 LAND FOR LABOUR HUTS/ SITE OFFICE AND STORAGE ACCOMMODATION

- 28.1 The Contractor shall arrange the land for temporary office, storage accommodation and labour huts at his own cost and get the clearance of local authorities for setting up of labour camp and cost of same is deemed to be included in the rates quoted by the Contractor for the works. The Contractor shall ensure that the area of labour huts is kept clean and sanitary conditions are maintained as laid down by the local authorities controlling the area. The labour huts shall be so placed that it does not hinder the progress of work or access to the worksite. The vacant possession of the land used, for the purpose shall be given back by Contractor after completion of the work. The Retention Money of the Contractor shall be released only after Contractor demolishes all structures including foundations and gives back clear vacant possession of this land.
- 28.2 In the event the Contractor has to shift his labour camp at any time during execution of the work on the Instructions of local authorities or as per the requirement of the work progress or as may be required by EPI, he shall comply with such instructions at his cost and no claim whatsoever shall be entertained on this account.

28.3 FURNISHED OFFICE ACCOMMODATION & MOBILITY AND COMMUNICATION TO BE PROVIDED BY CONTRACTOR TO EPI

On acceptance of Tender, the Contractor at his own cost will construct a suitable furnished office at Site equipped with basic facilities such as telephone(s), fax, internet, photocopier, computer(s) & printer(s) alongwith operator(s), regular electricity & drinking water supply and vehicles for staff etc. as per the requirement of the project. The Contractor shall provide consumable as required and maintain the aforesaid facilities intact/operational during the currency of the contract including the defects liability period. The Contractor shall also make sufficient arrangement for photography/ videography preferably by maintaining a camera/video camera at Site so that photographs video can be taken of any specific activity at any point of time. The Contractor shall also provide software like MS Project etc. for the purpose of preparing progress report, etc.

28.4 The Contractor shall make all arrangements for ground breaking ceremony/ inaugural function etc for the project as required and the cost towards it is deemed to be included in his rates/offer. Any expenditure already incurred/to be incurred by EPI, shall be recovered from the Contractor.

28.5 **PROTECTION OF TREES**

Trees designated by the Engineer-In-Charge shall be protected from damage during the course of the works and earth level within one meter of each such tree shall not

be changed. Where necessary, such trees shall be protected by providing temporary fencing.

29.0 WATCH & WARD AND LIGHTING

The Contractor shall at his own cost take all precautions to ensure safety of life and property by providing necessary barriers, lights, watchmen etc. during the progress of work as directed by Engineer-In-Charge.

30.0 HEALTH & SANITARY ARRANGEMENTS

In case of all labour directly or indirectly employed in work for the performance on the Contractor's part of this contract, the Contractor shall comply with all rules and regulations framed by Govt. from time to time for the protection of health and sanitary arrangements for workers.

31.0 WORKMEN'S COMPENSATION ACT

The Contractor shall at all times indemnify EPI and Owner against all claims for compensation under the provision of Workmen's Compensation Act,1923 or any other law in force, for any workmen employed by the Contractor or his sub-Contractor in carrying out the contract and against all costs and expenses incurred by EPI therewith.

32.0 MINIMUM WAGES ACT

The Contractor shall comply with all the provisions of the Minimum Wages Act, 1948, Contract Labour Act (R&A) 1970, and rules framed thereunder and other labour laws/local laws affecting contract labour that may be brought into force from time to time.

33.0 LABOUR RECORDS

The Contractor shall submit by the 4th & 19th of every month to the Engineer-In-Charge of EPI a true statement, showing in respect of the second half of the preceding month and the first half of the current month, respectively, of the following data :-

- a) The number of the labour employed by him (category-wise).
- b) Their working hours.
- c) The wages paid to them.
- d) The accidents that occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused.

- e) The number of female workers who have been allowed Maternity Benefits under the Maternity Benefit Act,1962 and the amount paid to them.
- f) Any other information required by Engineer-In-Charge.

34.0 RELEASE OF RETENTION MONEY AFTER LABOUR CLEARANCE

Retention Money of the work shall not be refunded till the Contractor produces a clearance certificate from the concerned Labour Officer. As soon as the work is virtually complete, the Contractor shall apply for the clearance certificate to the concerned Labour Officer under intimation to the Engineer-In-Charge. The Engineer-In-Charge, on receipt of the said communication, shall write to the Labour Officer to intimate if any complaint is pending against the Contractor in respect of the work. If no complaint is pending, on received from the Labour Officer to this effect till six months after the date of completion, it will be deemed to have received the clearance certificate and the Retention Money will be released if otherwise due.

35.0 SECURED ADVANCE AGAINST NON-PERISHABLE MATERIALS

Interest free secured advance up-to a maximum of 75 % (seventy five percent) of the Market Value of the materials or the cost of materials as derived from the tendered item rate of the Contractor, whichever is less, required for incorporation in the permanent works and brought to Site and duly certified by EPI Site Engineer shall be paid to the Contractor for all non-perishable items as per CPWD/ MORTH (as the case may be) norms. The advance will be paid only on submission of Indemnity Bond in the prescribed pro-forma. The advance shall be recovered in full from next Running Account bill and fresh advance paid for the balance quantities of materials. The Contractor shall construct suitable godown at the Site of work for safe storage of the materials against any possible damages due to sun, rain, dampness, fire, theft etc. at his own cost. He shall also employ necessary watch & ward establishment for the purpose at his costs and risks Such secured advance shall be payable on other items of perishable nature, fragile and combustible with the approval of the Engineer-In-Charge provided the Contractor provides a comprehensive insurance cover for the full cost of such materials. The decision of the Engineer-In-Charge shall be final and binding on the Contractor in this matter. No secured advance shall however, be paid on high-risk materials such as ordinary glass, sand, petrol, diesel etc.

36.0 MEASUREMENTS OF WORKS

36.1 Unless otherwise mentioned in the Bill of Quantities the measurements of works shall be done as per CPWD/MORTH specifications (as specified in Technical Specification of the Tender) and if the same is not given in the CPWD/MORTH Specifications, the same shall be measured as per latest relevant BIS codes in force. The quantity of steel reinforcement and the structural steel sections incorporated in the work shall be measured & paid on the basis of standard coefficients of sections as per BIS Codes of practice.

- 36.2 The Engineer-In-Charge shall except as otherwise stated ascertain and determine by measurement the value of work done in accordance with the contract.
- 36.3 All items having financial value shall be entered in Measurement Book, level book, etc. prescribed by EPI so that a complete record is obtained of all work performed under the contract. Items of non-financial value (which are not payable) may also be entered in Measurement Book at the sole discretion of the Engineer-In-Charge.
- 36.4 Measurements shall be taken jointly by the Engineer-In-Charge or his authorized representative and by the Contractor or his authorized representative.
- 36.5 Before taking measurements of any work the Engineer-In-Charge or the authorized person deputed by him for the purpose shall give a reasonable notice to the Contractor. If the Contractor fails to attend or send an authorized representative for measurement after such a notice or fails to countersign or to record the objection within a week from the date of measurement, then in any such event measurement taken by the Engineer-In-Charge or by the person deputed by him shall be taken to be correct measurements of the work.
- 36.6 The Contractor shall, without extra charge provide assistance with every appliance, labour and other things necessary for measurement.

Measurements shall be signed and dated by both parties each day on the Site on completion of measurement.

37.0 PAYMENTS

- 37.1 The bill shall be submitted by Contractor each month on or before the date fixed by the ENGINEER-IN-CHARGE for all works executed in previous months. The Contractor shall prepare computerized bills using the program as approved by Engineer-In-Charge as per prescribed format/ pro-forma. The Contractor shall submit five numbers of hard copies and one soft copy of floppy/ CD for all bills. Subject to clause 37.3 herein below, the payment due to the Contractor shall be made within fifteen days of getting the measurements verified from the Engineer-In-Charge or his subordinate/ representative and certification of bill by the Engineer-In-Charge.
- 37.2 All running payments shall be regarded as 'on account' payments against the final payment only and not as payments for work actually done and completed and / or accepted by EPI and shall not preclude the recovery for bad, unsound and imperfect or unskilled work to be removed and taken away and reconstructed or re-erected or be considered as an admission of the due performance of the Contract, or any part thereof, in this respect, or the accruing of any claim, nor shall it conclude, determine or affect in any way the powers of EPI under these conditions or any of them as to the final settlement and adjustments of the accounts or otherwise, or in any other way vary/ affect the contract. The final bill shall be submitted by the Contractor within three months of

the completion of work, otherwise EPI's certificate of the measurement and of the total amount payable for the work accordingly shall be final and binding on Contractor. Each Running Bill should be accompanied by two sets of at-least 20 (twenty) photographs as per direction of Engineer-In-Charge taken from various points depicting status of work as on Report/ Bill date along with Monthly Progress Report for the concerned month in the pro-forma to be given/ approved by Engineer-In-Charge. Intermittent progress photographs as and when required shall also be provided by the Contractor at his own cost as per direction of Engineer-In-Charge. No payment of running account bill shall be released unless it is accompanied by progress photographs and Monthly Progress Report as above.

- 37.3 It is clearly agreed and understood by the Contractor that notwithstanding anything to the contrary that may be stated in the agreement between EPI and the Contractor, the Contractor shall become entitled to payment only after EPI has received the corresponding payment(s) from the Client/ Owner for the work done by the Contractor. Any delay in the release of payment by the Client/ Owner to EPI leading to delay in the release of the corresponding payment by EPI to the Contractor shall not entitle the Contractor to any compensation/ interest from EPI.
- 37.4 All payments shall be released by EPI by Account Payee Cheque from any of its offices in India directly at the address notified by the Contractor (Postage charges shall be charged to the Contractor's account). In case of Payments is made by Demand Draft at the request of the Contractor, Bank Commission charges shall be debited to the account of Contractor.

38.0 WORK ON SUNDAYS, HOLIDAYS AND DURING NIGHT

For carrying out work on Sunday and Holidays or during night, the Contractor will approach the Engineer-In-Charge or his representative at least two days in advance and obtain his permission. The Engineer-In-Charge at his discretion can refuse such permission. The Contractor shall have no claim on this account whatsoever. If work demand, the Contractor shall make arrangements to carry out the work on Sundays, Holidays and in two, three shifts with the approval of Engineer-in-Charge at no extra cost to EPI.

39.0 NO IDLE CHARGES TOWARDS LABOUR OR PLANT & MACHINERY ETC.

No idle charges or compensation shall be paid for idling of the Contractor's labour, staff or Plant & Machinery etc. on any ground or due to any reason whatsoever. EPI will not entertain any claim in this respect.

40.0 WORK TO BE EXECUTED IN ACCORDANCE WITH SPECIFICATIONS, DRAWINGS, ORDERS, ETC.

The Contractor shall execute the whole and every part of the work in the most substantial and workman like manner both as regards materials and otherwise in every respect in strict accordance with the specifications. The Contractor shall also conform exactly, fully and faithfully to the Design, Drawings and Instructions in writing in respect of the work assigned by the Engineer-In-Charge and the Contractor shall be furnished free of charge one copy of the Contract Documents together with Specifications, Designs, Drawings.

The Contractor shall comply with the provisions of the contract and execute the works with care and diligence and maintain the works and provide all labour and materials, tools and plants including for measurements and supervision of all works, structural plans and other things of temporary or permanent nature required for such execution and maintenance in so far as the necessity for providing these is specified or is reasonably inferred from the contract. The Contractor shall take full responsibility for adequacy, suitability and safety of all the works and methods of construction.

41.0 DIRECTION FOR WORKS

- 41.1 All works to be executed under the contract shall be executed under the direction and subject to approval in all respect of the Engineer-In-Charge of EPI who shall be entitled to direct at what point or points and in what manner works are to be commenced and executed.
- 41.2 The Engineer-In-Charge and his representative shall communicate or confirm their instructions to the Contractor in respect of the execution of work during their Site inspection in a 'Works Site Order Book' maintained at the site office of Engineer-In-Charge. The Contractor or his authorized representative shall confirm receipt of such instructions by signing against the relevant orders in the book. The Contractor shall be bound to sign the site order book as and when required by Engineer-In-Charge and carry out compliance of instructions promptly to the satisfaction of Engineer-In-Charge.

42.0 ORDER OF PRECEDENCE OF DOCUMENTS

- 42.1 In case of difference, contradiction, discrepancy, dispute with regard to Conditions of Contract, Specifications, Drawings, Bill of Quantities and Rates quoted by the Contractor and other documents forming part of the contract, the following shall prevail in order of precedence.
 - i) Contract Agreement
 - ii) Fax, Telegram or Letter of Intent, detailed letter of Work Order along with statement of agreed variations and its enclosures.
 - iii) Description in Bill of Quantity / Schedule of Quantities
 - iv) Additional Conditions of Contract.
 - v) Technical specifications (General / Special Technical Specification) as given in the Tender Documents.
 - vi) General Conditions of Contract.
 - vii) Drawings
 - viii) CPWD/ MORTH specifications (as specified in Technical Specification of the Tender) update with correction slips issued up to last date of receipt of Tenders.

- ix) Relevant B.I.S. Codes.
- 42.2 If there are varying or conflicting provisions made in any one document forming part of the contract, the Engineer-In-Charge shall be the deciding authority with regard to the intention of the document which shall be final and binding on the Contractor.
- 42.3 Any error in description, quantity or rate in the Schedule of Quantities/items or Bill of Quantities or any omission there from shall not vitiate the contract or release the Contractor from the execution of the whole or any part of the works comprised therein according to the Drawings and Specifications or from any of his obligations under the contract.

43.0 TIME SCHEDULE & PROGRESS

- 43.1 Time allowed for carrying out all the works as entered in the Tender shall be as mentioned in the "Memorandum" to the "Form of Tender" which shall be reckoned from the 10th day from the date on which the letter/ telegram of Intent is issued to the Contractor. Time shall be the essence of the contract and Contractor shall ensure the completion of the entire work within the stipulated time of completion.
- 43.2 The Contractor shall also furnish within 10 days from the date of letter/ telegram of Intent, a CPM network/ PERT chart/ Bar Chart for completion of work within stipulated time. This will be duly got approved from EPI. This approved Network/ PERT Chart shall form a part of the agreement. Achievement of milestones as well as total completion has to be within the time period allowed.
- 43.3 Contractor shall mobilize and employ sufficient resources for completion of all the works as indicated in the agreed BAR CHART/Network. No additional payment will be made to the Contractor for any multiple shift work or other incentive methods contemplated by him in his work schedule even though the time schedule is approved by the Engineer-In-Charge.
- 43.4 During the currency of the work the Contractor is expected to adhere to the time schedule on miles stone and total completion and this adherence will be a part of Contractor's performance under the contract. During the execution of the work Contractor is expected to participate in the review and updating of the Network/ BAR CHART undertaken by EPI. These reviews may be undertaken at the discretion of EPI either as a periodical appraisal measure or when the quantum of work order on the Contractor is substantially changed through deviation orders or amendments. The review shall be held at Site or any of the offices of EPI/ Owner or Consultant of EPI/ Owner at the sole discretion of EPI.
- 43.5 If at any time, it appears to the Engineer-In-Charge that the actual progress of work does not conform to the approved programme referred above, the Contractor shall produce a revised programme showing the modifications to the approved programme by additional inputs to ensure completion of the work within the stipulated time. The Contractor will adhere to the revised schedule thereafter. The approval to the revised schedule resulting in a completion date beyond the

stipulated date of completion shall not automatically amount to a grant of extension of time to the Contractor.

- 43.6 Contractor shall submit fortnightly/ Monthly (as directed by Engineer-In-Charge) progress reports (5 copies) on a computer based program (program and software to be approved by Engineer-In-Charge) highlighting status of various activities and physical completion of work.
- 43.7 The Contractor shall send completion report along with as built drawings and maintenance schedule to the office of Engineer-In-Charge, of EPI in writing within a period of 30 days of completion of work.

44.0 WATER AND ELECTRICITY

The Contractor shall make his own arrangement for Water & Electrical power for construction and other purposes at his own cost and pay requisite electricity and water charges. The Contractor shall also make standby arrangement for water & electricity to ensure un-interrupted supply.

45.0 MATERIALS TO BE PROVIDED BY THE CONTRACTOR

The Contractor shall, at his own expense, provide all materials, required including Cement & Steel for the works.

The Contractor shall at his own expense and without delay, supply to the Engineer-in- Charge samples of materials to be used on the work and shall get the same approved in advance. All such materials to be provided by the Contractor shall be in conformity with the specifications laid down or referred to in the contract. The Contractor shall, if requested by the Engineer-in- Charge furnish proof, to the satisfaction of the Engineer-In-Charge that the materials so comply.

The Contractor shall at his risk and cost submit the samples of materials to be tested or analyzed and bear all charges and cost of testing unless specifically provided for otherwise elsewhere in the contract or specifications. The Engineer-In-Charge or his authorized representative shall at all times have access to the works and to all workshops and places where work is being prepared or from where materials, manufactured articles or machinery are being obtained for the works and the Contractor shall afford every facility and every assistance and cost in obtaining the right and visit to such access.

The Engineer-In-Charge shall have full powers to require the removal from the premises of all materials which in his opinion are not in accordance with the specifications and in case of default, the Engineer-In-Charge shall be at liberty to employ at the expense of the Contractor, other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials. The Engineer-In-Charge shall also have full power to require other proper materials to be substituted thereof and in case of default, the Engineer-In-Charge may cause the same to the supplies and all

costs which may require such removal and substitution shall be borne by the Contractor.

45.1 CEMENT AND CEMENT GODOWN

Cement shall be procured by Contractor of 43 Grade conforming to BIS : 8112 Specification latest edition or higher Grade as directed by the Engineer-In-Charge. The cement shall be procured directly from the reputed manufacturers/ stockist, which will have to be got approved from EPI in advance. Relevant vouchers and test certificates will be produced as and when required. The cement shall be stored by the Contractor in such suitable covered and lockable stores, well protected from climate and atmospheric effect. The cement godown shall be constructed by the Contractor as per CPWD specifications at his own cost. The cement will remain under double lock, one from EPI and other from Contractor. The cement in bags shall be stored in godowns in easy countable position. Cement bags shall be used on first in first out basis. Cement stored for beyond 90 days will be required to be tested at Contractors cost, before use in works.

45.2 STEEL & STEEL STOCKYARD

Steel conforming to BIS specifications (latest edition) shall be procured by the Contractor directly from reputed manufacturers/producers as approved by EPI. The manufacturer has to give a certificate that the material supplied is not a rerolled product. Relevant vouchers & test certificates will be produced by the Contractor. Re-rolled sections will not be allowed.

Reinforcement steel, structural steel shall be stored and stacked in such manner so as to facilitate easy identification, removal etc. The Contractor shall take proper care to prevent direct contact between the steel and the ground/ water for which he shall provide necessary arrangement at his own cost including ensuring proper drainage of area to prevent water logging as per directions of the Engineer-In-Charge. If required, the reinforcement steel shall also be protected, by applying a coat of neat cement slurry over the bars for which no extra payment shall be made.

Test certificates for each consignment of steel shall be furnished and tests to be got carried out by the Contractor at his own cost from the authorized laboratory as per the directions of Engineer-In-Charge, before incorporating the materials in the work.

46.0 SCHEDULE OF QUANTITIES / BILL OF QUANTITIES

- 46.1 The quantities shown against the various items of work are only approximate quantities, which may vary as per the actual requirement at Site.
- 46.2 All items of work in the Bill of Quantities/ schedule of quantities shall be carried out as per the CPWD/ MORTH (as the case may be) specifications, drawings and instructions of the ENGINEER-IN-CHARGE of EPI and the rates shall include for supply of required materials including proper storage, consumables, skilled & unskilled labour, supervision, tools, tackles, plant & machinery complete

as called for in the detailed specifications and conditions of the contract. No item, which is not covered in the Bill of Quantities, shall be executed by the Contractor without the approval of EPI. In case any Extra/Substituted item is carried out without specific-approval, the same will not be paid.

47.0 ANTI-TERMITE TREATMENT & WATER PROOF TREATMENT

- 47.1 Pre-construction treatment shall be carried out in co-ordination with the building work and shall be executed in such a manner that the civil works are not hampered or delayed by the anti-termite treatment. The treatment shall be carried out as detailed in BIS: 6313 (Part-II) latest revision. The waterproof treatment shall be of type and specifications as given in the schedule of quantities.
- 47.2 The treatment against water-proofing of basement, roofs, water retaining areas and termite infestation shall be and remain fully effective for a period of not less than 10(Ten) years to be reckoned from the date of expiry of the Defect Liability period, prescribed in the contract. At any time during the said guarantee period if EPI finds any defects in the said treatment or any evidence of re-infestation, dampness, leakage in any part of buildings or structure and notifies the Contractor of the same, the Contractor shall be liable to rectify the defect or give re-treatment at his own cost and shall commence the work or such rectification or re-treatment within seven days from the date of issue of such letter to him. If the Contractor fails to commence such work within the stipulated period, EPI may get the same done by another agency at the Contractor's cost and risk and the decision of the Engineer-In-Charge of EPI for the cost payable by the Contractor shall be final and binding upon him.
- 47.3 Re-treatment if required shall be attended to and carried out by the Contractor within seven days of the notice from Engineer-In-Charge of EPI.
- 47.4 EPI reserves the right to get the quality of treatment checked in accordance with recognized test methods and in case it is found that the chemicals with the required concentration and rate of application have not been applied, or the water proof treatment is not done as per specifications, the Contractor will be required to do the re-treatment in accordance with the required concentration & specifications at no extra cost failing which no payment for such work will be made. The extent of work thus rejected shall be determined by EPI.
- 47.5 Water proofing and anti-termite treatment shall be got done through approved / specialized agencies only with prior approval of Engineer-In-Charge.
- 47.6 The Contractor shall make such arrangement as may be necessary to safeguard the workers and residents of the building against any poisonous effect of the chemicals used during the execution of the work.
- 47.7 During the execution of work, if any damage shall occur to the treatment already done, either due to rain or any other circumstances, the same shall be rectified and made good to the entire satisfaction of Engineer-In-Charge by the Contractor at his cost.

- 47.8 The Contractor shall make his own arrangement for all equipments required for the execution of the job.
- 47.9 The Contractor shall execute Guarantee Bond in the prescribed form as appended for guaranteeing the anti-termite treatment and waterproof treatment.

48.0 INDIAN STANDARDS

Wherever any reference is made to any IS in any particular specifications, Drawings or Bill of Quantities, it means the Indian Standards editions with the amendments current at the last date of receipt of Tender Documents.

49.0 CENTERING & SHUTTERING

Marine plywood only or steel plates of minimum thickness as approved by Engineer-In-Charge shall be used for formwork. The shuttering plates shall be cleaned and oiled after every repetition and shall be used only after obtaining approval of EPI's Engineers at Site. The number of repetitions allowed for plywood and steel shuttering shall be at the discretion of Engineer-In-Charge of EPI depending upon the condition of shuttering surface after each use and the decision of ENGINEER-IN-CHARGE in this regard shall be final and binding on the Contractor. No claim whatsoever on this account shall be admissible.

50.0 CONTROLLED MATERIALS

- 50.1 The following Controlled materials shall be brought to Site after the approval of EPI.
 - a) Water proofing compound.
 - b) Cement
 - c) Steel
 - d) Primer/ Paints/ Varnish etc.
 - e) Bitumen
 - f) Chemical for anti termite treatment
 - g) Any other materials as per discretion of EPI.
- 50.2 The quantity of Controlled materials shall be measured and recorded in the Measurement books and signed by the Contractor and the Engineer-In-Charge as a check to ensure that the required quantities as required for execution of works as per specifications have been brought to Site for incorporation in the work.
- 50.3 Controlled materials brought at Site shall be stored as directed by EPI and those already recorded in Measurement book, shall be suitably marked for identification.
- 50.4 The Contractor shall ensure that the Controlled materials are brought to Site in original sealed containers or packing bearing manufacturer's markings and

brands (except where the quantity required is a fraction of the smallest packing). Materials not complying with this requirement shall be rejected. The empty containers of such Controlled materials shall not be destroyed/ disposed-off without the written permission of EPI.

- 50.5 The Contractor shall produce receipted vouchers showing quantities of the materials to satisfy Engineer-In-Charge that the materials comply with the specifications. These vouchers shall be endorsed, dated and initialed by Engineer-In-Charge giving the contract number and name of work and a certified copy of each such voucher signed both by EPI and the Contractor shall be kept on record.
- 50.6 When the cost of each category of materials is less than Rs.5000/- production of vouchers may not be insisted upon if EPI is otherwise satisfied with the quality and quantity of materials.

51.0 RECORDS OF CONSUMPTION OF CEMENT & STEEL

- 51.1 For the purpose of keeping a record of cement and steel received at Site and consumption in works, the Contractor shall maintain a properly bound register in the form approved by EPI, showing columns like quantity received and used in work and balance in hand etc. This register shall be signed daily by the Contractor's representative and EPI's representative.
- 51.2 The register of cement & steel shall be kept at Site in the safe custody of EPI's Engineer during progress of the work. This provision will not, however, absolve the Contractor from the quality of the final product.
- 51.3 In case cement or steel quantity consumed is lesser as compared to the theoretical requirement of the same as per CPWD/MORTH (as the case may be) specifications/ norms, the work will be devalued and/ or a penal rate (i.e. double the rate at which cement/ steel purchased last) recovery for lesser consumption of cement/ steel shall be made in the item rates of the work done subject to the condition that the tests results fall within the acceptable criteria as per CPWD/MORTH (as the case may be) specifications otherwise the work shall have to be dismantled and redone by the Contractor at no extra cost.

In case of cement, if actual consumption is less than 98% of the theoretical consumption, a recovery shall be effected from the Contractor's dues at the penal rate for the actual quantity that is lower than 98% of theoretical consumption.

52.0 MATERIALS AND SAMPLES

52.1 The materials/ products used on the works shall be one of the approved make/ brands out of list of manufacturers/ brands/ makes given in the Tender Documents. The Contractor shall submit samples/ specimens out of approved makes of materials/ products to the Engineer-In-Charge for prior approval. In exceptional circumstances Engineer-In-Charge may allow alternate equivalent makes/ brands of products/ materials at his sole discretion. The final choice of brand/ make shall remain with the Engineer-In-Charge, whose decision in this matter shall be final and binding and nothing extra on this account shall be payable to the Contractor.

In case single brand/ make is mentioned, other equivalent makes/ brands may be considered by the Engineer-In-Charge with prior approval. In case of variance in CPWD/ IS/BIS Specifications from approved products/ makes specification, the specification of approved product/ make shall prevail for which nothing shall be paid extra to the Contractor.

In case no make or brand of any materials, articles, fittings and accessories etc. is specified, the same shall comply with the relevant Indian Standard Specifications and shall bear the ISI/BIS mark. The Engineer of EPI and the Owner shall have the discretion to check quality of materials and equipments to be incorporated in the work, at source of supply or site of work and even after incorporation in the work. They shall also have the discretion to check the workmanship of various items of work to be executed in this work. The Contractor shall provide the necessary facilities and assistance for this purpose.

- 52.2 The above provisions shall not absolve the Contractor from the quality of final product and in getting the material and workmanship quality checked and approved from the Engineer-In-Charge of EPI.
- 52.3 The Contractor shall well in advance, produce samples of all materials, articles, fittings, accessories etc. that he proposes to use and get them approved in writing by EPI. The materials articles etc. as approved shall be labelled as such and shall be signed by EPI and the Contractor's representative.
- 52.4 The approved samples shall be kept in the custody of the Engineer- in-Charge of EPI till completion of the work. Thereafter the samples except those destroyed during testing shall be returned to the Contractor. No payment will be made to the Contractor for the samples or samples destroyed in testing.
- 52.5 The brands of all materials, articles fittings etc. approved together with the names of the manufacturers and firms from which supplies have been arranged shall be recorded in the Site Order Book.
- 52.6 The Contractor shall set up and maintain at his cost, a field testing laboratory for all day-to-day tests at his own cost to the satisfaction of the Engineer-In-Charge. This field testing laboratory shall be provided with equipment and facilities to carry out all mandatory field tests as per CPWD/MORTH (as the case may be) specifications. The laboratory building shall be constructed and installed with the appropriate facilities; Temperature and humidity controls shall be available wherever necessary during testing of samples.

All equipments shall be provided by the Contractor so as to be compatible with the testing requirements specified. The Contractor shall maintain all the equipments in good working condition for the duration of the contract. The Contractor shall provide approved qualified personnel to run the laboratory for the duration of the Contract. The number of staff and equipment available must at all times be sufficient to keep pace with the sampling and testing programme as required by the Engineer-In-Charge.

The Contractor shall fully service the site laboratory and shall supply everything necessary for its proper functioning, including all transport needed to move equipment and samples to and from sampling points on the Site, etc.

The Contractor shall re-calibrate all measuring devices whenever so required by the Engineer-In-Charge and shall submit the results of such measurements without delay.

All field tests shall be carried out in the presence of EPI's representative. All costs towards samples, materials, collection, transport, manpower, testing, including concrete mix-design etc. shall be borne by the Contractor and are deemed to be included in the rates quoted by him in the Bill of Quantities.

53.0 TESTS AND INSPECTION

53.1 The Contractor shall carry out the various mandatory tests as per specifications and the technical documents that will be furnished to him during the performance of the work. All the tests on materials, as recommended by CPWD, MORTH (as the case may be) and relevant Indian Standard Codes or other standard specifications (including all amendments current at the last date of submission of Tender Documents) shall be got carried out by the Contractor at the field testing laboratory or any other recognized institution/ laboratory, at the direction of EPI. All testing charges, expenses etc. shall be borne by the Contractor. All the tests, either on the field or outside laboratories concerning the execution of the work and supply of materials shall be got carried out by the Contractor or EPI at the cost of the Contractor.

53.2 WORKS TO BE OPEN TO INSPECTION

All works executed or under the course of execution in pursuance of this contract shall at all times be open to inspection and supervision of EPI. The work during its progress or after its completion may also be inspected, by Chief Technical Examiner of Government of India (CTE) and/ or an inspecting authority of State Government of State in which work is executed and/or by third party checks by Owner/ Clients. The compliance of observations/ improvements as suggested by the inspecting officers of EPI/CTE/ State authorities/ Owners shall be obligatory on the part of the Contractor at the cost of Contractor.

54.0 BORROW AREAS

The Contractor shall make his own arrangements for borrow pits and borrow disposal areas including their approaches and space for movement of men, machinery, other equipments as required for carrying out the works. The Contractor shall be responsible for taking all safety measures, getting approval,

making payment of royalties, charges etc. and nothing extra shall be paid to the Contractor on this account and unit rates quoted by the Contractor for various items of Bill of Quantities shall be deemed to include the same.

55.0 BITUMEN WORK

The Contractor shall be responsible for arranging Bitumen/Tar of required grade from source to be approved by the Engineer-In-Charge. No Bitumen work shall be carried out on wet surface or in rainy conditions.

56.0 CARE OF WORKS

From the commencement to the completion of works and handing over, the Contractor shall take full responsibility for care of all the works and in case of any damage/loss to the works or to any part thereof or to any temporary works due to lack of precautions or due to negligence on part of Contractor, the same shall be made good by the Contractor at his own cost.

57.0 WORK IN MONSOON AND DEWATERING

The execution of the work may entail working in the monsoon also. The Contractor must maintain labour force as may be required for the job and plan and execute the construction and erection according to the prescribed schedule. No special/ extra rate will be considered for such work in monsoon. The Contractor's rate shall be considered inclusive of cost of dewatering required, if any and no extra rate shall be payable on this account.

58.0 NO COMPENSATION FOR FORECLOSURE/CANCELLATION/ REDUCTION OF WORKS

If at any time after the commencement of the work EPI shall for any reason whatsoever is required to abandon the work or does not require the whole work thereof as specified in the Tender to be carried out, the Engineer-In-Charge shall give notice in writing of the fact to the Contractor, who shall have no claim to any payment of compensation whatsoever on account of any profit or advantage which he might have derived from the execution of the work in full, but which he did not derive in consequence of the full amount of the work not having been carried out or on foreclosure, neither shall he have any claim for compensation by reason of any alterations having been made in the original Specifications, Drawings, Designs and Instructions which shall involve any curtailment of the work as originally contemplated.

Provided that the Contractor shall be paid the charges on the cartage only of materials actually and bonafide brought to the Site of the work by the Contractor and rendered surplus as a result of the abandonment or curtailment of the work or any portion thereof and then taken back by the Contractor, provided however, that the Engineer-In-Charge shall have in all such cases the option of taking over all or any such materials at their purchase price or at local current rates whichever may be less. In the case of such stores having been issued by EPI

and returned by the Contractor to EPI, credit will be given to him by the Engineer-In-Charge at rates not exceeding those at which they were originally issued to him after taking into consideration any deduction for claims on account of any deterioration or damage while in the custody of the Contractor and in this respect the decision of the Engineer-In-Charge shall be final.

59.0 RESTRICTION ON SUBLETTING

- 59.1 The Contractor shall not sublet or assign the whole or part of the works except where otherwise provided, by the contract and even then only with the prior written consent of EPI and such consent if given shall not relieve the Contractor from any liability or obligation under the contract and he shall be responsible for the acts, defaults or neglects of any sub-Contractor, his agents, servants or workmen as full as if they were the acts, defaults or neglects of the Contractor, his agent, servants or workmen provided always that the provision of labour on piece work basis shall not be deemed to be a subletting under this clause.
- 59.2 The Contractor may entrust specialist items of works to the agencies specialized in the specific trade. The Contractor shall give the names and details of such firm whom he is going to employ for approval of EPI. These details shall include the expertise, financial status, technical manpower, equipment, resources and list of works executed and on hand of the specialist agency. Specialist agency shall be engaged only after obtaining written approval of the Engineer-In-Charge.

60.0 PROHIBITION OF UNAUTHORISED CONSTRUCTION & OCCUPATION

No unauthorized buildings, structures should be put up by the Contractor anywhere on the project Site, neither any building built by him shall be unauthorizedly occupied by him or his staff.

61.0 CO-ORDINATION WITH OTHER AGENCIES

Work shall be carried out in such a manner that the work of other Agencies operating at the Site is not hampered due to any action of the Contractor. Proper Co-ordination with other Agencies will be Contractor's responsibility. In case of any dispute the decision of EPI shall be final and binding on the Contractor. No claim whatsoever shall be admissible on this account.

62.0 SETTING OUT OF THE WORKS

62.1 The Contractor shall be responsible for the true and proper setting out of the works and for the correctness of the position, levels, dimensions and alignment of all parts of the works. If at any time during the progress of works, shall any error appear or arise in the position, levels, dimensions or alignment of any part of the works, the Contractor shall at his own expenses rectify such error to the satisfaction of Engineer-in- charge. The checking of any setting out or of any line or level by the engineers of EPI shall not in any way relieve the Contractor of his responsibility for the correctness.

62.2 Contractor shall provide permanent bench marks, flag tops and other reference points for the proper execution of work and these shall be preserved till the end of work. All such reference points shall be in relation to the levels and locations, given in the Architectural, Plumbing and other services Drawings.

63.0 NOTICE BEFORE COVERING UP THE WORK

The Contractor shall give not less than seven days notice before covering up or otherwise placing beyond the reach of measurement any work, to the Engineer-In-Charge in order that the same may be inspected and measured. If any work is covered up or placed beyond the reach of Inspection/ measurement without such notice to the Engineer-In-Charge or his consent being obtained, the same shall be uncovered at the Contractors expenses and he shall have to make it good at his own expenses.

64.0 SITE CLEARANCE

- 64.1 The Contractor shall ensure that the working Site is kept clean and free of obstructions for easy access to job Site and also from safety point of view. Before handing over the work to EPI the Contractor shall remove all temporary structures like the site offices, cement godown, stores, labour hutments etc., scaffolding rubbish, left over materials tools and plants, equipments etc., clean and grade the Site to the entire satisfaction of the Engineer-In-Charge. If this is not done the same will be got done by EPI at his risk and cost.
- 64.2 The Contractor shall clean all floors, remove cement/ lime/ paint drops and deposits, clean joinery, glass panes etc., touching all painter's works and carry out all other necessary items of works to make the premises clean and tidy before handing over the building, and the rates quoted by the Contractor shall be deemed to have included the same.

65.0 VALUABLE ARTICLES FOUND AT SITE

All gold, silver and other minerals of any description and all precious stones, coins, treasure, relics, antiques and all other similar things which shall be found in, under or upon the Site, shall be the property of the Owner/ Government and the Contractor shall duly preserve the same to the satisfaction of Engineer-In-Charge and shall from time to time deliver the same to such person or persons indicated by EPI.

66.0 MATERIALS OBTAINED FROM DISMANTLEMENT TO BE OWNER'S PROPERTY

All materials like stone, boulders and other materials obtained in the work of dismantling, excavation etc. will be considered Owner/ government property and may be issued to the Contractor by the Owner/ EPI, if required for use in this work at rates approved by EPI or the Contractor may be asked to dispose off these items at his cost.

67.0 SET-OFF OF CONTRACTOR'S LIABILITIES

EPI shall have the right to deduct or set off the expenses incurred or likely to be incurred by it in rectifying the defects and/or any claim under this agreement

against the Contractor from any or against any amount payable to the Contractor under this agreement including Retention Money and proceeds of Security Deposit cum Performance Guarantee and from any other contract being executed by the Contractor for EPI.

68.0 MATERIALS PROCURED WITH THE ASSISTANCE OF EPI

If any material for the execution of this contract is procured with the assistance of EPI either by issue from its stores or purchase made under orders or permits or licences obtained by EPI, the Contractor shall hold and use the said materials economically and solely for the purpose of this contract and shall not dispose them without the written permission of Engineer-In-Charge. The Contractor, if required by EPI, shall return all such surplus or unserviceable materials that may be left with him after the completion of the contract or at its termination on whatsoever reason, on being paid or credited such price as EPI shall determine having due regard to the conditions of materials.

69.0 ALTERATION IN SPECIFICATION, DESIGN & DRAWING

69.1 The Engineer-In-Charge shall have power to make any alterations in, omissions from, additions to or substitutions for, the original Specifications, Drawings, Designs and Instructions that may appear to him to be necessary during the progress of the work, and the Contractor shall carry out the work in accordance with any instructions which may be given to him in writing signed by the Engineer-In-Charge and such alterations, omissions, additions, or substitutions shall not invalidate the contract and any altered, additional or substituted work which the Contractor may be directed to do in the manner above specified as part of the work shall be carried out by the Contractor on the same conditions in all respects on which he agreed to do the main work.

The time for the completion of the work shall be extended in the proportion that the altered, additional or substituted work price bears to the original contract work price, and the certificate of the Engineer-In-Charge shall be conclusive as to such proportion. Over and above this, a further period to the extent of 25 percent of such extension shall be allowed to the Contractor.

The rates for such additional, altered or substituted work under this clause shall be worked out in accordance with the following provisions in their respective order :

- i) If the rates for the additional, altered or substituted work are specified in the contract for the work, the Contractor is bound to carry out the additional, altered or substituted work at the same rates as are specified in the contract for the work.
- ii) If the rates for the additional, altered or substituted work are not specifically provided in the contract for the work, the rates will be derived from the rates for a nearest similar item of work as are specified in the contract for the work. In case of composite tenders where two or more

schedule of quantities/ Bill of Quantities form part of the contract, the rates shall be derived from the nearest similar item in the schedule of quantities/Bill of Quantities of the particular part of work in which the deviation is involved failing that from the lowest of the nearest similar item in other schedule of quantity. The opinion of the Engineer-In-Charge as to whether or not the rate can be reasonably so derived from the item in this contract will be final and binding on the Contractor.

- iii) If the altered, additional or substituted work includes any work for which no rate is specified in the contract for the work and which cannot be derived in the manner specified in sub para (i) and (ii) above from the similar class of work in the contract then such work shall be carried out at the rates entered in the Schedule of Rates (as mentioned in "Memorandum" to the "Form of Tender" for Civil/ Sanitary Works) minus/plus the percentage which the tendered amount of scheduled items bears with the estimated amount of schedule items based on the Schedule of Rates (as mentioned in "Memorandum" to the "Form of Tender" for Civil/ Sanitary Works). The scheduled items mean the items appearing in the Schedule of Rates (as mentioned in "Memorandum" to the "Form of Tender" for Civil/ Sanitary Works), which shall be applicable in this clause. This clause will apply mutatis mutandis to electrical work except that Electrical Schedule of Rates as mentioned in "Memorandum" to the "Form of Tender" will be considered in place of Civil/ Sanitary works Schedule of rates as mentioned in "Memorandum" to the "Form of Tender".
- iv) If the rates for the altered, additional or substituted work cannot be determined in the manner specified in sub-clauses (i) to (iii) above, then the Contractor shall, within 7 days of the date of receipt of order to carry out the work, inform the Engineer-In-Charge the rates which he intends to charge for such class of work, supported by analysis of the rate or rates claimed, and the Engineer-In-Charge shall determine the rate or rates on the basis of prevailing market rates of the material, Labour, T&P etc. plus 10% (Ten percent) to cover the Contractors supervision, overheads and profit and pay the Contractor accordingly. The opinion of the Engineer-In-Charge as to the current market rates of materials and quantum of labour involved per unit of measurements will be final and binding on the Contractor.

However, the Engineer-In-Charge, by notice in writing, will be at liberty to cancel his order to carry out such class of work and arrange to carry it out in such manner, as he may consider advisable. But under no circumstances, the Contractor shall suspend the work on the plea of non-settlement of rates of items falling under the clause.

- v) Except in case of items relating to foundations, provisions contained in sub clauses (i) to (iv) above shall not apply to contract, altered or substituted items as individually exceed the 'deviation limit' of plus/minus 25% (Twenty Five Percent) subject to the following:-
 - (a) Deviation limit shall apply to individual items.

(b) The value of additions of items, of any individual trade not already included in the contract, shall not exceed 20% of the Tendered value of work, subject to overall deviation limit as given above.

Provided further that in case where the original item is substituted, the Substituted Item shall be deemed to have replaced the original item in the contract itself to that extent and above provisions pertaining to the deviations shall apply with respect to such Substituted Item and not the original item.

NOTE: Individual trade means the trade section to which Bill of Quantities annexed to the agreement has been divided or in the absence of any such division the individual section of the MORTH/C.P.W.D. (as the case may be) Scheduled of rates specified above, such as excavation and earthwork, Concrete, wood work and joinery, etc.

The rate of any such work except the items relating to foundations which is in excess of the deviation limit and deviation in quantities of AHR items on plus side as contained in Clause 9.2(i) shall be determined in accordance with the provisions contained in Clause 69.2.

- 69.2 In the case of contract items, substituted items, Contract cum substituted items or additional items which exceed the limits laid down in sub para (v) of condition 69.1 above (except the items relating to foundation work, which the Contractor is required to do under Clause 69.1 above and deviation in guantities of AHR items on plus side as contained in clause 9.2 (i)), the Contractor may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis, for the work in excess of the above mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities or those derived in accordance with the provisions of sub para (i) to (iii) of conditions 69.1 by more than five percent, the Engineer-In-Charge shall within three months of receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the Contractor, determine the rates on the basis of the market rates and if the rates so determined exceed the rates specified in the schedule of quantities or those derived in accordance with the provisions of sub paras (i) to (iii) of condition 69.1 by more than five percent, the contract shall be paid in accordance with the rates determined. In the event of the Contractor failing to claim revision of rates within the stipulated period, or if the rates determined by the Engineer-In-Charge within the period of three months of receipt of the claims supported by analysis are within five percent of the rates specified in the schedule of quantities or of those determined in accordance with the provisions of sub-para (i) to (iii) of condition 69.1, the Engineer-In-Charge shall make payment at the rates as specified in the schedule of quantities or those already determined under sub para (i) to (iii) of condition 69.1 for the quantities in excess of the limits laid down in sub para (v) of condition 69.1.
- **69.3** The provisions of the proceeding paragraph shall apply to the decrease in the rates of items for the work in excess of the limits laid down in sub para (v) of

condition 69.1 provided that such decrease is more than five percent of rates specified in the schedule of quantities or those derived in accordance with the provisions of sub para (i) to (iii) of condition 69.1 and the Engineer-In-Charge may after giving notice to the Contractor within two months of receipt of order by the Contractor or occurrence of the excess and after taking into consideration any reply received from him within fifteen days of receipt of the notice revise the rates for the work in question within two months of expiry of the said period of fifteen days having regard to the market rates.

- **69.4** The Contractor shall send to the Engineer-In-Charge once every three months an up to date account giving complete details of all claims for additional payments to which the Contractor may consider himself entitled and of all additional work ordered by the Engineer-In-Charge which he has executed during the preceding quarter failing which the Contractor shall be deemed to have waived his right.
- **69.5** For the purpose of operation of clause 69.1 (v) the following works shall be treated as works relating to foundation:
 - i) For buildings, compound walls plinth level or 1.2 meters (4 feet) above ground level whichever is lower excluding items of flooring and D.P.C. but including base concrete below the floors.
 - ii) For abutments, piers, retaining walls of culverts and bridges, walls of water reservoirs the bed of floor level.
 - iii) For retaining walls where floor level is not determinate 1.2 meters above the average ground level or bed level.
 - iv) For Roads all items of excavation and filling including treatment of sub base and soiling work.
 - v) For water supply lines, sewer lines, under-ground storm water drains and similar works. All items of work below ground level except items of pipe work, masonry work.
 - vi) For open storm water drains, all items of work except lining of drains.

70.0 ACTION AND COMPENSATION PAYABLE IN CASE OF BAD WORK

If it shall appear to the Engineer-In-Charge or his authorized subordinate in charge of the work or to the Chief Technical Examiner or to any other inspecting agency of Government/ State Government/ Owner where the work is being executed, that any work has been executed with unsound, imperfect, or unskillful workmanship or with materials of any inferior description, or that any materials or articles provided by him for the execution of the work are unsound or of a quality inferior to that contracted for or otherwise not in accordance with the contract, the Contractor shall on demand in writing which shall be made within six months of the completion of the work from the ENGINEER-IN-CHARGE specifying the work, materials or articles complained of notwithstanding that the same may have been passed, Certified and paid for forthwith rectify, or remove and

reconstruct the work so specified in whole or in part as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own proper charge and cost, and in the event of his failing to do so within a period to be specified by the Engineer-In-Charge in his demand aforesaid, then the Contractor shall be liable to pay compensation at the rate of one percent of the estimated amount put to tender for every day not exceeding ten days, while his failure to do so shall continue and in the case of any such failure, the Engineer-In-Charge may rectify or remove and re-execute the work or remove and replace with others, the material or articles complained of as the case may be at the risk and expense in all respects of the Contractor.

71.0 POSSESSION PRIOR TO COMPLETION

- 71.1 EPI shall have the right to take possession of or use any completed or partially completed work or part of the work. Such possession or use shall not be deemed to be any acceptance of any work not completed in accordance with the contract agreement. If such prior possession or use by EPI delays the progress of work an equitable adjustment in the time of completion will be made and the contract agreement shall be deemed to be modified accordingly. The decision of EPI in this case shall be final binding and conclusive.
- 71.2 When the whole of the works or the items or the groups of items of work for which separate periods of completion have been specified have been completed the Contractor will give a notice to that effect to the Engineer in writing. The Engineer shall within 15 days of the date of receipt of such notice inspect the works and either the Engineer-In-Charge issues to the Contractor a completion certificate stating the date on which in his opinion the works were completed in accordance with the contract or gives instructions in writing to the Contractor specifying the balance items of work which are required to be done by the Contractor before completion certificate could be issued. The Engineer-In-Charge shall also notify the Contractor of any defect in the works affecting completion.
- 71.3 The Contractor shall during the course of execution prepare and keep updated a complete set of 'as built' drawings to show each and every change from the Contract Drawings, changes recorded shall be countersigned by the Engineer-In-Charge and the Contractor. Four copies of 'as built' drawings shall be supplied to EPI by the Contractor within 30 days of the completion. All costs incurred in this respect shall be borne by the Contractor only.

72.0 COMPENSATION FOR DELAY AND REMEDIES

72.1 If the Contractor fails to maintain the required progress in terms of clause 72.4 or relevant clause of Additional Conditions of Contract, to complete the work and clear the Site on or before the completion date or extended date of completion, he shall, without prejudice to any other right or remedy available under the law to EPI on account of such breach, pay as agreed compensation the amount calculated at the rates stipulated below or such smaller amount as the Engineer in charge (whose decision in writing shall be final and binding) may decide on the amount of tendered value of the work for every completed day / week (as

applicable) that the progress remains below that specified in Clause 72.4.1 or the relevant clause in Additional Conditions of Contract or that the work remains incomplete. This will also apply to items or group of items for which a separate period of completion has been specified.

i)	For works with completion period not exceeding 3 month (as originally stipulated)	@ 1% per day
ii)	For works with completion period exceeding 3 months (as originally stipulated)	@ 1% per week or part thereof

Provided always that the total amount of compensation for delay to be paid under this Condition shall not exceed 10% of the Tendered Value of work or of the Tendered Value of the item or group of items of work for which a separate period of completion is originally given.

The amount of compensation may be adjusted or set-off against any sum payable to the Contractor under this or any other contract with EPI even after completion of the work.

72.2 CANCELLATION / DETERMINATION OF CONTRACT IN FULL OR PART

Subject to other provisions contained in this clause, the Engineer-In-Charge may, without prejudice to his any other rights or remedy against the Contract in respect of any delay, inferior workmanship, any claims for damages and / or any other provisions of this contract or otherwise, and whether the date of completion has or has not elapsed, by notice in writing absolutely determine the contract in full or in part in any of the following cases:

- If the Contractor having been given by the Engineer-In-Charge a notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in an inefficient or otherwise improper or unworkmanlike manner shall omit to comply with the requirement of such notice for a period of seven days thereafter; or
- ii) If the Contractor has, without reasonable cause, suspended the progress of the work or has failed to proceed with the work with due diligence so that in the opinion of the ENGINEER-IN-CHARGE (which shall be final and binding) he will be unable to secure completion of the work by the date for completion and continues to do so after a notice in writing of seven days from the Engineer-In-Charge; or
- iii) If the Contractor fails to complete the work within the stipulated date or items of work with individual date of completion, if any stipulated, on or before such date(s) of completion and does not complete them within the period specified in a notice given in writing in that respect by the Engineer-In-Charge; or
- iv) If the Contractor persistently neglects to carry out his obligations under the contract and / or commits default in complying with any of the terms

and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that respect by the Engineer-In-Charge; or

- v) If the Contractor shall offer or give or agree to give to any person in EPI service or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any action in relation to the obtaining or execution of this or any other contract for EPI; or
- vi) If the Contractor shall enter into a contract with EPI in connection with which commission has been paid or agreed to be paid by him or to his knowledge, unless the particulars of any such commission and the terms of payment thereof have been previously disclosed in writing to the Engineer-In-Charge; or
- vii) If the Contractor shall obtain a contract with EPI as a result of wrong tendering or other non-bona-fide methods of competitive tendering; or
- viii) If the Contractor being an individual, or if a firm, any partner thereof shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do, or if any application be made under any Insolvency Act for the time being in force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors; or
- ix) If the Contractor being a company, shall pass a resolution or the Court shall make an order for the winding up of the company, or a receiver or manager on behalf of the debenture holders or otherwise shall be appointed or circumstances shall arise which entitle the Court or debenture holders to appoint a receiver or manager; or
- x) If the Contractor shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days; or
- xi) If the Contractor assigns, transfers, sublets (engagement of labour on a piece-work basis or of the labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer sublet or otherwise parts with the entire works or any portion thereof without and prior written approval of the Engineer-In-Charge.

When the Contractor has made himself liable for action under any of the clauses aforesaid, the Engineer-In-Charge may without prejudice to any other right or remedy which shall have accrued or shall accrue hereafter to EPI, by a notice in writing to cancel the contract as a whole or only such items of work in default from the Contract.

The Engineer-In-Charge shall on such cancellation by EPI have powers to:

- a) Take possession of Site and any materials, Construction Plant & machinery, implements, stores, etc. thereon; and/ or
- b) Carry out the incomplete work by any means at the risk and cost of the Contractor; and/ or
- c) To determine or rescind the contract as aforesaid (of which termination or rescission notice in writing to the Contractor under the hand of the Engineer-In-Charge shall be conclusive evidence). Upon such determination or rescission the full Retention Money recovered by EPI under the contract and Security Deposit cum Performance Guarantee shall be liable to be forfeited and un-used materials, construction plant & machinery, implements, temporary buildings, etc. shall be taken over and shall be absolutely at the disposal of EPI. If any portion of the Retention Money has not been received or recovered by EPI from RA Bills, it would be called for and forfeited; and/ or
- d) To employ labour and to supply materials, equipment to carry out the work or any part of the work debiting the Contractor with the cost of the labour and the price of the materials, equipment rentals (of the amount of which cost and price certified by the Engineer-In-Charge shall be final and conclusive) against the Contractor and crediting him with the value of the work done in all respects in the same manner and at the same rates as if it had been carried out by the Contractor under the terms of his contract. The certificate of the Engineer-In-Charge as to the value of the work done shall be final and conclusive against the Contractor provided always that action under the sub-clause shall only be taken after giving notice in writing to the Contractor. Provided also that if the expenses incurred by the EPI are less than the amount payable to the Contractor; and/ or
- e) After giving notice to the Contractor to measure up the work of the Contractor and to take such whole, or the balance or part thereof as shall be unexecuted or delayed with reference to the General Conditions of Contract clause no. 72.4.1 and/ or relevant clause of Additional Conditions of Contract, out of his hands and to give it to another Contractor to complete in which case any expenses which may be incurred in excess of the sum which would have been paid to the original Contractor if the whole work had been executed by him (of the amount of which excess the certificate in writing of the Engineer-In-Charge shall be final and conclusive) shall be borne and paid by the original Contractor and may be deducted from any money due to him by EPI under his contract or on any other account whatsoever or from his Retention Money, Security Deposit cum Performance Guarantee or the proceeds of sales of unused materials, construction plants & machinery, implements temporary buildings etc. thereof or a sufficient part thereof as

the case may be. If the expenses incurred by EPI are less than the amount payable to the Contractor at his agreement rates, the difference shall not be paid to the Contractor; and/ or

f) By a notice in writing to withdraw from the Contractor any items or items of work as the Engineer-In-Charge may determine in his absolute discretion and get the same executed at the risk and cost of the Contractor.

Any excess expenditure incurred or to be incurred by EPI in completing the works or part of the works or the excess loss or damages suffered or may be suffered by EPI as aforesaid after allowing such credit shall without prejudice to any other right or remedy available to EPI in law be recovered from any moneys due to the Contractor on any account, and if such moneys are not sufficient the Contractor shall be called upon in writing and shall be liable to pay the same within 30 days.

If the Contractor shall fail to pay the required sum within the aforesaid period of 30 days, the Engineer-In-Charge shall have the right to sell any or all of the Contractors unused materials, Construction Plant, machinery, implements, temporary buildings, etc. and apply the proceeds of sale thereof towards the satisfaction of any sums due from the Contractor under the contract and if thereafter there be any balance outstanding from the Contractor, it shall be recovered in accordance with the provisions of the contract and law.

Any sums in excess of the amounts due to EPI and unsold materials, Construction Plant etc. shall be returned to the Contractor, provided always that if cost or anticipated cost of completion by EPI of the works or part of the works is less than the amount which the Contractor would have been paid had he completed the works or part of the works, such benefit shall not accrue to the Contractor.

In the event of anyone or more of the above courses being adopted by the Engineer-In-Charge the Contractor shall have no claim to compensation whatsoever for any loss sustained by him by reasons of his having purchased or procured any materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the performance of the contract. And in case action is taken under any of the provision aforesaid the Contractor shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the Engineer-In-Charge has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified. Provided further that if any of the recoveries to be made, while taking action as per (d) and/or (e) above, are in excess of the Retention Money & Security Deposit cum Performance Guarantee forfeited, these shall be limited to the amount by which the excess cost incurred by the EPI exceeds the Retention Money & Security Deposit cum Performance Guarantee so forfeited.

72.3 CONTRACTOR LIABLE TO PAY COMPENSATION EVEN IF ACTION NOT TAKEN

In any case in which any of the powers conferred upon the Engineer-In-Charge by relevant clause thereof, shall have become exercisable and the same are not exercised, the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any future case of default by the Contractor and the liability of the Contractor for compensation shall remain unaffected. In the event of the Engineer-In-Charge putting in force all or any of the powers vested in him under the preceding clause he may, if he so desires after giving a notice in writing to the Contractor, take possession of (or at the sole discretion of the Engineer-In-Charge which shall be final and binding on the Contractor) use as on hire (the amount of the hire money being also in the final determination of the Engineer-In-Charge) all or any tools, plant, machinery, materials and stores, in or upon the works, or the site thereof belonging to the Contractor, or procured by the Contractor and intended to be used for the execution of the work / or any part thereof, paying or allowing for the same in account at the contract rates, or in the case of these not being applicable, at current market rates to be certified by the Engineer-In-Charge, whose certificate thereof shall be final, and binding on the Contractor and/or direct the Contractor, clerk of the works, foreman or other authorized agent to remove such tools, machinery, plant, materials, or stores from the premises (within a time to be specified in such notice) in the event of the Contractor failing to comply with any such requisition, the Engineer-In-Charge may remove them at the Contractor's expense or sell them by auction or private sale on account of the Contractor and his risk in all respects and the certificate of the Engineer-In-Charge as to the expenses of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against the Contractor.

72.4 TIME ESSENCE OF CONTRACT & EXTENSION FOR DELAY

The time allowed for execution of the Works as specified in the terms of contract or the extended time in accordance with these conditions shall be the essence of the contract. The execution of the works shall commence from the 10th Day or such time period as mentioned in letter of Intent after the date on which the Engineer-In-Charge issues written orders to commence the work. If the Contractor commits default in commencing the execution of the work as aforesaid, the Executing Agency shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the earnest money absolutely.

72.4.1 Within 10 (Ten) days of Letter of Intent, the Contractor shall submit a Time and Progress Chart (CPM/ PERT/ Quantified Bar Chart) and get it approved by the Engineer-In-Charge. The Chart shall be prepared in direct relation to the time stated in the contract documents for completion of items of the works. It shall indicate the forecast (mile-stones) of the dates of commencement and completion of various items, trades, sections of the work and may be amended as necessary by agreement between the Engineer-In-Charge and the Contractor within the limitations of time stipulated in the Contract documents, and further to ensure good progress during the execution of the work, the Contractor shall in all cases in which the time allowed for any work exceeds one month (save for

special jobs for which a separate program has been agreed upon) complete 1/8th of the whole of work before 1/4th of the whole time allowed in the contract has elapsed, 3/8th of the work before one half of such time has elapsed and 3/4th of the work before 3/4th of such time has elapsed. The physical report including photographs shall be submitted by the Contractor on the prescribed format & the intervals (not exceeding a month) as decided by the Engineer in Charge. The compensation for delay as per clause 72.1 shall be leviable at intermediate stages also, in case the required progress is not achieved to meet the above time deadlines of the completion period and/ or milestones of time and progress chart, provided always that the total amount of Compensation for delay to be paid under this condition shall not exceed 10% (Ten Percent) of the tendered value of work".

- 72.4.2 If the work(s) be delayed by:
 - i) force-majeure or
 - ii) abnormally bad weather, or
 - iii) serious loss or damage by fire, or
 - iv) civil commotion of workmen, strike or lockout, affecting any or the trades employed on the work, or
 - v) delay on the part of other Contractors or tradesmen engaged by Engineer-In-Charge in executing work not forming part of the Contract, or
 vi) non-availability of stores, which are responsibility of EPI or,
 - vii) non-availability or break down of tools and plant to be supplied or supplied by EPI or,
 - viii) any other cause which, in the absolute discretion of EPI, is beyond the Contractor's control,

then, upon the happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the Engineer-In-Charge but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-In-Charge to proceed with the works.

72.4.3 Request for extension of time, to be eligible for consideration, shall be made by the Contractor in writing within fourteen days of the happening of the event causing delay on the prescribed form. The Contractor may also, if practicable, indicate in such a request the period for which extension is desired. In any such case EPI may give a fair and reasonable extension of time for completion of work. Such extension shall be communicated to the Contractor by the Engineer-In-Charge in writing, within 3 months of the date of receipt of such request. Non-application by the Contractor for extension of time shall not be a bar for giving a fair and reasonable extension by the Engineer-In-Charge and the extension of time so given by the Engineer-In-Charge shall be binding on the Contractor.

73.0 WITHHOLDING AND LIEN IN RESPECT OF SUMS DUE FROM CONTRACTOR

73.1 Whenever any claim or claims for payment of a sum of money arises out of or under the contract or against the Contractor, EPI shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security,

if any, deposited by the Contractor and for the purpose aforesaid, EPI shall be entitled to withhold the Retention Money, if any, furnished as the case may be and also have a lien over the same pending finalization or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the Contractor, EPI shall be entitled to withhold and have a lien to retain to the extent of such claimed amount or amounts referred to above, from any sum or sums found payable or which may at any time thereafter become payable to the Contractor under the same contract or any other contracts pending finalization or adjudication of any such claim.

73.2 It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above by the Engineer-In-Charge or EPI will be kept withheld or retained as such by the Engineer-In-Charge or EPI till the claim arising out of or under the contract is determined by the Arbitrator / Competent Court and that the Contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to above and duly notified as such to the Contractor. For the purpose of this clause, where the Contractor is a sole proprietor or a partnership firm or a limited company, etc. the Engineer-In-Charge or EPI shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to proprietor /partnership firm/limited company, as the case may be whether in his individual capacity or otherwise.

EPI shall have the right to cause an audit and technical examination of the works and the final bills of the Contractor including all supporting vouchers, abstract, etc, to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by the Contractor under the contract or any work claimed to have been done by him under the contract and found not to have been executed, the Contractor shall be liable to refund the amount of over-payment and it shall be lawful for EPI to recover the same from him in the manner prescribed in sub-clause (I) of this clause or in any other manner legally permissible; and if it is found that the Contractor was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by EPI to the Contractor, without any interest thereon whatsoever.

73.3 LIEN IN RESPECT OF CLAIMS IN OTHER CONTRACTS

Any sum of money due and payable to the Contractor (including the Retention Money & Security deposit returnable to him) under the contract may be withheld or retained by way of lien by the Engineer-In-Charge or by EPI against any claim of the Engineer-In-Charge or EPI in respect of payment of a sum of money arising out of or under any other contract made by the Contractor with the Engineer-In-Charge or EPI.

It is an agreed term of the contract that the sum of money so withheld or retained under this clause by the Engineer-In-Charge or EPI will be kept withheld or retained as such by the Engineer-In-Charge or EPI or till his claim arising out of the same contract or any other contract is either mutually settled or determined by the Arbitrator or Competent court as the case may be, and that the Contractor shall have no claim for interest or damages whatsoever on this account or on any other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the Contractor.

74.0 DEFECTS LIABILITY PERIOD

The Contractor shall be responsible for the rectification of defects in the works for a period of twelve months from the date of taking over of the works by the Owner/ Client. Any defects discovered and brought to the notice of the Contractor forthwith shall be attended to and rectified by him at his own cost and expense. In case the Contractor fails to carry out these rectifications, the same may without prejudice to any other right or remedy available, be got rectified by EPI at the cost and expense of the Contractor.

75.0 FORCE MAJEURE

Any delay or failure of the performance of either party hereto shall not constitute default hereunder to give rise to any claims for damages, if any to the Extent such delay or failure of performance is caused by occurrences such as Acts of God or the public enemy, expropriation, compliance with any order or request of Government authorities/ Courts, acts of war, rebellions, sabotage fire, floods, illegal strikes, or riots (other than Contractor's employees). Only extension of time shall be considered for Force Majeure conditions as accepted by EPI. No adjustment in contract price shall be allowed for reasons of force majeure.

76.0 ARBITRATION

- 76.1 Before resorting to arbitration as per the clause given below, the parties if they so agree may explore the possibility of conciliation as per the provisions of Part-III of the Arbitration and Conciliation Act. 1996. When such conciliation has failed, the parties shall adopt the following procedure for arbitration :
- i) Except where otherwise provided for in the contract, any disputes and differences relating to the meaning of the Specifications, Design, Drawings and Instructions herein before mentioned and as to the quality of workmanship or materials used in the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the Contract, Designs, Drawings, Specifications, Estimates, Instructions, or these conditions, or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the completion or abandonment thereof shall be referred to the Sole Arbitration of the Chairman and Managing Director (CMD) of Engineering Projects (India) Limited (EPI), or any other person discharging the functions of CMD of EPI and if CMD or such person discharging the functions of CMD of EPI is unable to act, to the sole Arbitration of some other person appointed by CMD of EPI or such other person discharging the functions of CMD of EPI. There will be no objection if the arbitrator so appointed is an employee of Engineering Projects (I) Ltd. However, such an employee shall not have directly dealt with the said Contract or the works there under on behalf of EPI. Such Arbitrator shall be appointed within 30 days of the receipt of letter of invocation of arbitration duly satisfying the requirements of this clause.

- ii) If the arbitrator so appointed resigns or is unable or unwilling to act due to any reason whatsoever, or dies, the Chairman & Managing Director aforesaid or in his absence the person discharging the duties of the CMD of EPI may appoint a new arbitrator in accordance with these terms and conditions of the contract, to act in his place and the new arbitrator so appointed may proceed from the stage at which it was left by his predecessor.
- iii) It is a term of the contract that the party invoking the arbitration shall specify the dispute / differences or questions to be referred to the Arbitrator under this clause together with the amounts claimed in respect of each dispute.
- iv) The Arbitrator may proceed with the arbitration ex-parte, if either party, in spite of a notice from the arbitrator, fails to take part in the proceedings.
- v) The work under the contract shall continue as directed by the Engineer-In-Charge, during the arbitration proceedings.
- vi) Unless otherwise agreed, the venue of arbitration proceedings shall be at the venue given in the 'Memorandum' to the 'Form of Tender'.
- vii) The award of the Arbitrator shall be final, conclusive and binding on both the parties.
- viii) Subject to the aforesaid, the provisions of the Arbitration and Conciliation Act, 1996 or any statutory modifications or re-enactment thereof and the Rules made there under and for the time being in force shall apply to the arbitration proceedings and Arbitrator shall publish his Award accordingly.

NOTE

NOTWITHSTANDING ANYTHING CONTAINED HEREINABOVE, THIS CLAUSE SHALL NOT BE APPLICABLE WHERE THE DISPUTE IS BETWEEN EPI AND ANOTHER CENTRAL PUBLIC SECTOR ENTERPRISE OR GOVT. OF INDIA DEPARTMENT, FOR WHICH A SEPARATE ARBITRATION CLAUSE IS PROVIDED VIDE CLAUSE NO. 76.2 GIVEN BELOW :

76.2 ARBITRATION BETWEEN CENTRAL PUBLIC SECTOR ENTERPRISES INTER SE / GOVERNMENT OF INDIA DEPARTMENTS/ MINISTRIES

- i) In the event of any dispute or difference relating to the interpretation and application of the provisions of the contract, such dispute or difference shall be referred by either party to the arbitration as per the instructions (Office Memorandums / Circulars) issued by Govt. of India from time to time with regard to arbitration between one Government Department and another, one Government Department and a Public Sector Enterprise and Public Sector Enterprise inter se.
- ii). Subject to any amendment that may be carried out by the Government of India from to time, the procedure to be followed in the arbitration shall be as is

contained in D.O. No. DPE/4(10)/2001-PMA-GL-I dated 22.01.2004 of Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises, Government of India or any modification issued in this regard.

76.3 JURISDICTION

The courts mentioned in the 'Memorandum' to the 'Form of Tender' alone will have jurisdiction to deal with matters arising from the contract, to the exclusion of all other courts.

77.0 SUSPENSION OF WORKS

- (a) The Contractor shall, on receipt of the order in writing of the Engineer-In-Charge, suspend the progress of the works or any part thereof for such time and in such manner, as the Engineer-In-Charge may consider necessary for any of the following reasons:
- i) On account of any default on part of the Contractor, or
- ii) For proper execution of the works or part thereof for reason other than the default of the Contractor, or
- iii) For safety of the works or part thereof.

The Contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the Engineer-In-Charge.

- (b) If the suspension is ordered for reasons (ii) and (iii) in sub-para (a) above, the Contractor shall be entitled to an extension of the time equal to the period of every such suspension plus 25%. No adjustment of contract price will be allowed for reasons of such suspension.
- (c) In the event of the Contractor treating the suspension as an abandonment of the contract by EPI, he shall have no claim to payment of any compensation on account of any profit or advantage which he may have derived from the execution of the work in full but which he could not derive in consequence of the abandonment.
- (d) The Contractor shall resume work in all earnestness after suspension has been lifted by EPI.

78.0 TERMINATION OF CONTRACT ON DEATH OF CONTRACTOR

If the Contractor is an individual or a proprietorship concern and the individual or the proprietor dies then unless the Engineer-In-Charge is satisfied that the legal representatives of the individual Contractor or of the proprietor of the proprietary concern and in the case of partnership firm, the surviving partners, are capable of carrying out and completing the contract, the Engineer-In-Charge shall be entitled to cancel the contract as to its incompleted part without EPI being in any way liable to payment of any compensation to the estate of the deceased Contractor and/or to surviving partners of the Contractor's firm on account of cancellation of the contract. Such cancellation of Contract shall be with out prejudice to any of the rights & remedies available to the Engineer-In-Charge under the contract. The decision of the Engineer-In-Charge that the legal representatives of the deceased Contractor or the surviving partners of the Contractor's firm cannot carry out and complete the contract shall be final and binding on the parties.

79.0 CLARIFICATION AFTER TENDER SUBMISSION

Tenderer's attention is drawn to the fact that during the period, the bids are under consideration, the bidders are advised to refrain from contacting by any means, EPI and/or his employees/ representatives on matters related to the bid under consideration and that if necessary, EPI will obtain clarifications in writing or as may be necessary. The Tender evaluation and process of award of works is done by duly authorized Tender Scrutiny Committee and this committee is authorized to discuss and get clarification from the tenderers.

80.0 ADDENDA/ CORRIGENDA

Addenda/Corrigenda to the Tender Documents may be issued prior to the date of opening of the Tender to clarify or effect modification in specification and/or contract terms included in various Tender Documents. The tenderer shall suitably take into consideration such Addenda/Corrigenda while submitting his tender. The tenderer shall return such Addenda/ Corrigenda duly signed and stamped as confirmation of its receipt and submit alongwith the Tender Document. All Addenda/ Corrigenda shall be signed and stamped on each page by the tenderer and shall become part of the Tender and contract documents.

81.0 QUALITY ASSURANCE PROGRAMME

To ensure that the works/services under the scope of this contract are in accordance with the specifications, the Contractor shall adopt Quality Assurance Programme to control such activities at the necessary points. The Contractor shall prepare and finalize such Quality Assurance Programme within 15 days from letter of intent. EPI shall also carryout quality audit and quality surveillance of systems and procedures of Contractor's quality control activities. A Quality Assurance Programme of Contractor shall generally cover the following:

- a) His organization structure for the management and implementation of the proposed Quality Assurance Program.
- b) Documentation control system.
- c) The procedure for procurement of materials and source inspection.
- d) System for site controls including process controls.
- e) Control of non-conforming items and systems for corrective actions.
- f) Inspection and test procedure for site activities.
- g) System for indication and appraisal of inspection status.
- h) System for maintenance of records.
- i) System for handling, storage and delivery.

 A quality plan detailing out quality practices and procedures, relevant standards and acceptance levels for all types of work under the scope of this contract.

All the quality reports shall be submitted by the Contractors in the formats appended hereto. Checklist enclosed here in this document shall be followed while carrying out Construction activities (items). If any item is not covered by the Checklist/ Formats appended hereto, the Format for the same may be developed and submitted to Engineer-In-Charge for approval and the same shall be adopted. These filled in formats shall be prepared in two copies and duly signed by representatives of Contractor and EPI. All the costs associated with printing of Formats and testing of materials required as per technical specifications or by Engineer-In-Charge shall deemed to be included in the Contractor's quoted rates of various items of work in the Schedule/ Bill of Quantities.

82.0 APPROVAL OF TEMPORARY / ENABLING WORKS

The setting and nature of all offices, huts, access road to the work areas, and all other temporary works as may be required for the proper execution of the works shall be subject to the approval of the Engineer-In-Charge.

All the equipments, labour, material including cement, reinforcement and the structural steel required for the enabling/ temporary works associated with the entire Contract-shall have to be arranged by the Contractor only. Nothing extra shall be paid to the Contractor on this account and the unit rates quoted by the Contractor for various items in the Bill of Quantities shall be deemed to include the cost of enabling works.

83.0 CONTRACT COORDINATION PROCEDURES, COORDINATION MEETINGS AND PROGRESS REPORTING

The Contractor shall prepare and finalize in consultation with EPI, a detailed contract coordination procedure within 15 days from the date of issue of Letter of Intent for the purpose of execution of the Contract.

The Contractor shall have to attend all the meetings at any place in India at his own cost with EPI, Owners/ Clients or Consultants of EPI/ Owner/ Client during the currency of the Contract, as and when required and fully cooperate with such persons and agencies involved during these discussions. The Contractor shall not deal in any way directly with the Clients/ Owners or Consultants of EPI/ Owner/ Clients and any dealing/ correspondence if required at any time with Clients/ Owners/ Consultants shall be through EPI only.

During the execution of the work, Contractor shall submit at his own cost detailed Monthly progress report to the Engineer-In-Charge of EPI by 5th of every month. The format of monthly progress report shall be as approved by Engineer-In-Charge of EPI.

84.0 CONTRACT AGREEMENT

The Contractor shall enter into a Contract Agreement with EPI within 10 days of the date of Letter of Intent or within such extended time, as may be granted by EPI. The cost of stamp papers, stamp duty, registration, if applicable on the contract, shall be borne by the Contractor. In case, the Contractor does not sign the agreement as above or does not start the work within 10 days of the issue of letter/telegram of intent, his earnest money is liable to be forfeited and letter of intent consequently will stand withdrawn.

85.0 MANNER OF EXECUTION OF AGREEMENT

- i. The agreement as per prescribed Performa as enclosed to the Additional Conditions of Contract shall be signed at the office of EPI within 10 days from the date of issue of Letter of Intent. The Contractor shall provide for signing of the Contract, appropriate Power of Attorney in favour of the authorised representative duly attested by notary Public and the requisite documents/materials. Till a formal contract is prepared and executed, the Letter of Intent read in conjunction with the Bidding Documents will constitute a binding contract.
- ii. The agreement will be signed in two originals and three more copies, EPI shall retain the 'Original', the Contractor shall be provided with the other signed original and the remaining three copies will be retained by EPI. In case of a dispute of any kind whatsoever, the 'Original' retained by EPI alone shall be treated as the 'Original Agreement'.
- iii. The Contractor shall provide free of cost to EPI all the Engineering data, drawings and descriptive materials submitted along with the bid, in at least five (5) copies to form an integral part of the Agreement within seven 7 days after issuing of Letter of Intent.
- iv. Subsequent to signing of the Agreement, the Contractor at his own cost shall provide to EPI with at least five (5) true hard bound copies of Agreement alongwith all the enclosures viz. letter of intent, Tender Documents etc. within thirty (30) days of its signing.

86.0 PURCHASE PREFERENCE TO PUBLIC SECTOR ENTERPRISES

EPI reserves its right to extend Purchase Preference to Central Public Sector Enterprises (CPSEs) as per policy of Government of India, if any, as applicable on this work. The tenderers are requested to go through latest instructions of Government of India on its Purchase Preference Policy for CPSEs before quoting for the Tender.

87.0 CHANGE IN FIRM'S CONSTITUTION TO BE INTIMATED

Where the Contractor is a partnership firm, prior approval in writing of EPI shall be obtained before any change is made in the constitution of the firm. Where the Contractor is an individual or a Hindu undivided family business concern such approval as aforesaid shall likewise be obtained before the Contractor enters into any partnership agreement whereunder the partnership firm would have the right to carry out the works hereby undertaken by the Contractor. If prior approval as aforesaid is not obtained, the contract shall be deemed to have been assigned in contravention of Clause 59.1 hereof and EPI shall be entitled to take action under Clause 72.2 (xi).

88.0 COMPLIANCE WITH ISO PROCEDURES

EPI is an ISO-9001 and ISO-14001 Company. The conditions of the ISO as applicable shall be followed by the Contractor for implementation & maintaining the established procedures of EPI.

LABOUR SAFETY PROVISIONS

- 1.0 Suitable scaffolds should be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except such short period work as can be done safely from ladders. When a ladder is used an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well, suitable footholds and handholds shall be provided on the ladder and the ladder shall be given an inclination not steeper than 1/4 to 1 (1/4 horizontal and 1 vertical).
- 2.0 Scaffolding or staging more than 3.6m (12 feet) above the ground or floor, swung or suspended from an overhead support or erected with stationery support shall have a guard rail properly attached or bolted, braced and otherwise secured at least 90 cm. (3 feet) high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
- 3.0 Working platforms, gangways, and stairways should be so constructed that they should not sag unduly or unequally, and if the height of the platform or the gangway or the stairway is more than 3.6m (12 feet) above ground level or floor level, they should be closely boarded, should have adequate width & should be suitable fastened as described in (2.0) above.
- 4.0 Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be 90 cm (3 feet).
- 5.0 Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9m. (30 feet) in length while the width between side rails in rung ladder shall in no case be less than 29 cm. for ladder up to and including 3m (10 feet) in length. For longer ladders this width should be increased at least 1/4" for each additional 30 cm (1 ft.) of length. Uniform step spacing shall not exceed 30 cm (12"). Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites of the work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The Contractor shall provide all necessary fencing and lights to protect the public from accident, and shall be bound to bear the expenses of defence of every suit, action or other proceeding at law that may be brought by an person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit, action or proceedings to any such person or which may, with the consent of the Contractor, be paid to compensate any claim by any such person.

6.0 EXCAVATION AND TRENCHING

All trenches, 1.2mts.(four feet) or more in depth, shall at all times be supplied with at least one ladder for each 30m. (100 feet) in length or fraction thereof, Ladder shall be extended from bottom of the trench to at least 90 cm (3feet) above the surface of the ground. The sides of the trenches, which are 1.5m. (5feet) or more in depth shall be stepped back to give suitable slope or securely held by timber bracing, so as to avoid the danger or sides to collapsing. The excavated materials shall not be placed within 1.5m (5 feet) of the edges of the

trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances undermining or undercutting shall be done.

- 7.0 Demolition Before any demolition work is commenced and also during the progress of the work:
- 7.1 All roads and open areas adjacent to the work Site shall either be closed or suitably protected.
- 7.2 No electric cable or apparatus which is likely to be a source of danger or a cable or apparatus used by the operator shall remain electrically charged.
- 7.3 All practical steps shall be taken to prevent danger to persons employed from risk or fire or explosion or flooding. No floor, roof or other part of the building shall be overloaded with debris or materials as to render it unsafe.
- 8.0 All necessary personal safety equipments as considered adequate by the Engineer-In-Charge should be kept available for the use of persons employed on the Site and maintained in a condition suitable for immediate use, and the Contractor should take adequate step to ensure proper use of equipment by those concerned- The following safety equipment shall be invariably provided.
- 8.1 Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.
- 8.2 Those engaged in white washing and mixing or stacking of cement bags or any materials which are injurious to the eye shall be provided with protective goggles.
- 8.3 Those engaged in welding works shall be provided with welder's protective eye shields.
- 8.4 Stone breakers shall be provided with protective goggles and protective clothing and seated at sufficiently safe interval.
- 8.5 When workers are employed in sewers and manholes, which are in active use, the Contractors shall ensure that the manhole covers are opened and ventilated at-least for an hour before the workers are allowed to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident the public. In addition, the Contractor shall ensure that the following safety measures are adhered to:
 - a. Entry for workers into the line shall not be allowed except under supervision of the JE or any other higher officer.
 - b. At least 5 to 6 manholes upstream and down stream should be kept open for at least 2 to 3 hours before any man is allowed to enter into the manholes for working inside.
 - c. Before entry, presence of Toxic gases should be tested by inserting wet lead acetate paper which changes colour in the presence of such gases and gives indication of their presence.
 - d. Presence of Oxygen should be verified by lowering a detector lamp into the manhole. In case, no Oxygen is found inside the sewer line, workers should be sent only with Oxygen kit.

- e. Safety belt with rope should be provided to the workers. While working inside the manholes such rope should be handled by two men standing outside to enable him to be pulled out during emergency.
- f. The area should be barricaded or cordoned of by suitable means to avoid mishaps of any kind. Proper warning signs should be displayed for the safety of the public whenever cleaning works are undertaken during night or day.
- g. No smoking or open flames shall be allowed near the blocked manhole being cleaned.
- h. The malba obtained on account of cleaning of blocked manholes and sewer lines should be immediately removed to avoid accidents on account of slippery nature of the malba.
- i. Workers should not be allowed to work inside the manhole continuously. He should be given rest intermittently. The Engineer In-charge may decide the time up to which a worker may be allowed to work continuously inside the manhole.
- j. Gas masks with Oxygen Cylinder should be kept at Site for use in emergency.
- k. Air-blowers should be used for flow of fresh air through the manholes. Whenever called for, portable air-blowers are recommended for ventilating the manholes. The Motors for these shall be vapour proof and of totally enclosed type. Non-sparking gas engines also could be used but they should be placed at-least 2 meters away from the opening and on the leeward side protected from wind so that they will not be a source of friction on any inflammable gas that might be present.
- I. The workers engaged for cleaning the manholes/ sewers should be properly trained before allowing them to work in the manhole. m. The workers shall be provided with Gumboots or non-sparking shoes, bump helmets and gloves non-sparking tools, safety lights and gas masks and portable air blowers (when necessary). They must be supplied with barrier cream for anointing the limbs before working inside the sewer lines.
- n. Workmen descending a manhole shall try each ladder step or rung carefully before putting his full weight on it to guard against insecure fastening due to corrosion of the rung fixed to manhole well.
- o. If a man has received a physical injury, he should be brought out of the sewer immediately and adequate medical aid should be provided to him.
- p. The extent to which these precautions are to be taken depend on individual situation but the decision of the Engineer-In-Charge regarding the steps to be taken in this regard in an individual case will be final.
- 8.6 The Contractor shall not employ men and women below the age of 18 years on the work of painting with products containing lead in any form Wherever men above the age of 18 are employed on the work of lead painting the following precautions should be taken.
- 8.6.1 No paint containing lead or lead products shall be used except in the form of paste or readymade paint.
- 8.6.2 Suitable facemasks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint is dry rubbed and scrapped.

- 8.6.3 Overalls shall be supplied by the Contractor to the workmen and adequate facilities shall be provided to enable the working painters to wash during the cessation of work.
- 8.6.4.1 a. White lead, sulphate or lead work products containing those pigments shall not be used in painting operation except in the form of paste or of paints ready for use.
 - b. Measures shall be taken whenever required in order to prevent danger arising from the application of paint in the form of spray.
 - c. Measures shall be taken, whenever practicable to prevent danger arising out of dust caused by dry rubbing down and scrapping.
- 8.6.4.2 a. Adequate facilities shall be provided to enable working painter to wash during and on cessation of work.
 - b. Suitable arrangements shall be made to prevent clothing put off during working hours being spoiled by painting materials.
- 8.6.4.3 a) Cases of lead poisoning and of suspected lead poisoning shall be notified and shall be subsequently verified by a medical man appointed by the competent authorities of the Consultant.
 - b) EPI may require when necessary a medical examination of workers.
 - c) Instructions with regard to the special hygienic precautions to be taken in the painting trade shall be distributed to working painters.
- 9.0 When the work is done near any place where there is risk of drowning, all necessary equipments should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provisions should be made for prompt first aid treatment of all injuries likely to be obtained during the course of the work.
- 10.0 Use of hoisting machines and tackle including their attachment encourage and supports shall conform to the following standard of conditions.
- 10.1 a. These shall be of good mechanical construction, sound material and adequate strength and free from patent, defects and shall be kept required in good working order.
 - b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength, and free from patent defects.
- 10.2 Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years should be in-charge of any hoisting machine including any scaffolding, winch or giving signals to operator.

- 10.3 In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or as means of suspension the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case of a hoisting machine having a variable safe working load, each safe working load and the conditions under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.
- 10.4 In case of EPI machines, the safe working load shall be notified by the Engineer-In-Charge. As regards Contractor's machines the Contractor shall notify the safe working load of the machine to the Engineer-In-Charge whenever he brings any machinery to Site of work and get verified by the Engineer-In-Charge.
- 11.0 Motors gearing, transmission electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguard, hosting appliances should be provided with such means as will reduce to the minimum the risk of accidental descent of the load. Adequate precautions should be taken to reduce the minimum the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations, which are already energized, insulating mats, wearing apparel, such as gloves sleeves and boots as may be necessary, be provided. The worker should not wear any rings, watches and carry keys or other materials, which are good conductors of electricity.
- 12.0 All scaffold, ladders, and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of work.
- 13.0 These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place of work spot. The person responsible for compliance of the safety codes shall be named therein by the Contractor.
- 14.0 To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the Contractor shall be open to inspection by the or their representatives.
- 15.0 Notwithstanding the above Clauses from (i) to (xiv) there is nothing in these to exempt the Contractor from the operations of any other Act or Rule in force in the Republic of India.

MODEL RULES FOR THE PROTECTION OF HEALTH AND SANITARY ARRANGEMENTS FOR WORKERS

1.0 APPLICATION

These rules shall apply to all building and construction works in which 20 (twenty) or more workers are ordinarily employed or are proposed to be employed in any day during the period during which the Contractor work is in progress.

2.0 DEFINITION

Work place means a place where twenty or more workers are ordinarily employed or are proposed to be employed in connection with construction work on any day during the period during which the Contractor work is in progress.

3.0 FIRST-AID FACILITIES

- 3.1 At every work place first aid facilities shall be provided and maintained, so as to be easily accessible during working hours, First-Aid boxes at the rate of not less than one box per 150 contract labour or part thereof ordinarily employed.
- 3.2 The First-Aid box shall be distinctly marked with a red cross on white ground and shall contain the following equipments:-
- 3.2.1 a) For work places in which number of contract labour employed does not exceed 50, Each First-Aid box shall contain the following equipments:
 - i) 6 small sterilized dressings.
 - ii) 3 medium size sterilized dressings.
 - iii) large size sterilized dressings.
 - iv) 3 large sterilized burn dressings.
 - v) 1 (30 ml) bottle containing a two percent alcoholic solution of iodine.
 - vi) 1(30 ml) bottle containing salvolatile having the dose and mode of administration indicated on the label.
 - vii) 1 snake-bite lancet.
 - viii) 1 (30 gms) bottle of potassium permanganate crystals.
 - ix) 1 pair of scissors.
 - x) 1 copy of the First-Aid leaf-let issued by the Director General, Factory Advise Service & Labour Institutes, Government of India.
 - xi) 1 bottle containing 100 tablets (each of 5 grams) of aspirin.
 - xii) Ointment for burns.
 - xiii) A bottle of suitable surgical antiseptic solution.

- 3.2.2 For work places in which the number of contract labour exceed 50. Each First-Aid box shall contain the following equipments:
 - i) 12 small sterilized dressings.
 - ii) 6 medium size sterilized dressings.
 - iii) 6 large size sterilized dressings.
 - iv) 6 large size sterilized burn dressings.
 - v) 6 (15 gms) packet sterilized cotton wool.
 - vi) 1 (60 ml.) bottle containing a two percent iodine alcoholic solution.
 - vii) 1 (60 ml.) bottle containing salvolatile having the dose and mode of administration indicated on the label.
 - viii) 1 roll of adhesive plaster.
 - ix) 1 snake bite lancet.
 - x) 1 (30 gms.) bottle of potassium permanganate crystals.
 - xi) 1 pair of scissors.
 - xii) 1 copy of the First-Aid leaf-let issued by the Director General, Factory Advice Service and Labour Institutes, Government of India.
 - xiii) A bottle containing 100 tablets (each of 5 grams) of aspirin.
 - xiv) Ointment for burns.
 - xv) A bottle of suitable surgical antiseptic solution.
- 3.3 Adequate arrangements shall be made for immediate recoupment of the equipment when necessary.
- 3.4 Nothing except the prescribed contents shall be kept in the First Aid box.
- 3.5 The First Aid box shall be kept in charge of a responsible person who shall always be readily available during the working hours of the work place.
- 3.6 A person in charge of the First-Aid box shall be a person trained in First-Aid treatment, in work places where the number of labour employed is 150 or more.
- 3.7 In work places where the number of labour employed is 500 or more and hospital facilities are not available within easy distance of the works, first-Aid Posts shall be established and run by a trained Compounder. The Compounder shall be on duty and shall be available at all hours when the workers are at work.
- 3.8 Where work places are situated in places, which are not towns of cities, a suitable motor transport shall be kept readily available to carry injured person or persons suddenly taken ill to the nearest hospital.

4.0 DRINKING WATER

- 4.1 In every work place, there shall be provided and maintained at suitable places, easily accessible to labour, a sufficient supply of cold water fit for drinking.
- 4.2 Where drinking water is obtained from an intermittent public water supply, each work place shall be provided with storage where such drinking water shall be stored.
- 4.3 Every water supply of storage shall be at a distance of not less than 50 feet from any latrines drain or other source of pollution, Where water has to be drawn from

an existing well which is within such proximity of latrine, drain or any other source of pollution, the well shall be properly chlorinated before water is drawn from it for drinking. All such wells shall be entirely closed in and be provided with a trapdoor which shall be dust and waterproof.

4.4 A reliable pump shall be fitted to each covered well, trap-door shall be kept locked and opened only for cleaning or inspection which shall be done at least once a month.

5.0 WASHING FACILITIES

- 5.1 In every work place adequate and suitable facilities for washing shall be provided and maintained for the use of labour employed herein.
- 5.2 Separate and adequate screening facilities shall be provided for the use of male and female workers.
- 5.3 Such facilities shall be conveniently accessible and shall be kept clean and hygienic condition.

6.0 LATRINES AND URINALS

- 6.1 Latrines shall be provided in every work place on the following scale, namely:
 - a) Where females are employed there shall be at least one latrine for every 25 females.
 - b) Where males are employed, there shall be at least one latrine for every 25 males.

Provided that where the number of males or females exceeds 100, it shall be sufficient if there is one latrine for 25 males or females, as the case may be, up to the first 100, and one for every 50 thereafter.

- 6.2 Every latrine shall be under cover and so partitioned off as to secure privacy, and shall has a proper door and fastenings.
- 6.3 Construction of Latrines: The inside walls shall be constructed of masonry or some suitable heat resisting non-absorbent materials and shall be cement washed inside and outside at least once a year. Latrine shall not be a standard lower than borehole system.
- 6.4 (a) Where workers of both sexes are employed, there shall be displayed outside each block of latrine and urinal, a notice in the language understood by the majority of the workers "For Men only" or "For Women only" as the case may be.
 - (b) The notice shall also bear the figure of man or of a women, as the case may be.

- 6.5 There shall be at least one urinal for male workers up to 50 and one for female workers up to 50 employed at a time. Provided that where the number of male or female workmen, as the case may be, exceeds 500, it shall be sufficient if there is one urinal for every 50 males or females up to the first 500 and one for every 100 or part thereof, thereafter.
- 6.6 a) The latrines and urinals shall be adequately lighted and shall be maintained in a clean and sanitary condition at all times.
 - b) Latrines and urinals other than those connected with a flush sewerage system shall comply with the requirements of the Public Health Authorities.
- 6.7 Water shall be provided by means of a tap or otherwise so as to be conveniently accessible in or near the latrines and urinals.

6.8 DISPOSAL OF EXCRETA

Unless otherwise arranged for by the local sanitary authority arrangements for proper disposal of excreta by incineration at the work place shall be made by means of a suitable incinerator. Alternatively excreta may be disposed off by putting a layer of night soil at the bottom of a pucca tank prepared for the purpose and covering it with a 15 cm layer of waste or for refuse and then covering it with a layer of earth for fortnight (when it will turn into manure).

6.9 The Contractor shall, at his own expense, carry out all instruction issued to him by the Engineer-In-Charge to effect proper disposal of night soil and other conservancy work in respect of the Contractor's workmen or employees on the Site. The Contractor shall be responsible for payment of any charges, which may be levied by Municipal or Cantonment Authority for execution of such work on his behalf.

7.0 PROVISION OF SHELTER DURING REST

At every place there shall be provided, free of cost four suitable sheds, two for males and the other two for rest separately for the use of man and women labour. The height of each shelter shall not be less than 3 meters from the floor level to the lowest part of the roof. These shall be kept clean and the space provided shall be on the basis of 0.6 sqm. Per head.

Provided that the Engineer-In-Charges may permit, subject to his satisfaction, a portion of the building under construction or other alternative accommodation to be used for the purpose.

8.0 CRECHES

8.1 A every work place, at which 20 or more women workers are ordinarily employed, there shall be provided two rooms of reasonable dimensions for the use of their children under the age of six years. One room shall be used as a playroom for the children and the other as their bedrooms.

The rooms shall be constructed on standard not lower than the following:

- i) thatched roof
- ii) mud floor and walls.
- iii) planks spread over the mud floor and covered with matting
- 8.2 The rooms shall be provided with suitable and sufficient openings for light and ventilation. There shall be adequate provision of sweepers to keep the places clean.
- 8.3 The Contractor shall supply adequate number of toys and games in the playroom and sufficient number of cots and beddings in the bedroom.
- 8.4 The Contractor shall provide one Ayaa to look after the children in the creche when the number of women workers does not exceed 50 and two when the number of women workers exceed 50.
- 8.5 The use of the rooms/earmarked as ealize shall be restricted to children, their attendant and mother of the children.

9.0 CANTEENS

- 9.1 In every work place where the work regarding the employment of contract labour is likely to continue for six months and wherein contract labour numbering one hundred or more are ordinarily employed, an adequate canteen shall be provided by the Contractor for the use of such labour.
- 9.2 The canteen shall be maintained by the Contractor in an efficient manner.
- 9.3 The canteen shall consist of at least a dining hall, kitchen, storeroom, pantry and washing places separately for workers and utensils.
- 9.4 The canteen shall be sufficiently lighted at all times when any person has access to it.
- 9.5 The floor shall be made of smooth and impervious material and inside walls shall be lime washed or colour washed at least once in each year.

Provided that the inside walls of the kitchen shall be lime-washed every four months.

- 9.6 The premises of the canteen shall be maintained in a clean and sanitary condition.
- 9.7 Waste Water shall be carried away in suitable covered drains and shall not be allowed to accumulate so as to cause a nuisance.
- 9.8 Suitable arrangements shall be made for the collection and disposal of garbage.
- 9.9 The dinning hall shall accommodate at a time 30 persons of the labour working at time.

- 9.10 The floor area of the dinning hall, excluding the area occupied by the service counter and any furniture except tables and chair shall not be less than one square meter per dinner to be accommodated.
- 9.11 a) A portion of the dinning hall, and service counter shall be partitioned off and reserved for women workers in proportion to their number.
 - b) Washing places for women shall be separate and screened to secure privacy.
- 9.12 Sufficient tables, stool, chairs or benches shall be available for the number of dinners to be accommodated.
- 9.13.1 a) There shall be provided and maintained sufficient utensils, crockery, furniture and any other equipment necessary for the efficient running of the canteen.
 - b) The furniture, utensils and other equipment shall be maintained in a clean and hygienic condition.
- 9.13.2 a) Suitable clean clothes for the employees serving in the canteen shall be provided and maintained.
 - b) A service counter, if provided, shall have top of smooth and impervious material.
 - c) Suitable facilities including an adequate supply of hot water shall be provided for the cleaning of utensils and equipment.
- 9.14 The foodstuffs and other items to be served in the canteen shall be in conformity with the normal habits of the labour.
- 9.15 The charge for food stuffs, beverages and any other items served in the canteen shall be based on 'No profit No loss' and shall be conspicuously displayed in the canteen.
- 9.16 In arriving at price of foodstuffs, and other articles served in the canteen, the following items shall not be taken into consideration as expenditure, namely:
 - a) The rent of land building.
 - b) The depreciation and maintenance charges for the building and equipment provided for the canteen.
 - c) The cost of purchase, repair and replacement of equipment including furniture, crockery, cutlery and utensils:
 - d) The water charges and other charges incurred for lighting and ventilation:
 - e) The interest and amounts spent on the provision and maintenance and equipment provided for in the canteen.

9.17 The accounts pertaining to the canteen shall be audited once every 12 months by registered accountants and auditors.

10.0 ANTI MALARIAL PRECAUTIONS

The Contractor shall at his own expense, conform to all anti-malarial instructions given to him by the Engineer-In-Charge including the filling up of any borrows pits which may have been dug by him.

11.0 AMENDMENTS

EPI may from time to time, add to or amend these rules and issue such directions as it may consider necessary for the purpose of removing any difficulty which may arise in the administration hereof.

CONTRACTOR'S LABOUR REGULATIONS

1.0 SHORT TITLE

These regulations may be called the Contractor "Labour Regulations".

2.0 DEFINITIONS

- 2.1 "Workman" means any person employed by EPI or its Contractor directly or indirectly through a sub-Contractor, with or without the knowledge, of EPI to do any skilled, semi-skilled, unskilled, manual, supervisory, technical or clerical work for hire or reward, whether, the terms of employment are expressed or implied but does not include any person
 - a) Who is employed mainly in a managerial or administrative capacity; or
 - b) Who being employed in a supervisory capacity draws wages exceeding Rupees Two thousand Five hundred per person or exercises either by the nature of the duties attached to the office or by reason of powers vested to him, functions mainly of managerial nature.
 - c) Who is an out worker, that is to say, a person to whom any articles or materials are given out by or on behalf of the principal Employer to be made up cleaned, washed, altered, ornamental finished, repaired, adopted or otherwise processed for sale for the purpose of the trade or business of the principal Employer and the process is to be carried out either in the home of the out worker or in some other premises, not being premises under the control and management of the principal Employer.
- 2.2 "Fair Wages" means wages whether for time or piecework fixed and notified under the provisions of the minimum Wages Act from time to time.
- 2.3 "Contractor" shall include every person who undertake to produce a given result other than a mere supply of goods or articles of manufacture through labour or who supplies labour for any work and includes a sub-Contractor.
- 2.4 "Wages" shall have the same meaning as defined in the Payment of Wages Act.
- 2.4.1 Normally working hours of an adult employee should not exceed 9 hours a day. The working day shall be so arranged that inclusive of interval for rest, if any, it shall not spread over more than 12 hours on any day.
- 2.4.2 When an adult worker is made to work for more than 9 hours on any day or for more than 48 hours in any week he shall be paid overtime for the extra hours put in by him at double the ordinary rate of wages.

- 2.4.3.1 Every worker shall be given a weekly holiday on a Sunday, in accordance with the provisions of the Minimum Wages (Central) Rules 1960 as amended from time to time, irrespective of whether such worker is governed by the Minimum Wages Act or not.
- 2.4.3.2 Whether the Minimum Wages prescribed by the Government under the Minimum Wages Act are not inclusive of the wages for the weekly day of rest, the worker shall be entitled to rest day wages at the rate applicable to the next preceding day, provided he has worked under the same Contractor for a continuous period of not less than 6 days.
- 2.4.3.3 here a Contractor is permitted by the Engineer-In-Charge to allow a worker to work on a normal weekly holiday, he shall grant a substitute holiday to him for the whole day on one of the five days immediately before or after the normal weekly holidays and pay wages to such worker for the work performed on the normal weekly holiday at overtime rate.

3.0 DISPLAY OF NOTICE REGARDING-WAGES, ETC.

The Contractor shall before he commences his work on contract, display and correctly maintain and continue to display and correctly maintain in a clean and legible condition in conspicuous places on the work, notices in English and in the local Indian languages spoken by the majority of the workers, giving the minimum rates of wages fixed under the Minimum Wages Act, the actual wages being paid, the hours of work for which such wages are earned, wage period, dates of payment of wages and other relevant information as per Appendix 'A'.

4.0 PAYMENT OF WAGES

4.1 The Contractor shall fix wage periods in respect of which wages shall be payable.

- 4.2 No wage period shall exceed one month.
- 4.3 The wages of every person employed as labour in an establishment or by a Contractor where less than one thousand, such persons are employed shall be paid before the expiry of the seventh day and in other cases before the expiry of tenth day after the last day of the wage period in respect of which the wages are payable.
- 4.4 Where the employment of any worker is terminated by or on behalf of the Contractor the wages earned by him shall be paid before the expiry of the second working day from the date on which his employment is terminated.
- 4.5 All payments of wages shall be made on a working day at the work premises and during the working time and on a date notified in advance and in case the work is completed before the expiry of the wage period, final payment shall be made within 48 hours of the last working day.

- 4.6 Wages due to every worker shall be paid to him direct or to other person authorized by him in this behalf.
- 4.7 All wages shall be paid in current coin or currency or in both.
- 4.8 Wages shall be paid without any deductions of any kind except those specified by the Central Government by general or special order in this behalf or permissible under the Payment of Wages Act 1956.
- 4.9 A notice showing the wage period and the place and time of disbursement of wages shall be displayed at the place of work and a copy sent by the Contractor to the Engineer-In-Charge under acknowledgment.
- 4.10 It shall be the duty of the Contractor to ensure the disbursement of wages in the presence of the Engineer or any other authorized representatives of the Engineer-In-Charge who will be required to be present at the place and time of disbursement of wages by the Contractor to workmen.
- 4.11 The Contractor shall obtain from the Engineer or any other authorized representative of the Engineer-In-Charge as the case may be, a certificate under his signature at the end of the entries in the "Register of Wages" or the "Wage-cum-Muster Roll" as the case may be in the following form :

5.0 FINES AND DEDUCTIONS, WHICH MAY BE MADE FROM WAGES

- 5.1 The wages of a worker shall be paid to him without any deduction of any kind except the following :
 - a) Fines
 - b) Deductions for absence from duty i.e. from the place or the places where by the terms of his employment he is required to work. The amount of deduction shall be in proportion to the period for which he was absent.
 - c) Deduction for damage to or loss of goods expressly entrusted to the employed persons for custody, or from loss of money or any other deduction which he is required to account where such damage or loss is directly attributable to his neglect or default.
 - d) Deduction for recovery of advances or for adjustment of over payment of wages, advances granted shall be entered in a register.
 - e) Any other deduction, which the Central Government may from time to time allow.
- 5.2 No fines should be imposed on any worker save in respect of such acts and omissions on his part as have been approved by the Chief Labour Commissioner.

NOTE: An approved list of Acts and Omissions for which fines can be imposed is enclosed at Appendix-I.

- 5.3 No fine shall be imposed on a worker and no deduction for damage or loss shall be made from his wages until the worker has been given an opportunity of showing cause against such fines or deductions.
- 5.4 The total amount of fine which may be imposed in any one-wage period on a worker shall not exceed an amount equal to three paise in a Rupee of the total wages, payable to him in respect of that wage period.
- 5.5 No fine imposed on any worker shall be recovered from him in installment, or after the expiry of sixty days from the date on which it was imposed.
- 5.6 Every fine shall be deemed to have been imposed on the day of the act or omission in respect of which it was imposed.

6.0 LABOUR RECORDS

- 6.1 The Contractor shall maintain a "Register of persons employed" on work on contract in form XIII of the CL (R&A) Central Rules 1971 (Appendix-B).
- 6.2 The Contractor shall maintain a "Muster Roll" register in respect of all workmen employed by him on the work under contract in from XVI of the CL (R&A) Rules 1971 (Appendix-C).
- 6.3 The Contractor shall maintain a "Wage Register" in respect of all workmen employed by him on the work in form (Appendix-D).
- 6.4 Register of accidents The Contractor shall maintain a register of accidents in such form as may be convenient at the work place but the same shall include the following particulars:
 - a) Full particulars of the labourers who met with accident.
 - b) Rate of wages
 - c) Sex
 - d) Age
 - e) Nature of accident and cause of accident.
 - f) Time and date of accident.
 - g) Date and time when he/she admitted in Hospital
 - h) Date of discharge from the Hospital
 - i) Period of treatment and result of treatment
 - j) Percentage of loss of earning capacity and disability as assessed by Medical Officer.
 - k) Claim required to be paid under Workmen's Compensation Act.
 - I) Date of payment of compensation.
 - m) Amount paid with details of the person to whom the same was paid.
 - n) Authority by whom the compensation was assessed.
 - o) Remarks.

6.5 Register of Fines – The Contractor shall maintain a "Register of Fines" in the form

(Appendix-H).

The Contractor shall display in a good condition and in a conspicuous place of work the approved list of Acts and Omission for which fines can be imposed (Appendix-I).

- 6.6 Register of Deductions-The Contractor shall maintain a "Register of Deductions" for damage or loss in form (Appendix-J).
- 6.7 Register of Advances-The Contractor shall maintain a "Register of Advances" in form (Appendix-K).
- 6.8 Register of Overtime-The Contractor shall maintain a "Register of Overtime" in form (Appendix-L).

7.0 ATTENDANCE CARD-CUM WAGE SLIP:

- 7.1 The Contractor shall issue an attendance card-cum-wage slip to each workman employed by him in the specimen form at (Appendix-E).
- 7.2 The card shall be valid for each wage period.
- 7.3 The Contractor shall mark the attendance of each workman on the card twice each day, once at the commencement of the day and again after the rest interval, before he actually starts work.
- 7.4 The card shall remain in possession of the worker during the wage period under reference.
- 7.5 The Contractor shall complete the wage slip portion on the reverse of the card at least a day prior to the disbursement of wages in respect of the wage period under reference.
- 7.6 The Contractor shall obtain the signature or thump impression of the worker on the wage slip at the time of disbursement of wages and retain the card with himself.

8.0 EMPLOYMENT CARD

The Contractor shall issue an Employment Card in form to each worker within three days of the employment of the worker (Appendix-F).

9.0 SERVICE CERTIFICATE

On termination of employment for any reason whatsoever the Contractor shall issue to the workman whose services have been terminated, a service certificate in from Appendix-G.

10.0 PRESERVATION OF LABOUR RECORDS

All records required to be maintained under Regulations Nos. 6 and 7 shall be preserved in original for a period of three years from the date of last entries made in them and shall be made available for inspection by the Engineer-In-Charge, Labour Officer.

11.0 POWER OF LABOUR OFFICERS TO MAKE INVESTIGATIONS INQUIRY

The Labour Officer or any other person authorized by EPI on its behalf shall have power to make inquires with a view to ascertaining and enforcing due and proper observance of the Fair Wage Clauses and the Provisions of Regulations. He shall investigate into any complaint regarding the default made by the Contractor or sub-Contractor in regard to such provision.

12.0 INSPECTION OF BOOK AND SLIPS

The Contractor shall allow inspection of all the prescribed labour records to any of his workers or to his agent at a convenient time and place after due notice is received or to the Labour officer or any other person, authorized by the Central Government on his behalf.

13.0 SUBMISSION OF RETURNS

The Contractor shall submit periodical returns as may be specified from time to time.

14.0 AMENDMENTS

EPI may from to time, add or amend the regulations and on any question as to the application, interpretation or effect of these regulations the decision of the Zonal Chief concerned shall be final.

Appendix – 'A'

LABOUR BOARD

Name of work

Name of Contractor

Address of Contractor

Name and Address of Unit

Name of Labour Enforcement Officer

Address of Labour Enforcement Officer

Date:

S. No.	Category	Minimum wage fixed	Actual wages paid	Number present	Remarks

Weekly Holiday

Wage Period

Date of Payment of wages

Working hours

Rest interval

Appendix – 'B'

FORM 13

SEE RULE 75

REGISTER OF WORKMEN EMPLOYED BY CONTRACTOR

Name and Address of Contractor

Name and Address of Establishment in/ under which contract is carried on

Nature and location of work

lo.	surname of workman	sex	Husbands Name	employment / designation	address of the workman (villag and Tehsil Talul and District)	k
1	2	3	4	5	6	7
	Date of mencement employment	impres	re or thumb sion of the orkman	Date of termination of employment	Reasons for termination	Remarks
	mencement	impres	sion of the	termination of		Remarks
	amencement employment	impres	sion of the orkman	termination of employment	termination	

Appendix – 'C'

FORM XVI

(See Rule 78(2) (193)

MUSTER ROLL

Name and address of Contractor

Name and address of establishment in/under which contract is carried on

Nature and location of work

Name and Address of Principal Employer

For the month / fortnight

S.No.	Name of the workman	Sex	Father's / Husband's Name	Dates	Remarks
1.	2	3	4	5.	
				1 2 3 4 5	

Appendix – 'D'

FORM XVII

[SEE RULE 78(2) (03)]

REGISTER OF WAGES

Name and address of Contractor

Name and address of establishment in/under which contract is carried on

Nature and location of work

Name and Address of Principal Employer

Wage period: per month/ fortnightly

S. No.	Name of Workman	Serial No. in the register of workman	Designation nature of work done	Nos. of days worked	Units of work done	Daily rate of wages/ piece rate	Basic Wages
1	2	3	4	5	6	7	8

Dearness allowance	Overtime	Other cash payments (Nature of payments to be indicated)	Total	Duration if any (indicate)	Net Amt paid	Signature thumb impression of the workman	Initial Contractor or his representative
9	10	11	12	13	14	15	16

Appendix – 'E'

FORM XIX

[SEE RULE 78 (2) (B)]

WAGESLIP

Name and address of Contractor

Name and Father's/Husband's Name of workman

Nature and location of work

For the Week/Fortnight/Month ending

- 1. No. of days worked
- 2. No. of Units worked in case of piece rate workers
- 3. Rate of daily wages/piece rate
- 4. Amount of overtime wages
- 5. Gross wages payable
- 6. Deductions if any
- 7. Net amount of wages paid

Sign of the Contractor

Appendix – 'E'

WAGE CARD

WAGE CARD NO.

NAME AND ADDRESS OF CONTR	ACTOR	DATE OF ISSUE
NATURE OF WORK WITH LOCATI	DESIGNATION	
NAME OF WORKMAN		MONTH/FORTNIGHT
RATE OF WAGES		
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 26 27 28 29 30 31	16 17 18 19 20 21 22 23 24 2	5
MORNING		RATE
EVENING		AMOUNT
INITIAL		
RECEIVED FROM	THE SUM OF RS.	ON ACCOUNT OF MY WAGON.

SIGNATURE

THE WAGE CARD IS VALID FOR ONE MONTH FROM THE DATE OF ISSUE.

Appendix - 'F'

FORM XIV

(SEE RULE 76)

EMPLOYMENT CARD

Name and address of Contractor

Name and address of establishment under which

The contract is carried out

Nature and location of work

Name and address of Principal Employer

- 1. Name of the workman
- 2. S. Name in the register of workman employed
- 3. Nature of Employment/Designation
- 4. Wage rate (with particulars of unit in case of piece work)
- 5. Wage Period
- 6. Tenure of employment
- 7. Remarks

Signature of Contractor

Appendix – 'G'

FORM XV

(SEE RULE 77)

SERVICE CERTIFICATE

Name and address of Contractor

Nature and location of work

Name and address of workman

Age or date of birth

Identification Marks

Father's/Husband's Name

Name and address of establishment in under which contract is carried on

Name and address of Principal Employer

Total period of which employed

S.No.	From	То	Nature of work	Rate of wages (with particular s of unit In case of piece work)	Remarks
1	2	3	4	5	6

Signature

Appendix – 'H'

FORM XII

[SEE RULE 78 (2) (D)]

REGISTER OF FINES

Name and address of Contractor

Name and address of establishment in/ under which contract is carried on

Nature and location of work

Name and address of workman

S.No.	Name of workman		Designation/nature of employment	Act/Omission for which fine imposed	Date of offence
1	2	3	4	5	6

Whether workman showed causes against fine	Name of person in whose presence employees explanation was heard	Wage period and wages payable	Amount of fine Imposed	Date on which fine realized	Remarks
7	8	9	10	11	12

LIST OF ACTS AND OMISSIONS FOR WHICH FINES CAN BE IMPOSED

In accordance with rule of Labour Regulations, to be displayed prominently at the Site of work both in English and local language.

- 1. Willful insubordination or disobedience, whether alone or in combination with other.
- 2. Theft, fraud or dishonestly in connection with Contractors beside a business or property of EPI.
- 3. Taking or giving bribes or any illegal gratifications.
- 4. Habitual late attendance.
- 5 Drunk-ness fighting riotous or disorderly or indifferent behaviour.
- 6. Habitual negligence.
- 7. Smoking near or around the area where combustible or other materials are locked.
- 8. Habitual indiscipline.
- 9. Causing damage to work in the progress or to property of EPI or of the Contractor.
- 10. Sleeping on duty.
- 11. Malingering or slowing down work.
- 12. Giving the false information regarding name, age, fathers name etc.
- 13. Habitual loss of wage cards supplied by the Employer.
- 14. Unauthorized use of Employers property or manufacturing or making of unauthorized articles at the work place.
- 15. Bad workmanship in construction and maintenance by skilled workers, which is not approved by EPI for which the Contractors are compelled to undertake rectifications.
- 16. Making false complaints and/or misleading statements.
- 17. Engaging on trade within the premises of the establishment.
- 18. Any unauthorized divulgence of business affairs of the employees.
- 19. Collection or canvassing for the collection of any money within the premises of an establishment unless authorized by the Employer.
- 20. Holding meeting inside the premises without previous sanction of the Employers.
- 21. Threatening or intimidating any workman or employee during the working hours within the premises.

Appendix – 'J'

FORM XX

[SEE RULE 78 (2) (D)]

REGISTER OF DEDUCTION FOR DAMAGES OR LOSS

Name and address of Contractor

Name and address of establishment in/ under which contract is carried on

Nature and location of work

S.No.	Name of workman	Father's/Husband Name	Designation/nature of employment	Particulars of damage or loss	Date of damage/loss
1	2	3	4	5	6

				Date o	of recovery	
Whether workman showed cause against deductions	Name of person in whose presence employees explanation was heard	Amount of deduction Imposed	No. of installment	First Installment	Last Installment	Remarks
7	8	9	10	11	12	13

Appendix – 'K'

FORM XXII

[SEE RULE 78(2)]

REGISTER OF ADVCANCES

Name and address of Contractor

Name and address of establishment in/ under which contract is carried on

Nature and location of work

S.No.	Name of workman	Father's/Husband Name	Designation/nature of employment	Wages period and wages payable	Date and amount of advance given
1	2	3	4	5	6

Purpose / for which advance made	ich advance installments		Date on which last installment was repaid	Remarks
7	8	9	10	11

Appendix – 'L'

FORM XXIII

[See Rule 78(2) (E)]

REGISTER OF OVERTIME

Name and address of Contractor

Name and address of establishment in/ under which contract is carried on

Nature and location of work

S.No.	Name of workman	Father's/Husband Name	Sex	Designation/ nature of employment	Date on which overtime worked
1	2	3	4	5	6

Total overtime worked or production in case of piece rated	Normal rate of wages	Overtime rate of wages	Overtime earning	Rate on which overtime wages paid	Remarks
7	8	9	10	11	12

APLICATION FOR EXTENSION OF TIME

(To be completed by the Contractor)

PART-I

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

a)	First extension vide Engineer-in- charge letter Nodate	Months	Days
b)	2nd extension vide Engineer-in- charge letter No date	Months	Days
c)	3rd extension vide Engineer-in- charge letter No date	Months	Days
d)	4th extension vide engineer-in- charge letter No date	Months	Days

Total extension previously given

- 9. Reasons for which extension have been previously given (copies of the previous application should be attached)
- 10. Period for which extension is applied for:
- 11. Hindrances on account of which extension is applied for with dates on which hindrances occurred, and the period for which these are likely to last.
 - a) Serial No.
 - b) Nature of hindrance

- c) Date of Occurrence
- d) Period for which it is likely to last
- e) Period for which extension required for this particular hindrance.
- f) Over lapping period, if any, with reference to item
- g) Net extension applied for
- h) Remarks, if any

Total period for which extension is now applied for on account of hindrances mentioned above Month/ days.

- 12. Extension of time required for extra work.
- 13. Details of extra work and on the amount involved:
 - a) Total value of extra work
 - b) Proportionate period of extension of time based on estimated amount put to tender on account of extra work.
- 14. Total extension of time required for 11 & 12 Submitted to the Engineer-In-Charges office.

SIGNATURE OF CONTRACTOR

DATE

APPLICATION FOR EXTENSION OF TIME

(PART – II)

- 1. Date of receipt of application from Contractor for the work in the Engineer-In-Charge office.
- 2. Acknowledgement issued by Engineer-In-Charge vide his letter No dated
- 3. Engineer-In-Charge remarks regarding hindrances mentioned by the Contractor.
 - i) Serial No.
 - ii) Nature of hindrance
 - iii) Date of occurrence of hindrance
 - iv) Period for which hindrance, is likely to last
 - v) Extension of time period applied for by the Contractor
 - vi) Over lapping period, if any, giving reference to items which over lap
 - vii) Net period for which extension is recommended.
 - viii) Remarks as to why the hindrance occurred and justification for extension recommended.
- 4. Engineer-In-Charge recommendations.

(The present progress of the work should be stated and whether the work is likely to be completed by the date upto which extension has been applied for. If extension of time is not recommended, what compensation is proposed to be levied under the agreement.

SIGNATURTE OF ENGINEER-IN-CHARGE

APPROVAL OF ZONAL HEAD

PROFORMA FOR EXTENSION OF TIME

PART-III

То

NAME

ADDRESS OF THE CONTRACTOR

SUBJECT:

Dear Sir(s)

Reference your letter No ______ dated _____, in connection with the grant of extension of time for completion of the work.....

The date of completion for the above mentioned work, is as stipulated in the agreement, dated

Extension of time for completion of the above mentioned work is granted upto______, without prejudice to the right of EPI to recover compensation for delay in accordance with the provision made in the relevant Clause (s) of the said agreement dated the ___/ ___/ ___. It is also clearly understood that EPI shall not consider any revision in contract price or any other compensation whatsoever due to grant of this extension.

Provided that notwithstanding the extension hereby granted, time is and shall still continue to be the essence of the said agreement.

Yours faithfully,

FOR EPI LTD.

FORMAT NO: EPI/MMD/F/26

PROFORMA FOR BANK GURANTEE IN LIEU OF EARNEST MONEY DEPOSIT

In consideration of Chairman & managing Director, Engineering Projects (India) Limited, (A Govt. of India Enterprise), Core-3, Scope Complex, Lodhi Road, New Delhi Pin-110003. (hereinafter called the EPI) having agreed to accept bank Guarantee of Rs lieu of EARNEST in MONEY DEPOSIT from (hereinafter called the Supplier/ Contractor/ Sub-Contractor, which expression shall include its heirs, successors and assignees) in respect of the Tender for

We, bank having its registered/head office at (hereinafter referred to as the Bank) do hereby agree and undertake to pay to EPI without demur or protest an amount not exceeding Rs...... on demand by EPI.

We the above said Bank further agree and undertake to pay the said amount of Rs..... without any demur on demand within 48 hours. Any demand made on the Bank by EPI shall be conclusive as regards the amount due and payable by the Bank under this guarantee.

We, the above said Bank, further agree that EPI shall have full liberty, without our consent and without affecting in any manner our obligation to verify, modify or delete any of the conditions.

We, the above said Bank, lastly undertake not to revoke this guarantee during its currency except with the prior consent of EPI in writing.

Dated......200.

For and on behalf of the Bank

<u>NOTE</u>: on a Non-Judicial stamp paper of Rs. 100/- (Rupees One hundred only)

FORMAT NO. EPI/MMD/F/17

SECURITY DEPOSIT CUM PERFORMANCE BANK GUARANTEE

The Chairman & Managing Director (A Govt. of India Enterprise), Engineering Projects (India) Ltd. Core-3, SCOPE Complex 7, Institutional Area, Lodhi road New Delhi –110 003

Dear Sir,

In consideration of the Chairman & Managing Director, Engineering Projects (India) Ltd. (A Govt. of India Enterprise), Core-3, Scope Complex, 7 Institutional Area, Lodhi Road, New Delhi – 110 003 (hereinafter called 'EPI' which expression shall unless repugnant to the subject or context includes its successors and assigns) having agreed under the terms and conditions of Supply Contract/Contract/Sub-Contract no.

____Dated_____made between M/s

(hereinafter referred to as the said Supplier/Contractor/Sub-Contractor) which expression shall unless repugnant to the subject or context includes its successors and assigns) and EPI in connection with (hereinafter called 'The said Supply Contract/Contract/Sub-Contract) to accept a Deed Security Deposit-cum-Performance Bank Guarantee as herein provided for _______ in lieu of :

- a) The Security Deposit to be made by the said Supplier/Contractor/Sub-Contractor for the due fulfillment by the said Supplier/Contractor/Sub-Contractor of the terms and conditions contained in the said Supply Contract/Contract/Sub-contract, and
- b) Fulfillment of the conditions of the said Supply Contract /Contract/Sub-Contract by furnishing a security for the performance of the works and/or equipment/materials supplied in accordance with conditions of the said Supply Contract/ Contract/ Sub-Contract.
- (hereinafter referred to as "the said bank 1. We which expression shall unless repugnant to the subject or context includes its successors and assigns) and having our registered office at _ do hereby unconditionally and irrevocably undertake and agree to indemnify and keep indemnified EPI from time to time to the extent of () Only against any loss, damages, costs, charges and expenses caused to or suffered by or that may be caused or suffered by EP II by reason of any breach or breaches by the said Supplier/Contractor/Sub-Contractor of any of the terms and conditions contained in the said Supply Contract/Contract/Sub-Contract and or any amount becoming due for non-

performance and /or penalty as assessed by EPI and top unconditionally pay the amount claimed by EPI on demand and without demur and protest.

- 2. We the said Bank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Supply Contract/Contract/Sub-Contract and till all the dues of EPI under the said Supply Contract/Contract/Sub-Contract or by virtue of any of the terms and conditions governing the said Supply Contract/ Contract/ Contract/ Contract/ Contract/ Contract/ Sub-Contract have been fully paid and its claims satisfied or discharged and till EPI certifies that the terms and conditions of the said Supply Contract/Contract/Contract/Sub-Contract/Sub-Contract have been fully and properly carried out by the said Supplier/Contractor/Sub-Contractor and accordingly discharge this guarantee subject, however, that EPI shall have no claim under this guarantee after 6 months from the date of expiry of the guarantee unless a notice of the claim under this guarantee has been served on the Bank before the expiry of the said period of 6 months.
- 3. EPI shall have the fullest liberty without affecting in any way the liability of the said Bank under this Guarantee or indemnity from time to time to vary any of the terms and conditions of the said Supply Contract/Contract/Sub-Contract to extend time of performance of the said Supply Contract/ Contract/ Sub-Contract or to postpone for any time and from time to time any power's exercisable by it against the said Supplier/Contractor/Sub-Contractor and either to enforce or forbear from enforcing any of the terms and conditions governing the said Supply Contract/ Contract/ Sub-Contract or securities available to EPI and the said Bank shall not be released from its liability under these presents by any exercise by EPI of the liberty with reference to the matters aforesaid or by reason of time being given to the said Supplier/Contractor/Sub-Contractor or of any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of so releasing the said Bank from its such liability.
- 4. We, the said Bank, further agree that EPI shall be the sole judge of and as to whether the said Supplier/Contractor/Sub-Contractor has committed any beach or breaches of any of the terms and conditions of the said Supply Contract/Contract/Sub-Contract and the extent of loss, damage, cost, charges and expenses caused to or suffered by or that may be caused to or suffered by EPI on account thereof and the decision of EPI that the said Supplier/Contractor/Sub-Contractor has committed such breach or breaches and as to the amount or amounts of loss, damages, costs, charges and expenses caused to or suffered by EPI from time to time shall be final and binding on the Bank.
- 5. This guarantee shall be a continuing guarantee and shall remain valid and irrevocable for all claims of EPI and liabilities of the said Supplier/Contractor/Sub-Contractor arising up to and until mid night of ______, subject the claim period as mentioned in para _____.
- 6. This guarantee shall be in addition to any other guarantee or security whatsoever that EPI may now or at any time anywise may have in relation to the said Supplier/Contractor/Sub-Contractor obligation/liabilities under and/or in connection with the said Supply Contract/Contract/Sub-Contract and EPI shall have full authority to take recourse to or enforce this guarantee in preference to any other guarantee or

security which EPI may have or obtain and there shall be no forbearance on the part of EPI IN ENFORCING OR REQUIRING ENFORCEMENT OF ANY OTHER SECURITY AND shall not have the effect of releasing the said Bank from its full liability hereunder:

- 7. EPI shall be at liberty without reference to the said Bank and without effecting the full liability of the said Bank hereunder to take any other security in respect of the said supplier's/Contractor's/sub-Contractor's obligations and/or liabilities under or in connection with the said Supply Contract/ Contract/ Sub-Contract.
- 8. This guarantee shall not be determined or affected by the liquidation or winding up, dissolution, or change of constitution or insolvency of the said Supplier/Contractor/Sub-Contractor, but shall in all respects and for all purposes be binding and operative until payment of all moneys paid to EPI in terms thereof.
- 9. The said Bank hereby waives all rights at any time inconsistent with the terms of this guarantee and the obligations of the said Bank in terms hereof shall not be anywise affected or suspended by reasons of any dispute or disputes having been raised by the said Supplier/Contractor/Sub-Contractor (whether or not pending before any arbitrator, tribunal or court) of any denial or liability by the said Supplier/ Contractor/Sub-Contractor stopping or preventing or purporting to stop or prevent any payment by the said Bank to EPI in terms hereof. The amount stated in any notice of demand addressed by EPI to the Guarantor Bank as liable to be paid to EPI by the Supplier/ Contractor/ Sub-Contractor on account of any losses or damages or costs, charges and /or expenses shall as between the said bank and EPI be conclusive evidence of the amount so liable to be paid to EPI or suffered or incurred by EPI as the case may be and payable by the said Bank to EPI in terms hereof. We, the said Bank further undertake that we shall pay forthwith the amount stated in the notice of demand to EPI without demur and protest.
- 10. We, the said bank undertake not to revoke this guarantee during its currency except with the consent of EPI in writing and agree that any change in the constitution of the aid Supplier/Contractor/Sub-Contractor or the said Bank shall not discharge our liabilities hereunder.
- 11. It shall not be necessary for EPI to proceed against the said Supplier/Contractor/Sub-Contractor before proceeding against the Bank and the guarantee herein contained shall be enforceable against the Bank notwithstanding EPI may have obtained any security which or obtain from the Supplier/Contractor/Sub-Contractor shall at the time when proceedings are taken against the said Bank hereunder be outstanding or unrealized.
- 12. Our liability under this guarantee shall be restricted to ______ and this guarantee shall remain in force until midnight of ______ unless a claim to enforce this guarantee is filed with us within six months from ______. (which is date of expiry of this guarantee), we shall be discharged from all liabilities under this guarantee thereafter.

DATED -----200...

FOR AND ON BEHALF OF BANK

Format No: EPI/MMD/F/15

PROFORMA FOR ADVANCE BANK GUARANTEE

То

The Chairman & Managing Director, Engineering Projects (India) Ltd., (A Govt.of India Enterprise), Core-3, Scope Complex, 7, Institutional Area, Lodhi Road, New Delhi—110 003.

Dear Sir,

- 1. In consideration of the Chairman & Managing Director, Engineering Projects (India) Limited, (A Govt. of India Enterprise), Core-3, Scope Complex, 7, Institutional Area, Lodhi Road, New Delhi - 110 003 (hereinafter called 'EPI' which expression shall includes its successors and assigns) having agreed under the terms and conditions of Supply Contract/ Contract/ Sub-Contract No.....dated...(hereinafter referred to as the said Supply Contract/ Contract/ Sub-Contract) EPI made between and.....hereinafter called the Supplier/ Contractor/ Sub-Contractor) which expression shall include its successors and assigns to make at the request of the Supplier/ Contractor/ Sub-Contractor a lump sum advance of Rs.....for utilising it only for the purposes of the said Supply Contract/ Contract/ Sub-Contract on his furnishing a guarantee acceptable to EPI.
- 3. We......Bank further agree that EPI shall be the sole judge of and as to whether the said Supplier/ Contractor/ Sub-Contractor has utilised or not utilised the said advance or any part thereof for the purposes of the said Supply Contract/ Contract/ Sub-Contract and/or as to whether the advance or any part thereof with

interest has been recovered or not and the finding of the EPI in this regard- shall be final and binding on us.

- 4. We, the said Bank further agree that the Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Supply Contract/ Contract/ Sub-Contract and till the said advance with interest has been fully recovered and its claims satisfied or discharged and till EPI certifies that the said advance with interest has been fully recovered from the Supplier/ Contractor/ Sub-Contractor.
- 5. EPI shall have the fullest liberty without affecting in any way the liability to the said Bank under this guarantee or indemnity from time to time to vary any of the terms and conditions of the said Supply Contract/ Contract/ Sub-Contract, or the advance or to extend time of performance by the said Supplier/ Contractor/ Sub-Contractor or to postpone for any time and from time to time any powers exercisable by it against the said Supplier/ Contractor/ Sub-Contractor and either to enforce or forbear from enforcing any of the terms and conditions governing the said Supply Contract/ Contract/ Sub-Contract or securities available to EPI and the said Bank shall not be released from its liability under these presents by any exercise by EPI of the liberty with reference to the matters aforesaid or by reason of time being given to the said Supplier/ Contractor/ Sub-Contractor or any other forbearance, act or omission on the part of the EPI or any indulgence by EPI to the said Supplier/ Contractor/ Sub-Contractor or of any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of so releasing the said Bank from its such liability.
- 6. The Bank hereby waives all rights at any time inconsistent with the terms of this guarantee/Undertaking and the obligations of the Bank in terms hereof shall not be anywise affected or suspended by reasons of any dispute or disputes having been raised by the Supplier/ Contractor/ Sub-Contractor (whether or not pending before any arbitrator, Tribunal or court) or any denial or liability by the Supplier/ Contractor/ Sub-Contractor stopping or preventing or purporting to stop or prevent any payment by the Bank to EPI in terms hereof.
- 7. The amount stated in any notice of demand addressed by EPI to Bank as liable to be paid to EPI by the Supplier/ Contractor/ Sub-Contractor, shall be conclusive evidence of the amount so liable to be paid to EPI by the Bank.
- 8. This guarantee/undertaking shall be in addition to any other guarantee or security whatsoever that EPI may now or any time anywise may have in relation to the Supplier's/ Contractor's/ Sub-Contractor's obligations of liabilities under and/or in connection with the said Supply Contract/ Contract/ Sub-Contract, and EPI shall have full authority to take recourse to or enforce this security in preference to any other guarantee or security which EPI may have or obtain and there shall be no forbearance on the part of EPI in enforcing or requiring enforcement of any other security and shall not have the effect of releasing the Bank from its full liability hereunder.
- 9. It shall not be necessary for EPI to proceed against the said Supplier/ Contractor/ Sub-Contractor before proceeding against the Bank and the guarantee herein contained shall be enforceable against the Bank notwithstanding any security which EPI may have obtained or obtain from the Supplier/ Contractor/ Sub-Contractor, shall at the time

when proceedings are taken against the said Bank hereunder be outstanding or unrealised.

- 10. We, the said Bank further undertake that we shall pay forthwith the amount stated in the notice of demand without demur and protest notwithstanding any dispute/difference pending between the parties before the arbitrator Tribunal or Court and/or dispute is being referred to arbitrator.
- 11. We, the said Bank undertake not to revoke this Guarantee during its currency except with the consent of EPI in writing and agree that any change in the Constitution of the said Supplier/ Contractor/ Sub-Contractor or the said Bank shall not discharge our liability hereunder.
- 12. This guarantee/undertaking shall be a continuing guarantee/undertaking and shall remain valid and irrevocable for all claims of EPI and liabilities of the Supplier/ Contractor/ Sub-Contractor arising up to and until midnight of.....
- 13. Notwithstanding anything contained herein above, our liability under this guarantee shall be restricted to Rs.....) and this guarantee shall remain in full force till..... unless a claim is made on us within 3 months from the date of expiry of this guarantee i.e. before all the claims under this guarantee shall be forfeited and we shall be relieved of and discharged from our liabilities hereunder.

Dated......day of200

For and on behalf of Bank

Format No: EPI/MMD/F-16

PROFORMA FOR PERFORMANCE BANK GUARANTEE

То

The Chairman & Managing Director, Engineering Projects (India) Ltd., (A Govt. of India Enterprise), Core-3, Scope Complex, 7, Institutional Area, Lodhi Road, New Delhi—110 003.

Dear Sir,

In consideration of the Chairman & Managing Director, Engineering Projects (India) Limited, (A Govt. of India Enterprise), Core-3, Scope Complex, 7, Institutional Area, Lodhi Road, New Delhi - 110 003 (hereinafter called 'EPI' which expression shall include its successors and assigns) having awarded to (hereinafter referred to as 'the Supplier/ Contractor/ Sub-Contractor' which expression shall wherever the subject or context so permits include its successors and assigns) a Supply Contract/Contract / Sub-Contract No. in terms inter alia, of EPI Letter No.dated...and the General Conditions of Contract/ General Purchase Conditions of EPI and upon the condition of the Supplier's/ Contractor's/ Sub-Contractor's furnishing security for the performance of the Supplier's/ Contractor's/ Sub-Contractor's obligations and/or discharge of the Supplier's/ Contractor's/ Sub-Contractor's liability under and/or in connection with the said Supply Contract/ Contract/ Sub-Contract up to a sum of Rs......(Rupees..... only) amount to.....percent of the total Supply Contract/ Contract/ Sub-Contract Value.

- 3. EPI shall be at liberty without reference to the Bank and without effecting the full liability of the Bank hereunder to take any other security in respect of the Supplier's/ Contractor's / Sub-Contractor's obligations and/or liabilities under or in connection with the said Supply Contract/ Contract/ Sub-Contract and to vary the forms vis-à-vis the Supplier/ Contractor/ Sub-Contractor of the said Supply Contract/ Contract/ Contract or to grant time and/or indulgence to the Supplier/ Contractor/ Sub-Contractor or to reduce or to increase or otherwise vary the prices of the total Supply Contract/ Contract/ Sub-Contract or to reduce or to sub-Contract Value or to release or to forbear from enforcement of all or any of the security and/or any other security(ies) now or hereafter held by the EPI and no such dealing(s) reduction(s) increase(s) or other indulgence(s) or arrangements with the Supplier/ Contractor/ Sub-Contractor or release or forbearance whatsoever shall absolve the bank of the full liability to EPI hereunder or prejudice rights of EPI against the bank.
- 4. The guarantee/undertaking shall not be determined or affected by the liquidation or winding up, dissolution, or change of constitution or insolvency of the Supplier/ Contractor/ Sub-Contractor but shall in all respects and for all purposes be binding and operative until payment of all moneys made to EPI in terms thereof.
- 5. The Bank hereby waives all rights at any time inconsistent with the terms of this guarantee/undertaking and the obligations of the Bank in terms hereof shall not be anywise affected or suspended by reasons of any dispute or disputes having been raised by the Supplier/ Contractor/ Sub-Contractor (whether or not pending before any arbitrator, Tribunal or Court) of any denial or liability by the Supplier/ Contractor/ Sub-Contractor stopping or preventing or purporting to stop or prevent any payment by the Bank to the EPI in terms hereof.
- 6. The amount stated in any notice of demand addressed by EPI to Bank as liable to be paid to EPI by the Supplier/ Contractor/ Sub-Contractor or as suffered or incurred by the EPI on account of any losses or damages or costs, charges and/or expenses shall be conclusive evidence of the amount so liable to be paid to EPI or suffered or incurred by EPI as the case may be and shall be payable by the Bank to EPI in terms hereof.

- 7. This guarantee/undertaking shall be a continuing guarantee/undertaking and shall remain valid and irrevocable for all claims of EPI and liabilities of the Supplier/ Contractor/ Sub-Contractor arising up to and until midnight of.....
- 8. This guarantee/undertaking shall be in addition to any other guarantee or security whatsoever that EPI may now or any time anywise may have in relation to the Supplier's/ Contractor's/ Sub-Contractor's obligations of liabilities under and/or in connection with the said Supply Contract/ Contract/ Sub-Contract, and EPI shall have full authority to take recourse to or enforce this security in preference to any other guarantee of security which EPI may have or obtain and here shall be no forbearance on the part of EPI in enforcing or requiring enforcement of any other security and shall not have the effect of releasing the Bank from its full liability hereunder.
- 9. It shall not be necessary for EPI to proceed against the said Supplier/ Contractor/ Sub-Contractor before proceeding against the Bank and the guarantee herein contained shall be enforceable against the Bank notwithstanding any security which the EPI may have obtained or obtain from the Supplier/ Contractor/ Sub-Contractor, shall at the time when proceedings are taken against the said Bank hereunder be outstanding or unrealised.
- 10. We the said Bank undertake not to revoke this guarantee during its currency except with the consent of EPI in writing and agree that any change in the constitution of the said Supplier/ Contractor/ Sub-Contractor or the sand bank shall not discharge our liability hereunder.
- 11. Wethe said Bank further undertake that we shall pay forthwith the amount stated in the notice of demand without demur and protest notwithstanding any dispute/difference pending between the parties before the arbitrator Tribunal or Court and/or any dispute is being referred to arbitrator.

For and on behalf of Bank

PROFORMA FOR INDEMNITY BOND TO BE EXECUTED BY THE CONTRACTOR FOR SECURED ADVANCE AGAINST MATERIALS SUPPLIED FOR THE PROJECT

(On non-judicial stamp paper of appropriate value)

INDEMNITY BOND

WHEREAS EPI has awarded to the Contractor a Contract for the work of.....vide its letter of Intent/Work Order No...... dated....... (hereinafter called the "Contract") in terms of which EPI is required to give "Secured Advance" to the Contractor as per Clause no. 35 of the General Conditions of Contract against supply of materials by the Contractor for the project on the security of materials, the quantities, rates and other particulars of which are detailed in the Bill of Quantities for the said Contract.

And WHEREAS by virtue of Clause no. 35 of the General Conditions of Contract of the said Contract, the Contractor is required to execute an Indemnity Bond in favour of EPI for the amount of "Secured Advance" towards the materials actually supplied by the Contractor for the Contract Work from time to time to EPI for the purpose of performance of the Contract. (hereinafter called the "Materials").

"AND WHEREAS the Contractor has applied to EPI that they may be allowed "Secured Advance" on the security of materials absolutely belonging to them and brought by them to the site of the works for use in construction of the work".

NOW THEREFORE, This Indemnity Bond witnesseth as follows:

1. That in consideration of the "Secured Advance" being given to the Contractor as mentioned in the Contract, for the purpose of performance of the Contract, the Contractor hereby undertakes to indemnify and shall keep EPI indemnified, for the Actual Cumulative Amount of the "Secured Advance" given to the Contractor from time to time against the said Contract. The Contractor hereby acknowledges actual receipt of the materials etc. as per despatch title documents being /to be handed over to EPI from time to time. The Contractor shall hold such materials in trust as a "Trustee" for and on behalf of EPI.

- 2. That the Contractor is obliged and shall remain absolutely responsible for the safe transit/protection and custody of the materials at EPI's project site against all risks whatsoever till the materials are duly used/erected in accordance with the terms of the Contract and the plant/package duly erected and commissioned in accordance with the terms of the Contract is taken over by EPI and the Secured Advance is fully adjusted/recovered as per terms of the Contract. The Contractor undertakes to keep EPI harmless against all losses, damages, deterioration and shortages that may be caused to the materials.
- 3. The Contractor undertakes that the materials shall be used exclusively for the performance/execution of the Contract strictly in accordance with its terms and conditions and no part of the materials shall be utilized for any other work or purpose whatsoever. It is clearly understood by the Contractor that non-observance of the obligations under this Indemnity Bond by the Contractor shall inter-alia constitute a criminal breach of trust on the part of the Contractor for all intents and purposes including legal/penal consequences.
- 4. That EPI is and shall remain the exclusive owner of the materials free from all encumbrances, charges or liens of any kind, whatsoever. The materials shall at all times be open to inspection and checking by the Engineer In Charge or other employees/agents authorized by him in this regard. Further, EPI shall always be free at all times to take possession of the materials in whatever form the materials may be, if in its opinion, the materials are likely to be endangered, misutilised or converted to uses other than those specified in the Contract, by any acts of omission or commission on the part of the Contractor or any other person or on account of any reason whatsoever and the Contractor binds himself and undertakes to comply with the directions of demand of EPI to handover the materials without any demur or reservation.
- 5. That this Indemnity Bond is irrevocable. If at any time any loss or damage occurs to the materials or the same or any part thereof is mis-utilised in any manner whatsoever, then the Contractor hereby agrees that the decision of the Engineer-In-Charge of EPI as to assessment of loss or damage to the materials shall be final and binding on the Contractor. The Contractor binds itself and undertakes to replace the lost and /or damaged materials at its own cost and/or shall pay the amount of 'Secured Advance' to EPI without any demur, reservation or protest. This is without prejudice to any other right or remedy that may be available to EPI against the Contractor to recover any amount or all the amounts of this Bond from any dues of the Contractor under the Contract or as per the law.
- 6. This Bond shall remain in force and effect till the completion of the work as per the aforesaid Contract and till all the amount recoverable under this Bond from the Contractor is fully recovered by EPI. The Bond can not be revoked by the Contractor without the written consent of EPI.
- 7. That Contractor also agrees that any change in the constitution of the Contractor shall not discharge them from their obligation and liability.
- 8. This Bond shall be treated as an additional addage to the Contract and nothing herein contained shall be construed to adversely affect the rights of EPI in the Contract.

IN WITNESS WHEREOF, the Contractor has signed this Indemnity Bond through its duly authorized representative on the date and place first above written.

For and on behalf of Contractor

(Contractor's Name)

WITNESS: Signature 1. 1. Signature Name (Executant) 2. Name Designation 3. Address (Authorised representative) 2. 1. Signature 2. Name 3. Seal Address

Signature of Contractor

FORM FOR GUARANTEE BOND

FOR ANTI-TERMITE TREATMENT

THIS AGREEMENT made this _____ day of Two thousand _____ between M/s _____ (hereinafter called the guarantor of the one part and M/s Engineering Projects (India) Limited, hereinafter called EPI hereinafter called the OWNER of the other part.

Whereas this agreement is supplementary to the contract hereinafter called the contract dated______ made between the guarantor of the one part and Engineering Projects (India) Ltd., of the other part whereby the Contractor inter-alia, understood to render the buildings and structures in the said contract recited, completed, termite proof. And whereas the guarantor agreed to give a guarantee to the effect that the said structure will remain termite proof for TEN YEARS to be so reckoned from the date after the maintenance period prescribed in the contract expires.

During this period of guarantee the guarantor shall make good all defects and for that matter shall replace at his risk and cost such wooden member as may be damaged by termite and in case of any other defect being found, he shall render the building termite proof at his cost to the satisfaction of the Engineer-In-Charge and shall commence the works of such rectification within seven days from date of issuing notice from the Engineer-In-Charge calling upon him to rectify the defects falling which the work shall be got done by EPI/ OWNER by some other Contractor at the guarantor's cost and risk and in the later case the decision of the Engineer-In-Charge as to the cost recoverable from the guarantor shall be final and binding.

That if the Guarantor fails to execute the Anti-Termite treatment or commits breaches hereunder then the Guarantor will indemnify EPI against all losses damages, cost expenses or otherwise which may be incurred by him by reasons of any default on the part of the guarantor in performance and observance of this supplemental Agreement. As to the amount of loss and or damage and/or cost incurred by EPI/ OWNER, the decision of the Engineer-In-Charge will be final and binding on the parties.

In witness where of these presents have been executed by the Guarantor_____ and by______ for and on behalf of EPI on the day of month and year first above written.

Signed sealed and delivered by (Guarantor)

IN THE PRESENCE OF: 1.

••

2.

Signed for and on behalf of EPI by/ in presence of:

1.

2.

GUARANTEE TO BE EXECUTED BY CONTRACTOR FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF WATER PROOFING WORKS

WHEREAS this agreement is supplementary to a contract (hereinafter called the Contract), dated and made between the GUARANTOR OF THE ONE part and EPI of the other part, whereby the Contractor, inter-alia, undertook to render the buildings and structures in the said contract recited completely water and leak proof.

AND WHEREAS the Guarantor agreed to give a guarantee to the effect that the said structures will remain water and leak proof for ten years from the date of handing over of the structure of water proofing treatment.

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

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

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

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

That if the Guarantor fails to execute the waterproofing or commits breach thereunder, then the Guarantor will indemnify the principal and his successors against all laws

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 EPI, the decision of the Engineer-In-Charge will final and binding on the parties.

IN WITNESS WHEREOF these presents have been executed by the Obligator,,,,.... and by And for and on behalf of EPI on the day, month and year first above written.

Signed, sealed and delivered by Obligator in the presence of-

1.

2.

Signed for and on behalf of EPI by _____

In presence of :

1.

2.

AGREEMENT FORM

This agreement made this day of (Month) (Year), between THE **ENGINEERING PROJECTS (INDIA) LIMITED (EPI)**, (A Govt. of India enterprise) a company incorporated under the Companies Act, 1956 having its Registered and Corporate Office at Core-3, Scope Complex, 7, Institutional area, Lodhi Road, New Delhi – 110003 (hereinafter referred to as the "EPI" which expression shall include its administrators, successors, executors and assigns) of the one part and **M/s (NAME OF CONTRACTOR)** (hereinafter referred to as the 'Contractor' which expression shall unless the context requires otherwise include its administrators, successors, executors and permitted assigns) of the other part.

WHEREAS, EPI, is desirous of construction of **(NAME OF WORK)** (hereinafter referred to as the "PROJECT") on behalf of the **(NAME OF OWNER/MINISTRY)** (hereinafter referred to as "OWNER"), and had invited Tenders as per Tender Documents vide NIT No. _____.

AND WHEREAS (NAME OF CONTRACTOR) had participated in the above referred Tender vide their tender dated _____ and EPI has accepted their aforesaid Tender and award the contract for (NAME OF PROJECT) on the terms and conditions contained in its Letter of Intent No. _____ and the documents referred to therein, which have been unequivocally and unconditionally accepted by (NAME OF CONTRACTOR) vide their Letter of Undertaking dated _____ resulting into a contract.

NOW THEREFORE THIS DEED WITNESSETH AS UNDER:

ARTICLE 1.0 – AWARD OF CONTRACT

1.1 SCOPE OF WORK

EPI has awarded the contract to **(NAME OF CONTRACTOR)** for the work of **(NAME OF WORK)** on the terms and conditions in its Letter of intent No. ______ dated ______ and the documents referred to therein. The award of work has taken effect from **(DATE)** i.e. the date of issue of aforesaid letter of intent. The terms and expressions used in this agreement shall have the same meanings as are assigned to them in the "Contract Documents" referred to in the succeeding Article.

ARTICLE 2.0 – CONTRACT DOCUMENTS

- 2.1 The contract shall be performed strictly as per the terms and conditions stipulated herein and in the following documents attached herewith (hereinafter referred to as "Contract Documents").
 - a) EPI Notice Inviting Tender vide No. _____ date _____and EPI's Tender Documents consisting of:
 - i) Instructions to Tenderers and General Conditions of Contract (GCC) alongwith amendments/errata to GCC (if any) issued (Volume-I).

- ii) Additional Conditions of Contract including Appendices & Annexures, Volume-II.
- iii) Bill of Quantities alongwith amendments/corrigendum of schedule items, if any (Volume-III).
- iv) Technical Specifications
- v) Drawings vi)
- b) (NAME OF CONTRACTOR) letter/proposal no._____ dated _____ and their subsequent communication:

i) Letter of Undertaking of Tender Conditions dated	
ii)	
iii)	
,	

- 2.2 EPI's detailed Letter of Intent No. _____ dated ____ including Bill of Quantities. Agreed time schedule, Contractor's Organisation Chart and list of Plant and Equipments submitted by Contractor.
- 2.3 All the aforesaid contract documents referred to in Para 2.1 and 2.2 above shall form an integral part of this Agreement, in so far as the same or any part thereof conform, to the Tender Documents and what has been specifically agreed to by EPI in its Letter of Intent. Any matter inconsistent therewith, contrary or repugnant thereto or deviations taken by the Contractor in its "TENDER" but not agreed to specifically by EPI in its Letter of Intent, shall be deemed to have been withdrawn by the Contractor without any cost implication to EPI. For the sake of brevity, this Agreement alongwith its aforesaid contract documents and Letter of Intent shall be referred to as the "Contract".

ARTICLE 3.0 – CONDITIONS & CONVENANTS

- 3.1 The scope of Contract, Consideration, Terms of Payments, Advance, Retention Moneys, Taxes wherever applicable, Insurance, Agreed Time Schedule, Compensation for delay and all other terms and conditions contained in EPI's Letter of Intent No. _____ dated _____ are to be read in conjunction with other aforesaid Contract Documents. The contract shall be duly performed by the Contractor strictly and faithfully in accordance with the terms of this contract.
- 3.2 The scope of work shall also include all such items which are not specifically mentioned in the Contract Documents but which are reasonably implied for the satisfactory completion of the entire scope of work envisaged under this contract unless otherwise specifically excluded from the scope of work in the Letter of Intent.
- 3.3 Contractor shall adhere to all requirements stipulated in the Contract documents.
- 3.4 Time is the essence of the Contract and it shall be strictly adhered to. The progress of work shall conform to agreed works schedule/contract documents and Letter of Intent.
- 3.5 This agreement constitutes full and complete understanding between the parties and terms of the presents. It shall supersede all prior correspondence to the extent of inconsistency or repugnancy to the terms and conditions contained in

Agreement. Any modification of the Agreement shall be effected only by a written instrument signed by the authorized representative of both the parties.

3.6 The total contract price for the entire scope of this contract as detailed in Letter of Intent is Rs. ______ (Rupees ______ only), which shall be governed by the stipulations of the contract documents.

ARTICLE 4.0 – NO WAIVER OF RIGHTS

4.1 Neither the inspection by EPI or the Engineer-In-Charge or Owner or any of their officials, employees or agents nor order by EPI or the Engineer-In-Charge for payment of money or any payment for or acceptance of, the whole or any part of the work by EPI or the Engineer-In-Charge nor any extension of time nor any possession taken by the Engineer-In-Charge shall operate as waiver of any provisions of the contract, or of any power herein reserved to EPI, or any right to damage herein provided, nor shall any waiver of any breach in the contract be held to be a waiver of any other or subsequent breach.

ARTICLE 5.0 – GOVERNING LAWS AND JURISDICTION

5.1 The Laws applicable to this contract shall be the laws in force in India and as amended from time to time.

Jurisdiction shall be of the Court (s) stated in the 'Memorandum' to the 'Form of Tender" only.

5.2 Notice of Default

Notice of default given by either party to the other party under the Agreement shall be in writing and shall be deemed to have been duly and properly served upon the parties hereto, if delivered against acknowledgment due or by FAX or by registered mail duly addressed to the signatories at the address mentioned herein above.

IN WITNESS WHEREOF, the parties through their duly authorized representatives have executed these presents (execution whereof has been approved by the Competent Authorities of both the parties) on the day, month and year first above mentioned at New Delhi.

For and on behalf of:	For and on behalf of:
(NAME OF CONTRACTOR)	M/s. Engineering Projects (I) Ltd.
WITNESS:	WITNESS:
1.	1.
2.	2.



ENGINEERING PROJECTS (INDIA) LIMITED (A Govt. of India Enterprise)

QUALITY CONTROL FORMATS AND CHECKLISTS

CONTRACT			CHECH	K LIST FOR CONCRETIN	IG					ईमीआ	5
			REF DI	RAWING No						(CD)	~
CONTRACT No.			LOCAT	TION BLOCK		FLOOR		AREA		Gra	
LAYOUT	Alignment Checked		\square	Level of base Checked		Dimensional Check (edges & diagonals)		Starers		Location of cutouts & services	5
STAGING / SCAFFOLDING		rigidity of Props, stays, onformity to scheme drgs.	\square								
FORMWORK	Qty. of form Props adeq	s and support uate		ertical form surface in lignment & plumb		Even Surface Oil sprayed		Gaps btwn shuttering are properly closed		No space for saggin Form work	g of
REINFORCEMENT	0	ending as per Bar nedule (Schedules attached)		dequate laps velds		Chair / cover blocks Placed as per scheme		Binding wire not Touching suttering		Fixtures, inserts Cunduits in position	
	Dowels & p Provided as			Valkway for abour provided			CLE	EARANCE from Elect. In-	charge		
PRE-CONCRETING	Concreting Arrangeme	nts		pproval of construction joint		Mixer / vibrator Condition & mixing		Top level of Concrete marked		Transporting & Placing arrangemen	t
POST-CONCRETING	Compactior Checked	1	R	emoval of Laitance		Post Concreting Level/Dimensions		No. of Cubes Cast			
DESHUTTERING & CLEARING	Curing days Water / com		SI 0	urface finish Nk		Concrete Test Results Ok					
SIGNATURE								W.O. IT	EM	UNIT	QTY.
CONTRACTOR	DATE	SITE ENGR		DATE		SITE INCHARGE		DATE		CONSULTANT	DATE

CONTRACT			CK LIST FOR MASONRY		_			ई मी आ	Ð
CONTRACT No.		LOC	CATION BLOCK	FLOOR		AREA		Err	
LAYOUT	Alignment & wal Thickness Check		Brick on edge (top course)						
SCAFFOLDING	Adequacy of props, Stays, platform	E	Rigidity of base	Movement Space		pproach to eight			
PRE-LAYING	Working arrangement & service provisions		Bricks as per specification	Mortar grade & mix As specified		Bricks noistened			
LAYING	Joint thickness & co Ht. As specified	urse	Joint alignment Checked	Vertical joints Properly mortar filled from	top				
	Raking of jonts Done (if applicable)	E	Bearing plaster for Concrete						
CURING AND CLEARING	Proper curing of con Joint	st.	Scaffloding removed (if required)						
SIGNATURE							W.O. ITEM	UNIT	QTY.
CONTRACTOR	DATE	SITE ENGR	DATE	SITE INCHARGE			DATE	CONSULTANT	DATE

CONTRACT			REF DRA	LIST FOR PLASTER						HE	भाइ
CONTRACT No.			LOCATIO	N BLOCK		FLOOR		AREA		C	7
SCAFFLODING	Platform			Stability		Movement space		Approach to Height			
SERVICE	All chasing Complete	work		ng in position g clamps etc.	\square	Patching Work complete		All door / wine Fixed in posit		Skirting to marked	floors
							CLI	EARANCE fro	m Elect. In-cha	arge	
SURFACE PREPARATION	Clearing & r surface	aking of		ghening king done		Fixing metal / lathe Chicken mesh		Mortar level Guides made		Surface moist Cement slurry	
PIASTERING	Mix & W/P o Checked as	compound per specification		ting / thickness pecified		Groove at Joints Provided		Corners & ed & at right Ang levels mainta	les lines &	Surface levele At straight edg	
FINISHING	Texture		Curii Days	ng s		Site cleared					
								ſ	W.O. ITEN		QTY
SIGNATURE									W.O. ITEN		- Ser i
CONTRACTOR	DATE	SITE ENGR		DATE		SITE INCHARGE			DATE	CONSULT	ANT DATE

CONTRACT			ECK LIST FOR LAYING OF E				ईमीआ	9
CONTRACT No.			CATION BLOCK		AREA		EPI	
EXCAVATION	Layout	E	Slope / cutting as per Specifications	Level				
LAYING/RCC	Bed concre Specificatio		RCC pipes as per Requirement	Jointing of Pipes				
	Boxing	E	Strata bore Dewatering (wherever required)					
Manholes	Bricks as pe	er specifications	Mortar as per specifications	Plastering				
	End of pipe	s plugged						
Back fillings	In layers					W.O. ITEM	UNIT	QTY.
SIGNATURE						-	-	
CONTRACTOR	DATE	SITE ENGR	DATE	SITE INCHARGE		DATE	CONSULTANT	DATE

			CHECK LIST FOR GRIT WASH				ईमोआ	1
			REF DRAWING No					7
CONTRACT No.			LOCATION BLOCK		FLOOR	 AREA	Gru	
SCAFFLODING	Platform		Stability		Movement space	Approach to Height		
SERVICE PROVISIONS			All chasing work Complete		All door / window frames Fixed in position			
	Roughening / I of surface don	Ũ	Fixing metal / lathe Chicken mesh		Mortar level Guides made	Surface moistened/ Cement slurry		
	Mix & W/P cor Checked agair		Coating / thickness As specified	r	Corners & edges sharp & at ight Angles lines & levels naintained			
	Fixing of bead drawing	ing for grooves as per	Lines and levels of grooves maintained		Vix as per specificaiton			
	Washing of top	p layer	Washing with Acid (light)		Curing day	Texture of final surface		
						W.O. ITEN	1 UNIT	QTY.
SIGNATURE CONTRACTOR	DATE	SITE ENGR	DATE		SITE INCHARGE	DATE	CONSULTANT	DATE

CONTRACT				CK LIST FOR WASTE/SOIL/ DRAWING No	VENT	PIPES ETC.			हमा आ	Ð
CONTRACT No.			LOC	ATION BLOCK		FLOOR		AREA	000	
MATERIAL	Make as s	specified		Thickness / class as Specified		Length & dia as specified		No cracks or holes visible		
LAYOUT	Space distril Alignment a			Plumb of vertfical line checked						
FIXING PIPE & FITTINGS		e for pipes fittings & erial as per size & fixing		Cutting & jointing as Specified		Fixing of fittings & specials as specified		Connection with corr. Internal networks	Temporary Plugging	
SMOKE TEST	Open ends p	plugged		Injection of smoke Pressure		No leakage of Smoke	\square	Section is Ok		
								W.O. ITE	M UNIT	QTY.
SIGNATURE CONTRACTOR	DATE	SITE ENGR		DATE		SITE INCHARGE		DATE	CONSULTANT	DATE

CONTRACT		RE	IECK LIST FOR MOSAIC FLOO F DRAWING No CATION BLOCK		AREA		हिम्	Ð
				12001(/((E))		\cup	
LAYOUT	Sub base Prepared	E	Provision of Services checked	Panelling (max size) Separator strips	Level of Sub base	checked		
	Slope Provision chec	sked						
BASE LAYER	Mix As specified	E	Water / cement Slurry applied	Cement concrete Thickness checked	Ramming Compaction			
	Evenness Checked	E	Joints treatment If any, provided					
TOP LAYER	Mix As specified	E	Proper leveling Done	Trowelling finish proper	Curing dor	ne		
FINISHING	Grinding	E	Final grinding	Repair applied at grinding stages	Polishing	W.O. ITEM	UNIT	QTY.
SIGNATURE								
CONTRACTOR	DATE	SITE ENGR	DATE	SITE INCHARGE		DATE	CONSULTANT	DATE

CONTRACT		CHECK LIST FOR GLAZED	TILE FLOORING	_	ईमी आई
CONTRACT No.		LOCATION BLOCK	FLOOR	AREA	EPU
LAYOUT	Service provisions Sanitary, electrical	Fixing pattern	Level of base & dado Height marked	Finish level Guide	Door & window frames in position
BASE	Mix	Thickness Layers	Watering / Cement slurry	Evenness	Verticality, corners At right angle
LAYING	Moistening of tiles	Plan position of cut pieces at corner	Cut to size Smooth edge	Chamfering of edges 8 edge matching proper	Raking / jointing
	Cement slurry adhesive	Level & plumb checked	No hollow sound on tapping		
FINISHING	Grounting of joints	Curing of joints			
SIGNATURE				W.O. IT	EM UNIT QT
CONTRACTOR	DATE SITE EN	GR DATE	SITE INCHARGE	DATE	CONSULTANT DA

CONTRACT			CHECK LIST FOR	WATER BOUND	MACADAN		ईमीआ	B
			LOCATION		-		(SPA)	
CONTRACT No.							(er G	
MATERIAL AGGREGATE	Gradation a	as specified	Crushing stre	ngth as	No of layers Thickness of layers starting from s	ubgrade		
SCREENINGS	Gradation a	as specfied	Crushing stre As specified	ngth	waiting & rolling as specified			
MOORUM	Gradation a	as specified	Silt content as	s specified	Fill material			
LAYOUT	•	of central line as per nd reference points	Marking of Ca way edges as	arriage s per drawings	Cross section levels of predecent Layer recorded			
WATER BOUND MACADAM	Templates thickness	placed of specified	Placing, level	ing of stone	Stone Screeing spread as specified			
	, ,	as specified section lands layer recorded	Application of specified	moorum as	Wet rolling / compaction as specified			
						W.O. ITEM	UNIT	QTY.
SIGNATURE CONTRACTOR	DATE	SITE ENGR		DATE	SITE INCHARGE	DATE	CONSULTANT	DATE

ANNEXURE-A

GENERAL SPECIFICATIONS OF EMRS BUILDINGS

General on MLP: -

- Layout of Building: All the building units shall be planned judiciously according to contours to minimise excess cutting and filling. The location of buildings shall be placed in such a way that internal road lengths shall be minimum.
- > Facing of Building: Building shall be planned preferably facing North or East.
- Kitchen and Dining shall be planned preferably in between the Boys and Girls Hostels.
- > Archery Ground shall preferably be aligned with face sighting towards North.
- Pump Room shall be centrally located in the campus. In case of hilly region, contours of the site should also be paid attention to take the benefit of flow of water under gravity & to minimise the pumping head.
- Septic tank shall be in the lower contour area near the building. The top level of septic tank shall preferably be 1.5 metre below the plinth level of the respective building, so that, due gradient can be maintained in laying the sewer pipe. Septic tank shall be of RCC with size designed as per IS 2470.1.1985 taking users as 200 nos & retention period as 2 years. Tentative size may be taken as 9.0 (L) x 2.70 (B) x 2.10 m (av.) (H) for the 1st Chamber & 4.50 (L) x 2.70 (B) x 1.70 m (H) for the 2nd Chamber both excluding free board.
- Rain Water Harvesting (RWH) System shall be near the Sump Well. Sump Well and RWH System shall not be in the vicinity of Septic tank and sewer chamber.
- Internal Roads: Level of CC Road at entry shall be raised by 150 mm w.r.t. the NGL at the entry gate and thereafter it will run in the campus 150 mm moderately or (av.) above the existing contour. Width of CC Road in front of School shall be 5.5 m and thereafter it will be 3.5 m.
- Protection Work: In case of construction in hilly region, due consideration should be given for safety of structures. If depth of cutting or filling is considerable then required protection measures in the form of retaining walls or stone pitching deemed necessary to be provided to maintain earth at its natural slope and avoid landslides during rains. If depth of cutting is moderate, stone pitching or random rubble masonry retaining wall may be provided as per site condition. When depth of cutting is more than 1.5 m suitable RCC retaining wall may be considered as per the site condition. Location and details of the same to be shown in the MLP.
- MLP shall be aligned as per contour indicating retaining walls, stone pitching, if any.
- Sump & Pump: Sump shall be provided for 50,000 litres capacity in Phase-I with a future provision of 50,000 Litres to be built in Phase-II. The Pump house shall

NDC Leaving pleAgrand 29:3.22

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be single and will be planned over the sump in Phase I only. Rectangular size Sump should be considered. Pump room with 12.0 Sqm floor area shall be single and will be planned over the sump in Phase I only. The top slab of UG sump shall be minimum 150mm above the NGL/FGL.

> The MLP Checklist is enclosed for reference at Annexure-III

General on Detailed Project Report (DPR)

The draft detailed estimate shall be shared first and once it is scrutinized, then only the same may be finally submitted after incorporating corrections/suggestions for approval.

- > The draft DPR shall be accompanied with
 - Approved Master Layout Plan duly signed with compliance of pending observation, if any.
 - Complete Architectural Drawings i.e. Floor plans, Elevations & Sections of the building units.
 - Detailed Soil Investigation Report along with remarks of the construction agency along with feasibility of the structure corresponding to the soil investigation report. At least, one bore hole should be done near the tentative location of each building unit i.e., School building, Boys' Hostel, Girls' Hostel, Kitchen & Dining, Qtrs area. The location of bore pit shall be clearly marked in MLP and Soil Investigation Report.
 - The DPR must include Structural Drawings of all the buildings including foundation proposal w.r.t. to bearing capacity of soil. The structural drawings of foundation, all structural members (Columns, beams, slabs, etc) of all EMRS buildings including sump, pump room, ESS, Septic Tank shall be shared with NESTS before sending the same for vetting. However, Only Vetted structural drawings shall be enclosed with the DPR only.
 - Details of measurement and its proper linking to the respective heads in BOQ and then to the main Detailed Estimate sheet (DE).
 - BOQ of EMRS Phase-II and Single-Phase shall be prepared on DSR 2019 with Item Sub-Head Wise (Vertically) and Heads Building & Service Wise (Horizontally). The applicable CPWD Cost Index shall be added as per relevant CPWD Cost Index order. A sample BOQ may be shared to PSUs for uniformity. The BOQ shall be divided into the approved Building & Service components such as School Building, Boys' Hostel, Girls' Hostel, Warden Residences (Boys'), Warden Residences (Girls'), Kitchen & Dinning, Principal Quarter, Type III Quarter, Type II Quarter, Security Cabin & Entrance Gate, Electrical Sub Station (ESS), Sump & Pump Room, Septic Tank & Soak Pit, Site Development Cutting & Filling, retaining wall/Stone Pitching, Compound Wall and Roads and other Services such as Plumbing, Fire Fighting Electrical Internal and, Electrical External, etc.

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- Cost Index in the estimate shall be supported by Documents from CPWD. In case the CPWD Cost index is not available for the particular location, the Detailed Estimate shall be submitted at par with DSR 2019 without considering Cost Index.
- The correctness in the quantities, rates and items are the responsibility of the concerned PSU. The quantities in the estimate are to be supported by details of measurements, MLP, designs, site conditions, approved drawings, inventories etc.
- The construction agency must ensure that the site is free from encroachment, HT Transmission lines/ HT Poles, forest cover/land etc. while submitting DPR.
- The DPR Checklist cum scrutiny sheet is enclosed at Annexure-IV

> Soil Investigation

- The soil investigation shall be conducted at the major building locations i.e., School Building, Boy's Hostel, Girls' Hostel, Type II/III Quarters etc.
- The location of building shall be clearly written in the report against each test pit.
- The N value in the Standard Penetration Test shall be obtained at every 0.5metre interval upto 3.0 metre, thereafter at the interval of 1.0 metre upto 10 metre depth or till it is required as per soil conditions.
- The soil strata (Type of Soil) shall be clearly marked in the report.
- The depth of water table shall be clearly indicated in the report.
- The safe bearing capacity of soil shall be calculated based on soil parameter applying proper correction factors & safety factor for settlement & shear.
- Recommendation of Type and Depth of foundation shall be provided by the Geo-Technical Consultant with name & designation in the summary of the soil report.
- The Construction Agency shall ensure that site engineer shall be available while taking reading & sample of soil.
- The Soil Laboratory testing shall be done in NABL accredited laboratory/Engineering College only.
- The copy of the soil report shall be certified by Zonal Head of the PMC.

Structure of Buildings

 All structural drawings shall be prepared as per the approved plans, elevations and section of buildings considering the overall functionality of buildings. No deviation in approved plan areas/ facility areas shall be permitted in any case.

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• Structural Members: Size of structural member shall be taken as per the Architectural/structural requirement of the structure ensuring soundness and stability of RCC members.

Layout Planning & Foundation

- Plinth of the Building shall be 600 mm to 750 mm above the ground level of the road (Finished Road Level) in its front which will be decided depending upon the terrain. Level of the Septic tank shall also be paid attention to while deciding the plinth.
- Foundation of each building unit shall be as per structural requirement based on the soil investigation report. Soil investigation shall be based on at least one bore hole located at the tentative location of each building i.e., School building, Boys Hostel Building, Girls Hostel Building, Staff Qtrs area, etc.
- Toe Wall: For toe wall purpose in external walls there will be Brick Work/ RR. Masonry below the plinth beam if depth of foundation is shallow. If depth is greater than 1.50 m, RCC notch will be provided below the plinth beam. The brickwork will start on a base course of 100 mm thick PCC 1:5:10 mix, laid generally at 0.90 meter below the plinth level of the building. For internal walls the provision shall be restricted to 50% only. In case of Hilly areas, preference to be given to use locally available hard stones/RR Masonry for foundation works and protection works. In case the depth of foundation is more than 1.5 metre, RCC notch may be more appropriate instead of brickwork/RR.
- Waterproof bitumen painting above plinth beam: The Brick work above the plinth beam shall be started only after laying a coat of bitumen painting over the plinth beam.
- The locations where rock cutting etc. is unavoidable, the available stone recovered shall be utilized judiciously viz in foundations etc.
- > Ceiling Height of Buildings: Clear Ceiling height of Buildings shall be as follows:
 - School building 3.60 metre
 - Kitchen & Dinning 3.45 metre
 - Hostel 3.15 metre
 - Warden residence 3.0 metre
 - Ramp Mumty height- 2.4 metre
 - Principal Quarter -3.00 metre
 - Type III & Type -II Quarter -3.00 metre •

External Cladding of Buildings from Ground Level

- School Building: Upto bottom of FF Level Beam Soffit (as per Drawings).
- Hostels' Building Upto Window Sill Level.
- Dinning & Kitchen Upto Window Sill Level.
- Principal Quarter Upto Plinth Level

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- Type III & Type II Quarter Upto Plinth Level.
- Terrace parapet of School Building and Hostel shall have height of 1200 mm i/c 50 mm CC coping. For Kitchen & Dining & Warden Residence being inaccessible, it will be 600 mm.
 - Locally available Materials: The climatic conditions and locally available building materials may be considered for design purpose of buildings.
- Water Tank on Terrace: Domestic water tank shall be provided over the toilet block on a slab at least 750 mm above the toilet block roof slab for school and hostel building and it will be supported on columns. Water tank for fire purpose shall be provided over one of the toilet blocks with arrangement similar to that of the domestic water tank. Placing of water tank shall be such that the overflow water of fire tank shall fed the domestic water supply tank. In kitchen, only domestic tanks shall be provided over the toilet.

In kitchen, one number domestic water tank shall be provided over the toilet blocks located near the utensil washing area at least 750 mm above the toilet block roof slab and shall be supported on brick columns.

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School Building:

- 1. Facility area:
 - > Facility area of rooms, corridor and stairs shall be maintained same as per the standard drawing. Width of stair, corridor, ramp etc shall be maintained in full width without any restriction.
 - > Facility for Person with disabilities: The entire requirement like ramp, handrails, tactile flooring, toilets, signage etc. shall be provided to the infrastructure being constructed. They shall comply to the provisions as per guidelines issued for the person with disabilities.
 - > All the ramp floors will be provided with suitable anti-skid tiles with the provision of tactile tiles & handrails for person with disabilities.
 - > Width of Ramp shall be 1800 mm. Head Room anywhere shall not be less than 2.40 metre.
 - Corridor Protection Railing of 1350 MM height with MS grill/railing in between the column as per approved drawings. The MS grill should be fixed 0ver 300 mm brick height wall throughout the corridor.
 - Railing to front Ramp and internal stair case shall be outer 40 mm dia in SS 304 grade. The finished top height of the handrail shall be 950 mm.
 - Rear Stair cases shall have no approach to terrace.

2. Doors and Windows:

- > Entrance door of the building shall be provided with powder coated anodised aluminium glazed door with Floor Spring. Steel Collapsible Shutter will be provided additionally for safety purpose.
- > All doors shall have T Iron frame 40 x 40 x 6mm.
- Single shutters with 35 mm thick factory-made exterior grade non-Decorative type flush door shutter with teak wood lipping on edges
- \triangleright Doors of Principal, Vice Principal and Staff Rooms, Toilet Main Doors shall be provided with hydraulic door closer. All the doors shall have rubber floor door stoppers. No floor door stopper to WC doors.
- > Toilets shall have 35 mm factory made machine pressed laminated flush door of exterior grade in single leaf.
- > Class Room, Labs and Library shall have MS Glazed window and ventilator with plain glass panes and MS grills 12 mm square bars. The weight of window grill and MS window sections shall be considered @ 12 Kg/ Sqm of window area for estimate purpose. The Central 40% area of the windows shall be fixed and rest open able shutters on either side. There shall be fixed glazing above the window from lux-point of view. Bath room windows/ventilators shall be with frosted glass panes.
- External Windows in general will be of size 1950 (L) x 1500 (H) mm having top 300 mm portion fixed. The bottom portion shall be divided horizontally in three parts middle portion fixed and sides openable. However, the overall dimension and design as per approved drawings.

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The corridor portion will have no windows except in administrative block Administrative Block Rooms like Principal Room, Vice Principal Room, Office, Staff Rooms; Recreation Room shall have windows of size 1950x1200 mm in the corridor. Other Rooms shall have ventilators in corridor of size equal to width of the external windows (1950 mm) and depth 600 mm. It will be placed opposite to external windows just below the floor beams (No separate lintels are required for ventilators). The top shall be divided in the same pattern provided in bottom

3. Flooring:

- Full body (homogeneous) Vitrified floor tile flooring with size not less than 600x600 mm shall be provided in Principal Room, Vice Principal Room and Staff Rooms.
- All other floors except WC area and ramp shall be with Kota Stone flooring as per the respective DSR item with marble strips (approximate @5% area) and skirting upto 100 mm height.
- > Treads and risers of stair shall have Kota in single length.
- All the ramp floors will be provided with matt finish anti-skid vitrified tiles of size 300 x 300 mm with provision of tactile tiles.
- Toilet block shall be also be provided with anti-skid rectified ceramic floor tiles with size of 300mm x 300mm or more. The walls shall have glazed ceramic tiles dado, inside WC area upto 900mm height and for remaining area of toilet block upto 2100 mm height as per respective DSR items.
- Working platforms in labs shall be provided with Granite top with nosing and dado upto 100 mm height. The detailed drawings for Lab table shall be provided shortly.
- In toilet, oval shaped wash basin shall be provided on RCC platform finished with granite stone.

4. Finishing

- The external wall (excluding Brick Tile Cladding area) shall be plastered with 18 mm plaster as per respective DSR item and finished with 1 mm thick external white cement-based putty.
- The external surface including corridor walls shall be provided with Premium acrylic water proof exterior grade with silicon additive paint.
- Inside Walls shall have 12/15 mm plaster and 6 mm in ceiling as applicable.
- Internal Finishing: Walls and ceiling shall be provided with first quality acrylic distemper (ready-mix).
- All wood work & steel work shall be provided with synthetic enamel paint of the approved brand.

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Hostels:

- 1. Facility area:
 - Facility area of rooms, corridor, stairs etc shall be maintained same as per the standard drawing. Width of stair & corridor etc shall be maintained in full without any restriction.
 - > Handicapped toilet shall be provided at ground floor only.
 - Electrical shaft and FHP shafts shall be provided as applicable.

2. Doors & Windows:

- Entrance door shall be provided with powder coated anodised aluminium glazed door with hydraulic door closures. Steel Collapsible door will be provided additionally for safety purpose.
- Frame of doors shall consist of T-iron frames 40 x 40 x 6 mm as per respective DSR item.
- Hostel will have 35 mm thick non decorative flush doors in single leaf including teak wood edge lipping (except Wash area) with rubber floor door stoppers and synthetic enamel paints on both sides. The door closer will be provided in the warden office.
- Wash Area and Toilets shall have 35 mm factory made machine pressed laminated flush door of exterior grade in single leaf.
- Steel glazed windows and ventilator frame & shutters shall be factory made ISI marked with Z-section; etc with MS grills with 12 mm square bars 100-120 mm c/c. Window & ventilators except toilet portion shall be in plain glass panes. The Central 40% area of the windows shall be fixed and the rest with openable shutters on either side. Glazed window shutters shall open outside and the wire mesh shutters shall open inside. Toilet portion windows/ventilators shall be with frosted glass panes.
- > The windows shall be fitted with the required fixtures like stays and fasteners.
- Railing to front Ramp and internal stair case stair shall be 40 mm outer dia in SS 304 grade. Finished railing height shall be 950 mm.
- 3. Flooring:
 - Warden Room in Hostel shall be provided with Full body (homogeneous) Vitrified floor tile flooring with size 600x600 mm.
 - > Treads and risers of stair shall have Kota stone slab in single length.
 - All other floors except WC area shall be in Kota Stone flooring with marble strips (approx. @ 5% area) and skirting upto 100 mm height. Treads and risers of stair shall have Kota in single length.

Toilet block shall be also be provided with anti-skid rectified ceramic floor tiles with size of 300mm x 300mm or more. The walls shall have 1st quality glazed ceramic tiles dado, inside WC area upto 900mm height and for remaining area of toilet block upto 2100 mm height as per respective DSR items.

Flat back wall mounted Wash basins shall be provided.

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4. Finishing

- External Finishing: The external wall (excluding Brick Tile Cladding area) shall be plastered with 18 mm plaster as per respective DSR Item and to be finished with premium acrylic smooth paints with silicon additives.
- Internal Finishing: Walls and ceiling shall be provided with first quality acrylic distemper (ready-mix).
- All wood work & steel work shall be provided with synthetic enamel paint of the approved brand.

Kitchen & Dining:

- 1. Facility areas:
 - Facility area of dining hall, kitchen, washing area, etc shall be maintained same as per the standard drawing.
 - All the floors except WC area and ramp shall be in Polished Kota Stone flooring in the respective DSR items with marble strips (approx. @5% area) and skirting upto 100 mm height.
 - Dining Hall shall be provided with 1200 mm height ceramic glazed wall tiles. In Kitchen Hall, wash area and utensil area shall have glazed wall tiles upto 2100 mm height.
 - WC area shall be provided with anti-skid rectified ceramic floor tiles of size 300x300 mm or more and wall with glazed ceramic tiles upto 1200 mm as per respective DSR items.
 - Kitchen platform, pantry shall be provided with pre-polished Kota stone topping with proper nosing.
 - ➢ For hand washing, oval shaped wash basin shall be provided on RCC platform finished with granite stone.
 - Floor of utensil washing area shall have anti-skid vitrified tiles of size not less than 300x300 mm. For washing of utensils, granite stone trough in full length along the counter of width 450 and depth 450 mm will be provided.
 - Kitchen courtyard: Kota Stone flooring shall be provided as per the respective DSR item.
 - Railing to Ramp at the entrance shall be of 950 mm height having 40 mm outer dia SS pipe handrall.
 - Peripheral wall of the Kitchen Courtyard shall be of 1200 mm height with wicket gate.

2. Doors & Windows

- Powder coated aluminium door shutters at entry of the Dining Hall shall be in two leaves.
- Other doors of Kitchen and Dining will have 35 mm thick non decorative flush doors in single leaf with teak wood edge lipping all-round (except Wash area) with rubber floor door stoppers and synthetic enamel paints on both sides.



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- > Wash Area & toilets shall have 35 mm thick factory pressed Laminated flush doors shutter in exterior grade.
- > Steel glazed/gauzed windows and ventilator frame & shutters shall be factory made ISI marked with Z-section, etc with MS grills with 12 mm square bars. Height of window shall generally be 1800 mm (Sill level being 750 mm) except Kitchen window on Courtyard side which will be 1650 mm. Top 600 mm height will be fixed and bottom horizontally divided into three parts middle one fixed and sides openable. Window & ventilators except toilet portion shall be in plain glass panes. The Central 40% area of the windows shall be fixed and the rest with openable shutters on either side. The glazed window shutters shall open outside and the wire mesh shutters shall open inside. Toilet portion windows/ventilators shall be with frosted glass panes. The windows shall be fitted with the required fixtures like stays and fasteners.
- ▶ Railing to Ramp at the entrance shall be of 950 mm height provided with 40 mm outer dia SS 304 grade.

3. Finishing

- > External Finishing: The external facia (excluding Brick Tile Cladding area) shall be plastered with 18 mm plaster as per respective DSR item.
- > The external surface shall be provided with premier acrylic water proof exterior grade paint. The external surface including courtyard walls shall be provided with premium acrylic water proof exterior grade with silicon additive paint.
- Internal Finishing: Walls and ceiling shall be provided with first quality acrylic distemper (ready-mix).
- > All wood work & steel work shall be provided with synthetic enamel paint of the approved brand.

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Principal Quarter

1. Doors & Windows:

- Frame of doors shall consist of T-iron frames 40 x 40 x 6 mm as per respective DSR item.
- Single shutters with 35 mm thick factory-made exterior grade non-Decorative type flush door shutter with teak wood lipping on edges with rubber floor door stoppers and synthetic enamel paints on both sides.
- Entrance door shall be 35 mm factory made machine pressed laminated flush door of exterior grade in single leaf along with MS safety grill door opening outside.
- Toilets shall have 35 mm factory made machine pressed laminated flush door of exterior grade in single leaf.
- Steel glazed/gauzed windows and ventilator frame & shutters shall be factory made ISI marked with Z-section and MS grills 12 mm square bars. The rooms shall also be provided with stainless steel wire (for mosquito) mesh steel shutters fixed in the steel frame. The glazed window shutters shall open outside and the wire mesh shutters shall open inside. Toilet portion windows/ventilators shall be with frosted glass panes. The windows shall be fitted with the required fixtures like stays and fasteners.
- Balcony shall have MS Railing of 1050 metre height over 150 mm height brick wall finished with kota stone

2. Flooring:

- All Room except kitchen shall be provided with Vitrified Tiles of size 600x600 mm.
- > Treads and risers of stair shall have Kota stone slab in single length.
- Kitchen including utility shall be provided with rectified glazed ceramic antiskid floor tiles of size not less than 300 x 300 mm and 1st quality ceramic glazed wall tiles dado over kitchen platform upto 600mm height whereas in utility area shall be 2100mm height.
- Toilet/Bath shall be provided with anti-skid rectified ceramic floor tiles with size of 300mm x 300mm or more. The walls shall have glazed ceramic tiles dado, inside WC area upto 900mm height and for bath upto 2100 mm height as per respective DSR items.
- > The Kitchen platform shall be with Granite Stone fixed over RCC slab.
- > Flat back wall mounted Wash basins shall be provided.

3. Finishing

- External Finishing: The external face with 18 mm plaster as per respective DSR item and to be finished with premium acrylic water proof exterior grade with silicon additive paint.
- Internal Finishing: First quality acrylic distemper (ready-mix).

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All wood work & steel work shall be provided with synthetic enamel paint of the approved brand.

Warden - Residences, Type III Quarter & Type II Quarter

1. Doors & Windows:

- Frame of doors shall consist of T-iron frames 40 x 40 x 6 mm as per respective DSR item.
- Single shutters with 35 mm thick factory-made exterior grade non-Decorative type flush door shutter with teak wood lipping on edges (except Wash area) with rubber floor door stoppers and synthetic enamel paints on both sides.
- Toilets shall have 35 mm factory made machine pressed laminated flush door of exterior grade in single leaf.
- Steel glazed/gauzed windows and ventilator frame & shutters shall be factory made ISI marked with Z-section and MS grills 12 mm square bars. The rooms shall also be provided with stainless steel wire (for mosquito) mesh steel shutters fixed in the steel frame. The glazed window shutters shall open outside and the wire mesh shutters shall open inside. Toilet portion windows/ventilators shall be with frosted glass panes. The windows shall be fitted with the required fixtures like stays and fasteners.
- Balcony shall have MS Railing of 1050 metre height over 150 mm height brick wall finished with kota stone
- Railing of internal stair case shall of MS of finished height 950 mm.

2. Flooring:

- All Rooms except kitchen shall be provided with Vitrified Tiles of size 600x600 mm.
- > Treads and risers of stair shall have Kota stone slab in single length.
- Kitchen including utility shall be provided with rectified glazed ceramic antiskid floor tiles of size not less than 300mm x 300mm and 1st quality ceramic glazed wall tiles dado over kitchen platform upto 600mm height whereas utility area shall be 2100mm height.
- Toilet block shall be provided with anti-skid rectified ceramic floor tiles with size of 300mm x 300mm or more. The walls shall have glazed ceramic tiles dado, inside WC area upto 900mm height and for bath upto 2100 mm height as per respective DSR items.
- The Kitchen platform shall be with Polished Kota Stone Slab fixed over RCC slab.
- Flat back wall mounted Wash basins shall be provided.

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3. Finishing

- External Finishing: The external face excluding Brick Tile Cladding shall be plastered with 18 mm and to be finished with premier acrylic water proof exterior grade with silicon additive paint.
- Internal Finishing: Walls and ceiling shall be provided with first quality acrylic distemper (ready-mix).
- All wood work & steel work shall be provided with synthetic enamel paint of the approved brand.

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SI.	the second second second	Plinth Area in Sq. Mt.			
No	EMRS Features	Unit Area		Total Area	
NU			(in Sq.m)	(in Sq.m)	
Α	School Building (G+1)/G +2				
1	Class Room	16	40.58	649.2	
2	Computer Lab	1	81.16	81.1	
3	Science Labs	3	81.16	243.4	
4	Maths Lab	1	40.58	40.5	
5	Language Lab/Art and Craft Room	1	40.58	40.5	
6	Recreation Room	1	40.58	40.5	
7	Library	1	91,92	91.9	
8	Boys Toilet	2	40.58	81.1	
9	Girls Toilet	2	40.58	81.1	
10	Principal Room	1	40.58	40.5	
11	Vice Principal Room	1	20.58	20.5	
12	Office Room	1	40.58	40.5	
13	Medical Room	1	14.44	40.5	
14	Staff Room (Male)	1	20.29	20.2	
15	Staff Room (Female)	1	20.29	20.2	
16	Staff Toilet (Male)	1	10.00	10.0	
17	Staff Toilet (Female)	1	10.00	10.0	
18	Physically Handicapped Toilet				
19	Security Room	4	0.00	13.2	
20	Store Room	1	0.00	5.7	
20	Circulation Area	1	20.29	20.2	
21	Total (School Building) Plinth Area			1014.0	
	Total (School Building) Plinth Area			2580.0	
B	Boys Hostel (G+1)/ G+2				
1	Dormitories	20	52.89	1057.8	
2	Toilets	5	52.65	263.2	
_					
3	Warden Office	1	80.00	80.0	
4	Common Room	1	48.50	48.5	
5	Store Room	1	14.78	14.7	
6	Physically Handicapped Toilet	1	0.00	4.2	
7	Circulation Area			891.3	
-	Total Plinth Area (Boys Hostel)			2360.0	
С	Girls Hostel (G+1)/G+2				
1	Dormitories	20	52.89	1057.8	
2	Toilets i/c Physically Handicpped toilet	5	52.65	263.2	
3					
3	Warden Room cum Office Common Room	1	80.00	80.0	
4 5	Store Room	1	48.50	48.5	
_		1	14.78	14.7	
6	Circulation Area Total Plinth Area (Girls' Hostel)			895.6	
-	Total Plinth Area (Giris Höstel)			2360.0	
D	Kitchen & Dinning Hall				
1	Kitchen & Pantry	1	210.00	210.0	
2	Store Room	1	0.00	0.0	
3	Dinning Room (Boys)	1	150.00	150.0	
	Dinning Room (Girls)		projec150.00	150.0	

	Circulation Area			40.00
_	Total Plinth Area (Kitchen & Dinning)			550.00
E	Principal Quarter	1		130.0
F	Type III Quarter 15 Nos		-	
1	Bed Rooms	2*15	11.02	330.4
2	Toilet	2*15	3.87	115.9
3	Kitchen	1*15	8.60	129.00
4	Dinning	1*15	17.28	259.2
5	Drawing Room	1*15	0.00	0.0
6	Balcony	1*15	6.50	97.50
7	Circulation Area			268.00
_	Type III-Plinth Area (15 Unit)			1200.00
G	Type II Quarter (10 Units)			
1	Bed Rooms	2*10	9.75	195.00
2	Toilet	2*10	3.87	77.40
3	Kitchen	1*15	7.30	73.00
4	Dinning	1*15	13.62	136.20
5	Drawing Room	1*15	6.00	60.00
6	Balcony	1*15	6.50	65.00
7	Circulation Area			93.4
-	Type II-Plinth Area (10 Unit)			700.00
Η	Guest House			80
1	ESS, Security Room and Pump Room			80
1	Sports Facility			
4				
1	Play Ground with 200/400 mt track	1	Mandatory	YES
2	Play Ground with 200/400 mt track Basketball	1	Mandatory Mandatory	
		2	Mandatory	40 m x 30 m
2	Basketball	2	Mandatory Mandatory	40 m x 30 m YES
2 3	Basketball Volley Ball	2	Mandatory	40 m x 30 m YES 40 m x 30 m
2 3 4 5	Basketball Volley Ball Kho Kho Archery	2 2 2 2	Mandatory Mandatory Optional	40 m x 30 m YES 40 m x 30 m
2 3 4 5 K	Basketball Volley Ball Kho Kho Archery Fire Fighting	2 2 2 2	Mandatory Mandatory Optional Mandatory	40 m x 30 m YES 40 m x 30 m 2500 Sq. Mt
2 3 4 5	Basketball Volley Ball Kho Kho Archery Fire Fighting School	2 2 2 2	Mandatory Mandatory Optional Mandatory Mandatory	40 m x 30 n YE 40 m x 30 n 2500 Sq. Mt
2 3 4 5 K 1	Basketball Volley Ball Kho Kho Archery Fire Fighting	2 2 2 2	Mandatory Mandatory Optional Mandatory	40 m x 30 n YE 40 m x 30 n 2500 Sq. Mt YE YE
2 3 4 5 K 1 2 3	Basketball Volley Ball Kho Kho Archery Fire Fighting School Hostel Quarter	2 2 2 2	Mandatory Mandatory Optional Mandatory Mandatory Mandatory	40 m x 30 m YES 40 m x 30 m 2500 Sq. Mt YES YES
2 3 4 5 K 1 2 3 3	Basketball Volley Ball Kho Kho Archery Fire Fighting School Hostel Quarter Drinking Water	2 2 2 1	Mandatory Mandatory Optional Mandatory Mandatory Mandatory Mandatory	40 m x 30 m YES 40 m x 30 m 2500 Sq. Mt YES YES
2 3 4 5 K 1 2 3 3 L 1	Basketball Volley Ball Kho Kho Archery Fire Fighting School Hostel Quarter Drinking Water Sump with Pump Room	2 2 2 1	Mandatory Mandatory Optional Mandatory Mandatory Mandatory	40 m x 30 n YE: 40 m x 30 n 2500 Sq. Mt YE: YE: YE: YE:
2 3 4 5 K 1 2 3 3 2 1 2 2	Basketball Volley Ball Kho Kho Archery Fire Fighting School Hostel Quarter Drinking Water Sump with Pump Room Deep Boring	2 2 2 1 1 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Mandatory Mandatory Optional Mandatory Mandatory Mandatory Mandatory underground sum	40 m x 30 n YE: 40 m x 30 n 2500 Sq. Mt YE: YE: YE: YE: YE: YE: YE: YE: YE: YE:
2 3 4 5 K 1 2 3 3 L 1 2 3	Basketball Volley Ball Kho Kho Archery Fire Fighting School Hostel Quarter Drinking Water Sump with Pump Room Deep Boring Overhead Tank	2 2 2 1 1 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Mandatory Mandatory Optional Mandatory Mandatory Mandatory Mandatory O Litre on the terr	40 m x 30 n YE: 40 m x 30 n 2500 Sq. Mt YE: YE: YE: yE: yE: yE: yE: yE: yE: yE: yE: yE: y
2 3 4 5 K 1 2 3 3 L 1 2	Basketball Volley Ball Kho Kho Archery Fire Fighting School Hostel Quarter Drinking Water Sump with Pump Room Deep Boring	2 2 2 1 1 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Mandatory Mandatory Optional Mandatory Mandatory Mandatory Mandatory O Litre on the terr	40 m x 30 n YE: 40 m x 30 n 2500 Sq. Mt YE: YE: YE: YE: YE: YE: YE: YE: YE: YE:
2 3 4 5 K 1 2 3 L 1 2 3 4 5	Basketball Volley Ball Kho Kho Archery Fire Fighting School Hostel Quarter Drinking Water Sump with Pump Room Deep Boring Overhead Tank Water Treatment Plant External Water Supply System	2 2 2 1 1 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Mandatory Mandatory Optional Mandatory Mandatory Mandatory Mandatory O Litre on the terr	40 m x 30 m YES 40 m x 30 m 2500 Sq. Mt YES YES YES YES YES YES Se (1.0 lakh litre) 2 Nos race of buildings se to Case Basis
2 3 4 5 K 1 2 3 3 L 1 2 3 4 5 5 M	Basketball Volley Ball Kho Kho Archery Fire Fighting School Hostel Quarter Drinking Water Sump with Pump Room Deep Boring Overhead Tank Water Treatment Plant External Water Supply System Other Services	2 2 2 1 1 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Mandatory Mandatory Optional Mandatory Mandatory Mandatory Mandatory Mandatory 0 Litre on the terr Ca:	2 Nos ace of buildings se to Case Basis YES
2 3 4 5 K 1 2 3 L 1 2 3 4 5	Basketball Volley Ball Kho Kho Archery Fire Fighting School Hostel Quarter Drinking Water Sump with Pump Room Deep Boring Overhead Tank Water Treatment Plant External Water Supply System	2 2 2 1 1 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Mandatory Mandatory Optional Mandatory Mandatory Mandatory Mandatory O Litre on the terr	40 m x 30 m YES 40 m x 30 m 2500 Sq. Mt YES YES YES YES YES YES YES YES YES YES



Ν	Elctrical Works		
1	Electric Substation		YE
2	SITC of sub station equipments (200/250 KVA Transformer)	Mandatory	YES
3	SITC of DG set (62 KVA)	Mandatory	YES
4	SITC UPS (10 KVA)	Mandatory	YES
6	Street Lighting	Mandatory	YES
5			
5	Payment to Local Electrical Supply Authority	Mandatory	YES
0	Campus Development		
1	Levelling/Cutting/ Filling	As per specific site requirement	
2	Protection Works - Retaining Walls , Stone Pitching	As per specific site requirement	
3	Boundary Wall (1.80 metre high masonry wall with 0.60 metre		YES
	high corcentia coil fencing at top)		
4	Entry Gate with Security Room		YES
5	Flag Hoisting Stage		YES
6	Internal Roads		YES
7	Internal pathways		YES
P	Green Features		
1	Recharge Pit	Mandatan	VE
4	Kitchen Waste Disposal Unit	Mandatory	YES
5	Septic Tank with Soak Pit/ Compost Pit	Mandatory	YES
6	Dust Bins	Mandatory	YES
8	Solar Street Lights	Mandatory	YES
9	Rain Water Harvesting	Mandatory	YES
10	Storm Water drain & sewer	Mandatory	YES
10		Mandatory	YES
Q	Horticulture / Landscaping		
1	Landscaping		YES
2	Herbal Garden		YES
3	Plantation		YES
4	RCC Benches		YES
6	Campus Development		YES
R	Furnishing		
1	School		480 Students
2	Hostel		480 Students
3	Guest House (accomodated in Type-III quarter at ground floor)		1 No.



ation & Structure structure ucture emal Partition por height nth Height RS & WINDOWS AME or Frame ndow Frame & itors itters n Doors	side hung wire gauzed windows shutters with z-	oncrete (ACC)/Cellular Concrete tricks as 60 cm from the adjoining gro pecial care shall be taken. If plint may be sought. mm with 15×3 mm lugs 10 cm 2019 item no. 10.13.1) steel glazed window (partly fixed section, window grills fixing with	Block(CLC)/Brick 00 Mts und level/plinth protectionlevel h height more than long embedded in cementconcrete and/or partly side hung/top hung) and	
ucture emal Partition por height nth Height RS & WINDOWS AME or Frame ndow Frame & ators	 work/Fly-ash brick Half brick thick masonry in ACC/CLC/Fly-ash B 3.15 Mt Plinth height of all the buildings shall be kept a Where plinth height becomes more then 60 cm sp 1.20 mtrs., approval of the competent authority m Providing and fixing T-iron frames of 40×40×6 block 15×10×10 cm of C C 1.3:6 (As per D S R Providing and fixing factory made ISI marked s side hung wire gauzed windows shutters with z- in cement concrete block 15×10×10 cm of C C 1 	as 60 cm from the adjoining gro pecial care shall be taken. If plint may be sought.	00 Mts und level/plinth protectionlevel h height more than long embedded in cementconcrete and/or partly side hung/top hung) and	
emal Partition por height nth Height S & WINDOWS AME or Frame ndow Frame & ators	 work/Fly-ash brick Half brick thick masonry in ACC/CLC/Fly-ash B 3.15 Mt Plinth height of all the buildings shall be kept a Where plinth height becomes more then 60 cm sp 1.20 mtrs., approval of the competent authority m Providing and fixing T-iron frames of 40×40×6 block 15×10×10 cm of C C 1.3:6 (As per D S R Providing and fixing factory made ISI marked s side hung wire gauzed windows shutters with z- in cement concrete block 15×10×10 cm of C C 1 	as 60 cm from the adjoining gro pecial care shall be taken. If plint may be sought.	00 Mts und level/plinth protectionlevel h height more than long embedded in cementconcrete and/or partly side hung/top hung) and	
oor height nth Height RS & WINDOWS AME or Frame ndow Frame & ators	3.15 Mt Plinth height of all the buildings shall be kept a Where plinth height becomes more then 60 cm sp 1.20 mtrs., approval of the competent authority m Providing and fixing T-iron frames of 40×40×6 block 15×10×10 cm of C C 1.3:6 (As per D S R Providing and fixing factory made ISI marked s side hung wire gauzed windows shutters with z- in cement concrete block 15×10×10 cm of C C	3.0 as 60 cm from the adjoining gro pecial care shall be taken 1f plint may be sought. 	und level/plinth protectionlevel h height more than long embedded in cementconcrete and/or partly side hung/top hung) and	
nth Height IS & WINDOWS AME or Frame ndow Frame & ators	Plinth height of all the buildings shall be kept a Where plinth height becomes more then 60 cm sp 1.20 mtrs., approval of the competent authority m Providing and fixing T-iron frames of 40×40×6 block 15×10×10 cm of C C 1.3:6 (As per D S R Providing and fixing factory made ISI marked s side hung wire gauzed windows shutters with z- in cement concrete block 15×10×10 cm of C C	as 60 cm from the adjoining gro pecial care shall be taken 1f plint may be sought. 	und level/plinth protectionlevel h height more than long embedded in cementconcrete and/or partly side hung/top hung) and	
AME or Frame ndow Frame & ators	 Where plinth height becomes more then 60 cm sp 1.20 mtrs., approval of the competent authority m Providing and fixing T-iron frames of 40×40×6 block 15×10×10 cm of C C 1.3:6 (As per D S R Providing and fixing factory made ISI marked s side hung wire gauzed windows shutters with z- in cement concrete block 15×10×10 cm of C C 	pecial care shall be taken. If plint hay be sought. mm with 15×3 mm lugs 10 cm 2019 item no. 10.13.1) steel glazed window (partly fixed section, window grills fixing with	h height more than long embedded in cementconcrete and/or partly side hung/top hung) and	
AME or Frame ndow Frame & ators	Providing and fixing T-iron frames of 40×40×6 block 15×10×10 cm of C C 1 3:6 (As per D S R Providing and fixing factory made ISI marked s side hung wire gauzed windows shutters with z- in cement concrete block 15×10×10 cm of C C	mm with 15×3 mm lugs 10 cm 2019 item no 10 13 1) iteel glazed window (partly fixed section, window grills fixing wit	and/or partly side hung/top hung) and	
or Frame ndow Frame & itors	block 15×10×10 cm of C C 1 3:6 (As per D S R Providing and fixing factory made 1S1 marked s side hung wire gauzed windows shutters with z- in cement concrete block 15×10×10 cm of C C	-2019 item no 10131) ited glazed window (partly fixed section, window grills fixing with	and/or partly side hung/top hung) and	
ndow Frame & itors itters	block 15×10×10 cm of C C 1 3:6 (As per D S R Providing and fixing factory made 1S1 marked s side hung wire gauzed windows shutters with z- in cement concrete block 15×10×10 cm of C C	-2019 item no 10131) ited glazed window (partly fixed section, window grills fixing with	and/or partly side hung/top hung) and	
utors uters	side hung wire gauzed windows shutters with z- in cement concrete block 15×10×10 cm of C.C.	section, window grills fixing with	and/or partly side hung/top hung) and	
		Providing and fixing factory made ISI marked steel glazed window (partly fixed and/or partly side hung/top hung) and side hung wire gauzed windows shutters with z- section, window grills fixing with 15x3 mm lugs)0 cm long embedded in cement concrete block 15×10×10 cm of C.C. 1.3:6		
n Doors	i) Double shutters for domitory hall, one withstail			
	steel Mosquito Proof Jali with autospring door cl and other Factory made flush door 35 mm thick of Teak Wood Edge Lipping) ii) M.S. collapsible steel shutters (for safetymeasu to main entrance lounge at GF	loser tubular box section style (i/c Mosquito Proof Jali and c thick ure)	s and rails frame I/C stainless steel other Factory made flush door 35mm	
er Doors	Single shutters with 35 mm thick factory made ext lipping on edges & finished with one coat of woo (As per D.S.R item no. 9.21.1 & 9.23 for flush of	od primer followed by two or mo	flush door shutter withteak wood re coat of synthetic enamel paints	
th, WC, Doors	Factory made Machine pressed pre-laminated flus sheet used shall be decorative high pressure of pl protective surface layer and reverse side of adhesi IS : 2046 Type S. The door shall be fixed to T Iror	sh door exterior grade with teak w lain / wood grain in gloss / matt/ ive bonding quality conforming to	suede finish with high density	
ndows & tors	Z- Section Double shutter one with frosted glass panes and other with stainless steel wire mesh shutter. Allwindows and ventilator shall be provided with 12 mm square guard bars at 10 to 12 cms C/C spacing			
iware &	Powder coated/anodized Aluminum/ SS fittings			
ling				
ng/Drawing 3ed Rooms, & Lounge with g grouting of	All flooring Kota stone combination with marble strip except WC/toilets area with matching grouting of joints	Ceramic Floor Tiles/ Vitirifed Tile Flooring not less than 400mm x 400 mmlaid on 20mm thick cement mortar 1:4 (1 cement 4 coarse sand) jointing with grey cement slurry @ 3 3kg/sqm including grouting the joints with white cement and matching pigments etc., complete	600 mm x 600 mm Vitirifed Tile Flooring laid on 20mm thick cement mortar 1.4 (1 cement 4 coarse sand) jointing with grey cement slurry @ 3.3 kg/sqm including grouting the joints with white cement and matching pigments etc., complete (to be removed)	
11 18 30 &	NG /Drawing ed Rooms, bunge with	NG /Drawing All flooring Kota stone combination with marble strip except WC/toilets area with matching grouting of joints	NG /Drawing ed Rooms, bunge with grouting of MI flooring Kota stone combination matching grouting of joints MI flooring kota stone combination MI flooring kota stone MI flooring ko	







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		of size not less than 300 mm × 300 mm with water absorption less than 0 08% laid with 20mm thick cement mortar 1.4 (1 cement 4 coarse sand) jointing with grey cement slurry @ 3 3kg/sqm including grouting the joints with white cement and	Anti skid vitrified tiles of size not less than 400 mm × 400 mm with water absorption less than 0.08% laid with 20mm thick cement mortar I 4 (1 cement 4 coarse sand) jointing with grey cement slurry @ 3.3kg/sqm including grouting the joints with white cement and matching pigments etc., complete
(iii) Kitchen Counter study table top for dormitories	Udaipur green marble / granite stone with nosing v	with matching grouting of joints	
(v) Common circulation area	matble stop (to be removed) (Kota stone slab flooring with marble strips		NA
. Nontenno			
	Pre-polished (to be removed) Kota stone in single	length up to 1.05 metre of treads &	z risers.
(vii)Toneta/ Dutiroon	Olazed ceramic anti-skid of size not ress than 5007	×300 mm with matching grouping o	of joints
Dado & Skirting			
(i) Skirting in rooms	100 to 150 mm heig	ht skirting matching with floor mat	erials
and other areas			criais
(ii)Kitchen Dado	NA	Ceramic Glazed tiles of size not less than 200 × 300 mm as per design from floor up tofull height.	Ceramic Glazed tiles of size not less than 300 × 450 mm as per design from floor up tofull height.NA
(iii)Toilets/bathrooms/ WC Dado	Ceramic Glazed tiles of size not less than 200 × 300 mm up to 2 10 metre height	Ceramic Glazed tiles of size not less than 200 × 300 mm up to 2 10 metre height	Ceramic Glazed tiles of size not less than 300 × 450 mm as per design from floor up to 2 10 metre height
FINISHES			
Internal Walls	All walls to be painted with low VOC Acrylic washable distemper Synthetic enamel paint on all wood works and steel works	except ceiling , toilet and kitch Acrylic washable distemper Sy	mm thick POP (one time only) hen and painted with low VOC nthetic enamel paint on all wood steel works
External Walls			
land Rail	Railing shall be of stainless steel		
Roof		71 of DSR-19)	
Foilets for Physically	One each for boys and	NA	NA
lisabled person	girls (specification as per NBC)		
	study table top for dormitories (v) Common circulation area (vi)Staircase (vii)Toilets / Bathroom Dado & Skirting i) Skirting in rooms and other areas ii)Kitchen Dado iii)Toilets/bathrooms/ WC Dado 'INISHES nternal Walls External Walls External Walls	study table top for Classroom - Mirror patished Kata stone with mathle strips (v) Common circulation area Classroom - Mirror patished Kata stone with mathle strips (vi) Common circulation area Classroom - Mirror patished Kata stone with mathle strips (vi) Common circulation area Classroom - Mirror patished Kata stone with mathle strips (vi) Staircase Pte-polished (to be removed) Kota stone in single (vii) Toilets / Bathroom Glazed ceramic anti-skid of size not less than 300 Dado & Skirting 100 to 150 mm height (iii) Toilets/bathrooms/ Ceramic Glazed tiles of size not less than200 NC Dado NA "INISHES Ceramic Glazed tiles of size not less than200 NC Dado NA "INISHES All walls to be painted with low VOC Acrylic washable distemper Synthetic enamel paint on all wood work & steel "INISHES All walls to be painted with low VOC Acrylic washable distemper Synthetic enamel paint on all wood work & steel external Walls Synthetic enamel paint on all wood work & steel - Premium Acrylic Smooth exterior paint with Silice land Rail Raiting shall be of stainless steel koof RCC Slab brick with Koba treatment (Item No. 22 'oilets for Physically One each for boys and	(iii) Kitchen Counter Udaipur green marble / granite stone with nosing with matching grouting of joints (iii) Kitchen Counter Udaipur green marble / granite stone with nosing with matching grouting of joints (iv) Common circulation Classroom Mirror polished K-sta stone with marble strips area Classroom Mirror polished K-sta stone with marble strips (vi) Common circulation Classroom Mirror polished K-sta stone with marble strips (vi) Staincase Pite-polished (to be removed) (vi) Staincase Pite-polished (to be removed) Kota stone in single length up to 1.05 metre of treads & (vii) Toilets / Bathroom Glazed ceramic anti-skid of size not less than 300×300 mm with matching grouting of loot of 150 mm height skirting matching with floor mat ind other areas (iii) Toilets/bathrooms/ Ceramic Glazed tiles of size not less than 200 × 300 mm as per design from floor up tofull height. (iiii) Toilets/bathrooms/ Ceramic Glazed tiles of size not less than 200 × 300 mm up to 2.10 metre height Ceramic Glazed tiles of size not less than 200 × 300 mm up to 2.10 metre height (TINISHIES All walls to be painted with low VOC Acrylic washable distemper Synthetic enamel paint on all wood works and steel work All walls to be treated with 2 except ceiling , toilet and kitch Acrylic Smooth exterior paint with Silicone additives or its equivalent (NA Synthetic enamel paint on all wood work & steel work All walls

2	Foundation & Structur	and the second	Kitcher & Dinne		
-		As per structural requirements based on soil investigation	The design And the second s		
-		per subcluta requirements based on son investigation	report the design shall vary as per soil conditions		
-	Superstructure a) Structure	RCC framed & Filler units of Americal Convert			
		Next manual a Priter waits of Merated Cement Concrete ()	ACC) / Cellular Concrete Block(CLC)/ Brick work/Fly-ash brick		
	(b) Internal Partition	Half brick thick masonry in ACC/CLC/Fly-ash Bricks			
	(c) Ceiling height (Clear)	3 60 Mts	3 45 Mts		
1	(d) Plinth Height	Plinth height of all the buildings shall be kept as 60 cm fro	m the adjoining ground level/plinth protection level. Where plinth height becomes more then		
		of cm special care shall be taken. In case plinth height more	re than 1 20 mtrs, approval of the competent authority may be sought		
	DOORS&				
_	WINDOWS (a)FRAME				
	(i)Door Frame	Providing and fixing T-iron frames of 40/40=6 mm with 1	5-3 mm lugs 10 cm long embedded in centent concrete block 15+10+10 cm of C C 1 3.6		
		As per D S R -2016 item no 10 13 1)	s sind logs to the way emperated in centeric concrete block (35-10-10 em of C C 13.6		
	ii) Window Frame & Ventilators	Providing and fixing factory made ISI marked steel glazes	dProviding and fixing factory made ISI marked steel glazed windows partly fixed and/or		
ľ	· ·····	with 2- section, window grills fixing with 15x3 mm lugs l	charily side hung top hung) and side hung, wire gauzed windows shutter with z- section.		
		with 2- section, window grills fixing with 15x3 mm lugs 10 window grills fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block cm long embedded in cement concrete block 15-10-10 cm 15-10-10 cm of C C 1.3.6 (As per D S R -2019 item no. 10.11.1)			
1	b) Shutters	of C.C. 1.3 6 (As per D.S.R -2019 item no. 10.11.1)			
-1-	i) Main Doors	i) Single shutters with 35 mm thick factory made exteri	or Powder coated Aluminium Double shutters . one fully glazed and other		
I		grade Non- Decorative type flush door shutter with teak willipping on edges & finished with one coat of wood primer	ood withSS wire mesh		
		followed by two or morecoat of synthetic enamel paints			
1		As per D S R - item no 921 1 & 923 for flush door)			
		in M.S. collapsible steel shutters at main entrances for safet measure) only			
F	ii)Other Doors	Single shutters with 35 mm thick factory made exterior grad	de Non- Decorative type flush door shutter with teak wood lipping on edges & finished with		
ħ	iil) Bath, WC,	one coat of wood primer followed by two or more coat of an	inthetic enamel paints (As ner DSR - unm no. 913) 1. & 9.23 for fluck desert		
IT.	oilets Doors	Factory made Machine pressed pre-taminated flush door exterior grade with teak wood lipping on edges. The lamination sheet used shall be decorative high pressure of plain / wood grain in gloss / matt/ suede finish with high density protective surface layer and reverse side of adhesive			
L		to IS 2046 Type S The door shall be fixed to T-Iron frame with SS Hinges			
ħ	w) All Window'	Z section single shutter with plain glass panes, windows	E- Section Double shutter one with frosted glass panes and other with stainless steel wire		
	entilator Shutter	and ventilator shall be provided with 12 mmsquare guard	mesh shutter. All windows and ventilator shall be provided with 12 mmsquare guard bars		
	except WC, Toilets, aths)	hars at 10 to 12 cms C/C spacing	m 10 to 12 cms C/C spacing		
	/) Windows/	Z-section single shutter with Frosted Glass			
-	entilators :) Hardware &				
Fi	ittings	Powder coated/anodized Aluminum/ SS fittings			
F1	looring , Skining, Dade	o, Counter/pantry, court yard			
	Flooring Main entrance hall.	Mirror polished Kota stone with marble strip			
	mmon circulation	anto pomiera cola sone with marole sinp			
(11	i)Other	Classroom -	Dining Hall & Kitchen Area -		
		Kota stone slab flooring with marble strips (upto 50mm width) in required pattern including rubbing and polishing	Kola stone slab flooring with marble strins (unit) 50mm width) in required nation		
		complete)			
	i)Tollet/WC/Bath including common	Rectified Glazed ceramic anti-skid of size not lessthan	Rectified Glazed ceramic anti-skid of size not less than 300-300 mm including		
cir	reulation area of toilet	300 - 100 mm including grouting the joints	stouting the joints		
_	ock)				
_	/) Staircase/steps	Kota stone in single length up to 1.05 metre of trends & risers	Kota stone in single length up to 1 05 metre of treads & risers		
) Skirting In rooms d other area	100 to 150 mm height skirting matching with floormaterials	100 to 150 mm height skirting matching with floor materials		
1.12) Dado				
	In toilets/WCs aths (including	Glazed Ceramic tiles not less than 200mm x 300mmas per	Glazed Ceramic tiles not less than 200mm x 300mm as per design from floor upto 2.1		
201	mmon circulationarea	design from floor up to 2.1 metre height	metre height		
-	roilet block)				
11	Counter/ pantry	At Laboratory platform Udaipur green marble/ granite stone with nosing	Kota store for kiteen and pastry platform		
		Breat maters Brance storic with uosing	Proje		
			00 100000		
		A	S AD S		
		all all see in the			
		NGINEERING REDUCTS ONCOLA J LTD.			

	e) Open Court Yard	Central court yard of School Building	Kitchen back courtward with Kota	Litchen back courtyard with Kota Stone Slab flooring and front Dinning courtyardwith		
		 (i) Top Course 60 mm thick factory made cement concret interlocking paver block of M-30 grade made by block making machine with strong vibratory compaction etc. in required colour, pattern, 50 mm thick compacted bed of course sand etc. (as per term no 16 68, DSR-14) (ii) Based course 7 50 cm thick CC (1 5 10) (iii) The top level of Court yard shall be (-) 30 cm from plinth level of School Building 	e anti skid virtifiev k f	d tile 300 x 300 mm flooring		
5	ROOFING	RCC Slab with Koba treatment (Item No 22 7 of DSR19)		Diming Front Courtward - Precoated GI profilesheet roofing and		
6	FINISHING					
	(a) External	Synthetic enamel paint on all wood work & steel work Premium Acrylic Smooth exterior paint with Silicone additives or its equivalent	Synthetic enamel paint on all wood work & steel work Premium Acrylic Smooth exterior paint with Silicone additives or its equivalent	Synthetic enamel paint on all wood work & uteel work Premium Acrylic Smooth exterior paint with Silicone additives or its equivalent		
	b) Internal	All walls & ceiling to be painted with low VOC Acrylic washable distemper Synthetic enamel paint on all wood works and steel works POP- Internal walls only of rooms except corridoor, stair case toilets treated with 2 mm thick POP (No POP in Ceiling)	All walls & ceiling, to be t painted with low VOC Acrylic washable distemper POP shall be provided only over the tiles height in Dinning Area. Syntheticenamel paint on all wood works and steel works			
8	Railing	Pailing ab	all he of standard start when a set			
9	Roof Water Freatment	Brick Coba Treatment as per DSR-1", item No 22 7 1	all be of stainless steel, wherever req	Brick Coba Treatment as per DSR-19, item No 12 7 1		
10	Roof Water Tank	Boys toilets 4000 ltrs Girls Toilets 2000 ltrs	500 lites for each toilets	(i) 10000 lites for Kitchen uses (ii) 500 liters for each toilets		
11	Cooking platform	r .		RCC as per design and drawings		
12	Pantry	*	7	RCC as per design and drawings		
	Laboratories Counter/ Platform	RCC as per design and drawings	-	RCC as per design and drawings		
_	Ramp for Physically disable person	One no (specification as per NBC)	One no (specification as per NBC)	Two nos (specification as per NBC)		
	Toilets for Physically disable person	One each for boys and girls (specification as per NBC)		-		



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	Details soo	ope & specification of Development works and Campus Boundary wall
A) Dev	elopment/external services work for	EMRS/EMDBS Campus:-Annexure- II®
SI. No.	Name of work	Details
t	Land development for buildings	The formation level of the land for building shall be developed considering the high floor level of the area, economic aspect. The quantities of earth filling/cutting shall be worked out in detailed calculation basis based on Initial level, contour plan.
2	Preparation of play fields:	
	(i) Playfield of Size 190mx110m for foot ball, cricket, hockey etc including 400mtrs/200mtrs - running track: 1 no. (Size may be very as per availability of land)	Leveling with good earth after filling/cutting of earth. The quantities of earth filling/cutting shall be worked out in detailed calculation basis as per initial level, contour plan. Finished level shall be 30 cm higher than theadjoining ground level so that water logging can be avoided.
	(ii)Basket Ball fields - 2 nos	 (a) Size-40mx30m: Leveling with good earth after filling/cutting of earth. The quantities of earth filling/cutting shall be worked out in detailed calculation basis as per initial level, contour plan Finished level shall be 30 cm higher then the adjoining ground level so that water logging can beavoided. (b) Size 30mx18m CC court with pole, board, basket etc.(i) Based concreting (1:5:10) of 7 50 cm thick (iii) Pole, board, Basket: As per SAI standard.
	(iii) Khokho' Volley Ball court: 2 nos (Size-40mx30m for each)	Leveling with good earth after filling/cutting of earth. The quantities of earth filling/cutting shall be worked out in detailed calculation basis as per initial level, contour plan. Finished level shall be 30 cm higher then theadjoining ground level so that water logging can be avoided
3	Internal roads, paths and culverts:	
	 (i) Internal roads (Cement Concrete roads) 	 Width: Shall be 3.50 mtrs + 1 mtrs. Shoulder/side berm of each side. (ii) Road shall be constructed up to all buildings. (iii) Based Course (1:5:10) of 10 cm thick. (iv) Top Course (M-20 grade designed mix) of 15 cm thick ((v) Finished/top level of the edge of the roads i.e. shoulder level shall be 15 cm. higher then the adjoining ground level
	(ii) Pathways :	 (i) 2.00 mtrs. width + 1 mtrs. shoulder/side berm each side of the pathways. (ii) Pathways shall be provided to connect the buildings/ permanent infrastructure to nearby internal roads. (iii) No pathways shall be provided on side of the roads. (iv) Top Course: 60 mm thick factory made cement concrete interlocking paver block of M-30 grade made by block making machine with strong vibratory compaction etc. in required colour, pattern, 50 mm thickcompacted bed of course sand etc (as per item no. 16.68, DSR-16) (v) Based course: 7.50 cm thick CC (1:5:10) (vi) Kerb stone on edge(50 mm thick, 250 mm height (for which shall be embedded underground): Factory Made kerb ctone of M 35 grade course (as per item no. 16.69, DSR-16). (vii) Finished/top level of the edge of the paths shall be 15 cm. higher than the adjoining ground level.
	(iii) Culverts:	As per actual requirement.
	External water supply.	
1	(i) Tube/open well i/c 2 Nos submcrsible pump 7.5 IIP(preferably Solar Powered)& cabling etc. complete	Shall be executed as per availability of underground water after examination by the local PHED or any other related Govt. agencies i.e. Central Ground Water Board, Local PHED etc. The yield of water source shall be 15000 LPH or more.
ī	ii) Overhead Tank	Required in all building
1	iii)Under Ground Sump:	100000 hr. capacity with 2 nos centrifugal pumps including one standby.



Minimum Quality Assurance (QA) Plans

Sl. No.	Tentative Date Planned for site visit	Target Activity *	Remarks of TPQA	
1	2	3	4	

*The visit shall be planned in such a manner so that the major milestones of building construction can be checked from quality point of view. The activities like layout of building components, retaining structures, marking of depth of foundation & centre of columns, foundation concreting, accuracy of plinth levels & lintel level, brickwork, slab casting, plastering, flooring, joinery, surface drains & sewerage planning, finishing works and all other relevant activities as considered necessary to be included in the **Quality Assurance Plan**.



_	Annexure – I	
Sr. No.	List of Equipment available For Field Testing Laboratory	Comments of TPQA
Α.	For Building Works	
1	Balances	
(i)	7 kg. to 10 kg. capacity, semi-self indicating type – accuracy 10 gm.	
(ii)	500 gm. capacity, semi-self indicating type – accuracy 1 gm.	
iii)	Pan balance – 5 kg. capacity – accuracy 10 gms.	
2	Ovens-electrically operated, thermostatically controlled upto 110 C – sensitivity 1 C.	
3	Sieves: as per IS 460=1962.	
(i)	I.S. sieves – 450mm internal dia, of size100 mm, 80 mm, 63 mm, 50 mm, 40 mm, 25 mm, 20 mm, 12.5 mm, 10 mm, 6.3 mm, 4.75 mm, complete with lid and pan.	
(ii)	I.S. sieves- 200mm internal dia (brass frame) consisting of 2.36mm, 1.18mm, 600 microns, 425 microns, 300 microns, 212 microns, 150 microns, 90 microns, 75 microns, with lid and pan.	
4	Sieve shaker capable of 200 mm and 300 mm dia sleves, manually operated with timing switch assembly.	
5	Equipment for slump test- Slump cone, steel plate, tamping rod, steel scale, scoop.	
6	Dial gauge, 25 mm travel – 0.01 mm/division least count - 2nos.	
7	100 tonnes compression testing machine, electrical-cum manually operated.	
8	Graduated measuring cylinders 200 ml capacity – 3 Nos.	
9	Enamel trays (for efflorescence test for bricks).	
(i)	300 mm x 250 mm x 40 mm- 2 nos.	
ii)	Circular plates of 250 mm dia – 4 nos.	



Annexure – II				
Sr. No.	Field Testing Instruments	Comments of TPQA		
1	Steel tapes – 3 m			
2	Vernier calipers			
3	Micrometer screw 25 mm gauge			
4	A good quality plumb bob			
5	Spirit level, minimum 30 cms long with 3 bubbles for horizontal vertical			
6	Wire gauge (circular type) disc			
7	Foot rule			
8	Long nylon thread			
9	Rebound hammer for testing concrete			
10	Dynamic penetrometer			
11	Magnifying glass)		
12	Screw driver 30 cms long			
13	Ball pin hammer, 100 gms			
14	Plastic bags for taking samples			
15	Moisture meter for timber			
16	Earth resistance tests (for Electrical Divisions)			
17	Meggar (for Electrical Divisions)			



Annexure – III

Proforma For Mandatory Tests To Be Attached With Running Bills

Name of the work	Name of
Contractor	Agreement No. and Date
R/A Bill No.	

SI. No,	ltem	Quantities as per agreement	Frequency as per specification	No. of tests required	Upto date quantity	No. of tests required	No. of tests actually done	Remarks
1	2	3	4	5	6	7	8	9

Note: If the number is less than that required, then reasons shall be recorded.



Annexure – IV

Check Lists For Various Items

PART – A

CHECK LIST FOR ITEMS OF FOUNDATION CONCRETE

Name	of work	
Name	of contractor	
Agreen	nent No	
1.	Date of inspection	
2.	Location	
3.	Material used for concrete whether tested	
	(a) Sand	Yes/No
	(b) Coarse aggregate	Yes/No
	(c) Water	Yes/No
	(d) Admixture, If any	Yes/No
4.	Raft top level, whether provided as per details	Yes/No
5.	Architectural/structural drawing correlated	Yes/No
6.	Whether location of construction joint has been discussed with Executive	
	Engineer, and he has approved it	Yes/No
7.	Cleaning over water proofing surface and construction joint done	Yes/No
8.	CC cover blocks of 60 mm, thickness provided (min 2 in one square metre area)	Yes/No
9.	Reinforcement placement as per relevant structural drawing checked	Yes/No
10.	Layout of columns as per relevant structural drawing checked	Yes/No
11.	Placement of shuttering plates and key board for proper construction joint with	
	shuttering oil	Yes/No
12.	Cement slurry applied on construction joint before pouring of concrete	Yes/No
13.	Trained mason available	Yes/No
14.	Concreting to start from farthest point to nearest point with respect of	
	weight batching plant	Yes/No
15.	Concrete mix has been designed	Yes/No
16.	Plasticiser being used	Yes/No
17.	Adequate number of concrete vibrators in working condition available	Yes/No
18.	Slump checked	Yes/No
19.	Sample cubes taken	Yes/No
20.	Signature of Junior Engineer	
	Signature of Assistant Engineer	
22.	Signature of Executive Engineer	



PART – B

CHECK LIST FOR COLUMNS/BEAMS/SLABS

1.	Date of inspection	
2.	Drawing No.	
3.	Location	
4.	Whether materials used conform to relevant Specifications	
	(a) Sand	Yes/No
	(b) Coarse aggregate	Yes/No
	(c) Water	Yes/No
	(d) Admixture, if any	Yes/No
5.	Whether structural drawings correlated with architectural drawings?	Yes/No
6.	Whether the centre line of column/beams checked with references	
	to grid lines as per architectural drawings?	Yes/No
7.	Whether treatment of expansion joint, wherever required, is done?	Yes/No
8.	Whether cleaning, repairing and approval of shuttering plate,	
	application of quality shuttering oil is done?	Yes/No
9.	Whether shuttering is in true plumb and vertical and properly	
	done and maintained during concreting?	Yes/No
10.	Whether reinforcement detailing, their placement are as per	
	structural drawings?	Yes/No
11.	Whether proper gauge binding wire is used and with full cross	
	binding and tightening of reinforcement bars with stirrups?	Yes/No
	Whether required minimum cover to reinforcement is maintained?	Yes/No
13.	Whether stainless steel cramps, angle irons for holding stones and any holding	
	arrangement for electrical/mechanical/fire fighting/other services have	
	been seen and approved by JE (E)/AE (E)	Yes/No
14.	Whether conduits for various electrical/mechanical/fire fighting/	
	other services have been seen and approved by JE (E)/AE (E)	Yes/No
15.	Whether concrete of approved design mix within maximum	
	permissible water-cement ratio is used?	Yes/No
16.	Whether admixture of good brand quality approved by	
	Engineer-in-charge is used?	Yes/No
17.	Whether technical supervision at batching plant/mixer and	
	at point of concreting done?	Yes/No
18.	Whether concreting is placed within initial setting time of mixing?	Yes/No
19.	Whether proper compaction with vibrator is done?	Yes/No
20.	Whether the concreting has been done in a lift not exceeding 1.5 m?	Yes/No
	Whether cubes as per requirement filled for testing?	Yes/No
	Signature of Junior Engineer	
	Signature of Assistant Engineer	
24.	Signature of Executive Engineer	

Post-concreting:

- 25. Whether shuttering stripped off as per specification, and laitance removed immediately thereafter? Yes/No
- 26. Whether proper arrangement of curing and curing period maintained as per specifications?



27. \	Whether hacking of RCC surface by proper hacking tool for subsequent	
1	plastering/finishing is carried out?	Yes/No
28. 9	Signature of Junior Engineer	
29. 9	Signature of Assistant Engineer	
30.	Signature of Executive Engineer	



PART – C

CHECK LIST FOR BRICK WORK

3.	Location	
4.	Whether materials used conform to relevant Specifications and whether mandate	ory tests
	doen?	
	(a) Sand	Yes/No
	(b) Bricks	Yes/No
	(c) Water	Yes/No
5.	Whether structural drawings co-related with architectural drawings?	Yes/No
6.	Whether the centre line of brickwork checked with reference to grid lines as per	
	architectural drawings?	Yes/No
7.	Whether bricks soaked in water before use for sufficient period?	Yes/No
8.	Whether queen closers are used at junction of walls?	Yes/No
9.	Whether brickwork is in true plumb and vertical and all layers truly horizontal?	Yes/No
10.	Whether graduated wooden straight edge storey rod being used for	
	keeping height of brick courses uniform?	Yes/No
	Whether wall height being constructed in a day is being restricted to 1 m height?	Yes/No
12.	Whether parts of wall left at different levels are raked back at an angle	
	of 45 degrees or less with the horizontal? (Toothing is not to be permitted)	Yes/No
13.	Whether top courses of all plinths, parapets, steps and top of walls below	
	floor and roof slabs laid with brick on edge? Whether marucona provided	
	at corners in such brickwork?	Yes/No
	Whether thickness of joints in brickwork is kept 1 cm +_ 20%?	Yes/No
15.	Whether mortar of approved mix within maximum permissible	
	water cement ratio is used?	Yes/No
	Whether all horizontal and vertical joints are being filled?	Yes/No
17.	Whether proper arrangement of curing and curing period maintained as per	
	specification?	Yes/No
	Whether date of work done written?	Yes/No
	Signature of Junior Engineer	
	Signature of Assistant Engineer	
21.	Signature of Executive Engineer	

Signature of TPQA

Date of Inspection
 Drawing No.



PART – D

CHECK LIST FOR PLASTERING

1.	Date of inspection	
2.	Drawing No.	
3.	Location	
4.	Whether materials used conform to relevant specifications and whether	
-	mandatory tests done?	Yes/No
5.	Whether surface cleaned of all loose mortar and efflorescence?	Yes/No
6.	Whether all conduiting and electrical piping done?	Yes/No
7.	Whether all doors, windows etc. fixed?	Yes/No
8.	Whether all defects of brickwork/CC/RCC rectified?	Yes/No
9.	Whether preparation of surface done?	Yes/No
10.	Whether 2.5 m long aluminium straight edge and plumb bob being used to check	
	vertically and evenness of surface?	Yes/No
11.	Whether 15 cm x 15 cm bunda at every 2 m horizontally and vertically	
	being provided to serve as gauges?	Yes/No
12.	Whether uniform groove provided at junctions of all plaster and ceiling plaster?	Yes/No
13.	Whether mortar of approved mlx within maximum permissible	
	water cement ratio is used?	Yes/No
14.	Whether proper arrangement of curing and curing period	
	maintained as per specifications?	Yes/No
15.	Whether date of word done written?	Yes/No
16.	Signature of Junior Engineer	
17.	Signature of Assistant Engineer	
	Signature of Executive Engineer	
	-	



PART – E

CHECK LIST FOR WATER SUPPLY LINES

1.	Date of inspection	
2.	Drawing No.	
3.	Location	
4.	Whether materials used conform to relevant specifications and whether	
	mandatory tests done?	Yes/No
5.	Whether plumber employed is licensed plumber or not?	Yes/No
6.	Whether plan for piping system has been prepared and got approved?	Yes/No
7.	Whether all pipes and fittings are ISI marked?	Yes/No
8.	Whether a sample system has been prepared and got approved?	Yes/No
9.	Whether clamps provided at specified spacing?	Yes/No
10.	Whether pipe lines checked at required pressure before covering?	Yes/No
11.	Whether weight of flushing pipe checked?	Yes/No
12.	Whether flushing cistern is ISI marked and internally painted	
	with bitumastic paint?	Yes/No
13.	Whether fittings like wash basin, sink pan, cistern, bib cock,	
	stop cock, wheel valves, etc. are ISI marked?	Yes/No
14.	Whether PVC water storage tank is ISI marked? If not, whether	
	sample sent for testing?	Yes/No
15.	Signature of Junior Engineer	
16.	Signature of Assistant Engineer	
	Signature of Executive Engineer	



SECTION 53

QUALITY ASSURANCE AND TECHNICAL AUDIT WING

53.1 Introduction

- (1) The Quality Assurance activity, in order to be truly effective has to ensure a progressively improved and uniform quality of the finished work. Experience gained over years indicate that "Process Control" is essential in building construction to ensure that the work in different phases is executed in a manner pre-determined and laid down in specifications. In order to achieve the above, the pre-requisites cover among other things, an inbuilt provision in the contract for a system of continuous check on quality by the field staff and the contractor for ensuring quality of work; availability of adequately manned and equipped agency for overseeing the quality aspects, and periodical appraisal of quality and a system of feed back for effecting possible improvements.
- (2) Maintenance of quality has to be imbibed in the minds of the contractor as well as the officials of the department. It is better to have a system in which the quality of work is achieved during the construction stage itself, rather than indulge in 'fire fighting' activities after the damage has been done by way of post-construction 'quality control'. Quality control does have a place in the system, but this has to be more by way of being a means of enforcement, to ensure that the quality of work is checked and controlled as a continuous process during the construction stage itself: The final output will then be satisfying both to structural as well as aesthetical sensibilities.

53.2 Minimum Quality Assurance Plan (Modified as per OM/MAN/233)

- (1) Minimum Q.A. Plan shall have to be part of tendered document for all the works costing more than Rs. 1 Crore, and for works not exceeding Rs. 1 Crore, the Technical Sanctioning Authority may provide this clause in the NIT considering its necessity. (Modified vide OM DG/ MAN/261 dt. 18.01.2014)
- (2) Lot size, number of required tests and frequency of testing needs to be clearly indicated in QA Plan. While deciding these criteria CPWD Specifications & Provisions of BIS Code and Standard Practices may be referred. Volume of work, Practical Difficulties and Site Conditions etc. may also be kept in view and lot size, number of tests and frequencies of testing may be varied suitably by NIT Approving Authority.
- (3) It should clearly indicate the Machinery and other Tool & Plants required to be deployed at site by the contractor. Entire Machinery and T&P may not be required at the start of work, therefore, a proper time schedule by which each Machinery & T&P is to be brought at site should also be indicated.
- (4) Requirement to setup field laboratory should be defined. All the testing equipments to be arranged by the contractor should be clearly mentioned. If field lab is to be setup by the Department the same may be indicated in the QA Plan.
- (5) All the relevant and applicable codes, specifications and standards, as well as the acceptance criteria for various items of work, workmanship, materials and process employed needs to be mentioned.
- (6) A proper shuttering schedule showing quantity of shuttering to be brought at site either in one lot or at different stages of work should form part of QA Plan.
- (7) Maintenance of Register of Tests -
 - (i) All the registers of tests carried out at Construction Site or in outside laboratories shall be maintained by the contractor which shall be issued to the contractor by Engineer-in-charge in the same manner as being issued to CPWD field staff.
 - (ii) All Samples of materials including Cement Concrete Cubes shall be taken jointly with Contractor by JE and out of this at least 50% samples shall be taken in presence of AE in charge. If there

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is no JE, all Samples of materials including Cement Concrete Cubes shall be taken by AE Jointly with Contractor. All the necessary assistance shall be provided by the contractor. Cost of sample materials is to be borne by the contractor and he shall be responsible for safe custody of samples to be tested at site.

(iii) All the test in field lab setup at Construction Site shall be carried out by the Engineering Staff deployed by the contractor which shall be 100% witnessed by JE and 50% of tests shall be witnessed by AE-in-charge. At least 10% of the tests are to be witnessed by the Executive Engineer.

For outstations the percentage of tests to be witnessed by JE, AE & EE are to be decided by NIT Approving Authority and should form part of QA Plan.

(iv) All the entries in the registers will be made by the designated Engineering Staff of the contractor and same should be regularly reviewed by JE/AE/EE.

- (v) Contractor shall be responsible for safe custody of all the test registers.
- (8) Submission of copy of all test registers, Material at Site Register and hindrance register along with each alternate Running Account Blll and Final Blll shall be mandatory. These registers should be duly checked by AE(P) in Division Office and receipts of registers should also be acknowledged by Accounts Officer by signing the copies and register to confirm receipt in Division office.

If all the test registers and hindrance register is not submitted along with each alternate R/A Bill & Final Bill, it will be responsibility of EE & AAO that no payment is released to the contractor.

- (9) Maintenance of Material at Site (MAS) Register -
 - (i) All the MAS Registers including Cement and Steel Registers shall be maintained by Contractor which shall be issued to the contractor by Engineer-in-charge in the same manner as being issued to CPWD field staff.
 - (ii) Each of the entry of receipt of material at site shall be 100% test checked by JE or by AE if there is no JE.
 - (iii) Each MAS Register shall be checked by JE at least twice a week and at least once a week by AE. If There is no JE then MAS registers will be checked by AE at least twice a week.
 - (iv) Cement Register shall be reviewed by EE at least once in a month. For outstations the frequency of checking the Registers by JE, AE & EE is to be decided by NIT Approving Authority and should form part of QA Plan.
- (10) It will be deemed that work so measured, checked and paid is of the required quality and standard, both in respect of ingredients as well as the intended functions it is supposed to perform. In other words, the work would not only meet the required specifications but also the workmanship as per sound engineering practices.
- (11) Minimum QA plan may vary work to work basis depending upon nature and volume of work.
- (12) The Superintending Engineer shall also have to check and sign these reports at suitable intervals in token of his ensuring compliance of the 'Quality Assurance Plan' for the work. For major works costing above Rs. 10 crores, he shall check and sign these reports for works in his headquarter, before every alternate running account bill, beginning from the first bill, as well as before the final bill is paid to the contractor. For works outside his headquarter, he shall check and sign these reports whenever he goes on inspection. The Chief Engineer can waive this requirement in exceptional cases, and for recorded reasons. However, in any case, the Superintending Engineer shall not be absolved of his responsibility to ensure that the 'Quality Assurance Plan' is complied with in every work under his charge. It will be his responsibility to locate the lapses or deficiency and take suitable remedial action if the Quality Assurance Plan is not implemented in spirit and action by the field officers.



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Quality Assurance & Quality Control Laboratory Test Program

A sample QA QC Lab test program is presented below, however, the testing program shall be as per the approved Project Quality Plan agreed between the Client, PMC and the Contracting agency.

Code of Confirmation.	IS: 2720	IS: 2720/CPWD	IS: 1489	IS: 1489	IS 383:2016
TPI's Role	 Review test reports 	Review test reportsRandomly Witness	 Review of MTC & Test reports 	 Review of MTC & Test Reports 	Review test reportsRandom Witness
External/Site Lab Testing Frequency	 Once per Source 	Per 250 Sqm.Per layer	 Submission of MTC Per source of Brand Per Lot Per 50 Tonnes or part thereof 	 Submission of MTC Per Source of Brand 	Once per Month Per Source Per 40 Cum. Per Source.
Reference L. S. Code	• IS: 2720	• IS: 2720	• IS: 4031	• IS: 4032	• IS: 2386
Tests to be carried out	 MDD OMC Liquid Limit Plastic Limit Plasticity Index 	• FDD	Physical Tests• Initial Setting time• Final Setting Time• Compressive Strength• Fineness• Soundness• Consistency	 Chemical Tests % Insoluble Residue % magnesia % Sulphuric Anhydride % Loss on ignition Chloride 	Percentage of Soft or deleterious material Particle Size
Material	Borrowed Soil, Natural Soil	Compacted Earth	Cement (PPC)	ods (India) Lin	Coarse Aggregate
No.	1.	2.	ri	a ou the the	4

Per Month	Per Day	Per Source	Per Source	Per Month	Per 40 Cum.	Per Source	Per 40 Cum.	Per Source	Per Source	Per Month	Per Source	Per Source
Water Absorption	Moisture Content	Specific Gravity	Bulk Density		Aggregate Crushing	Strength/10% fine Value	Aggregate Impact Value		Combined Flakiness &	Elongation Test	Soundness Test	Alkali Aggregate Reactivity



Material Tests to be carried out	Fine by Sort				Water Absol			 b) Suspendec c) Sulphates d) Inorganic e) Organic So 	ReinforcedSlump Testcement concreteNim &(Design Mix &Cube Test	Autoclaved Dimensional Tolerance collular Aerated Compressive Strength concrete blocks Density Thermal Conductivity			
carried out	ourities	ier than 75µ	sis	Sand (only	rption	ntent	iidity kality if Solids rides	Suspended Matter Sulphates Inorganic Solids Organic Solids		Tolerance Strength Iductivity			
Keterence I. S. Code	• IS: 2386						IS 3025		Appendix 'D' of Chapter 4 CPWD Spec IS 516	 IS:6441 (part- 1) 1972 (RA- 2017) IS: 3346-1980 			
Testing Frequency Per Source Per 20 m ³ or part thereof Per 20 m ³ or part thereof Per 40 m ³ receiving Per 20 m ³ receiving Per 20 m ³ receiving Per 20 m ³ receiving Per Day				Per Day	Each Source Every 3 month		Per Day Per 50 cum of Concrete As per IS-456	 Per source Per brand Per 10000 bricks 					
TPI's Role	 Review test Reports Randomly Witness 						AL						
Code of Confirmation.		15 383:2016					IS: 456-2000		IS : 456-2000	IS: 2185 Part 3- 2015			

	IS : 1786-2013		IS : 1077-1992 (RA 2016)
	 Review MTC & test reports 		 Review of Test reports Randomly Witness
	i)Under 10mm dia one sample for each 25 tonne or part thereof ii)10mm to 16mm dia one sample for each 35 tonnes iii)over 16mm dia one sample for each 45 tonne	lice	20 Bricks 40 Bricks 60 Bricks 80 Bricks 5 Bricks
	i)Under 10mm dia one sa for each 25 tonne or part th ii)10mm to 16mm dia sample for each 35 tonnes iii)over 16mm dia one sa for each 45 tonne	Per Diameter.	Per Brand. >=2000 2001-10000 10001-35000 35001-50000 Per Brand. >=2000
(KA-2017))8 (RA- 1) 2018 (RA2017)	017) 1992
(RA	IS: 1786:2008 (RA- 2013) IS:1608(part-1) 2018 IS:1599:2012 (RA2017)	Chemical test ASTM-E415:2017	IS:3495(part-2) (RA2016)
Urying Shrinkage	Physical Test	Chemical Test	Dimensional Tolerance Compressive Strength
	Reinforcement Steel		Bricks
	6		10. Br

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		11.		12.			13.		14.							Projec	15.	-	10
		. Structural Steel	Channel & Angle Sections& Plates)	. Structural Steel (Hollow Sections)			Anti Termite		EPDM							1		dia)	12/
Water Absorption	Efflorescence	Tensile Strength	Bend Test	Tensile Strength	Bend Test	Flattening Test	All tests as per IS: 8944-	2005	 Thickness 	 Unit Weight Tensile Strength 	 Elongation % 	Water Absorption	 UV Resistance 	 Minimum service 	temperature	- INIAXIIIIUITI SELVICE temperature	Dry Material	 Content A sh content 	 Relative Density
(RA2016) (RA2016) (RA2016)	IS:3495(part-3) 1992 (RA2016)		(/107 YY)7107:66C1S1	IS 1608	IS 2329	IS 2328	IS: 8944	IS:6940 IS:1448 IS:8963	ASTM: D412	ASTM: D471 ASTM: D624	ASTM: D1204	ASTM: D2240 ASTM: E154					IS: 9103-1999		
2001-10000 5 Bricks 10001-35000 10 Bricks	15	To be Procured from	 approved make Submission of MTC Once Per 20 MT. 	To be Procured from	 Submission of MTC 	 Once Per 8 MT. 	To be procured from	approved brandSubmission of MTCPer Brand	To be procured from	 approved brand. Submission of MTC 	 Per Brand 	 Per 1000 Sqm. 					 To be procured from 	approved brand	Per 5 MT.
		Review MTC &	test reports	 Review MTC & 	rest reports		 Review MTC & 	test reports	 Review MTC & 	Test reports							 Review of test 	reports &MTC	
		-	15:300- 1939(KA 2014) IS:1852- 1985(RA 2013)	IS: 4923-2017			IS: 8944-2005		ASTM: D412	ASTM: D471 ASTM: D624	ASTM: D1204	ASTM: D2240					IS: 9103-1999		

	IS: 15622-2006	IS : 1130-1969	IS-14223-1995 (Part-1)	IS:1128-1974	IS:3622-1977
11					
	 Review of test reports 	Review of test reports	Review of test reports	Review of test reports	Review of test reports
	Ę	art	art		
	 Per Batch Per 3000 Nos. To be procured from approved manufacturer 	 Per source Per 100 Sqm. or part thereof 	 Per source per 100 Sqm or part thereof 	 Per source 100 Sqm or part thereof 	 Per source 100 Sqm or part thereof
	 IS: 13630part-1 & part-15 2006 (RA-2017) 	IS: 1122-1974 IS: 1124-1974	IS: 13030-1991 IS: 1124:1972 IS: 1122-1974	IS:1124-1974 IS:1121 IS:1126-2013	IS:1124 IS:1121 IS:1706-1974 IS:1126-2013
 Chloride content pH 	 All test as per IS : 15622-2006 Water absorption Wodulus of rupture Scratch hardness Crazing resistance 	 Moisture Absorption Hardness Specific Gravity 	 Moisture Content Water Absorption Hardness Specific Gravity 	 Water Absorption Transverses Strength Durability 	 Water Absorption Transverses Strength Resistance to wear Durability
	Glazed Tiles/ Vitrified tiles	Marble	Granite	Kota Stone	Sand Stone
	16.	17.	18.	19.	Below Contraction

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IS: 13801-2013	IS: 15658-2006	As per CPWD specifications	IS: 733-1983 IS: 1285-2002 IS: 6477-1983 IS: 2673-2002	IS: 2095-2011
 Review of test reports 	 Review of test report 	 Review of Test reports 	 Review of Test Reports and MTC 	 Review of test reports and MTC
 Per Brand Per 1000 Sqm. 	 Per Brand Per 10000 nos 	 Per Source Per 1 Cum or part thereof 	 To be Procured from approved brand Per Brand Per Section Per 5 MT 	 To be procured from approved brand. Once per 1000 Sqm.
IS:13801-2013 IS:1237-2012	IS: 15658-2006 RA- 2011 IS: 15658-2006 RA- IS: 15658-2006 RA-	As per CPWD specifications	IS:504-1963 IS:1608-2005(part- 1)2018	IS: 2542-1978
 Dimension Water Absorption Wet Transverse Strength Resistance to wear 	 Dimension Water absorption Compressive strength Abrasion resistance 	 Moisture content 	 Thickness of anodic / powder coating 0.2% proof stress, Tensile strength Elongation Chemical Composition 	 Transverse strength
Cement concrete tiles	Concrete Paver Blocks	booW	Aluminum Section	Gypsum Board
21.	22.	23.	24.	25.



Code of Confirmation.	As per CPWD specifications/ IRC/MoRTH		
TPI's Role	 Review of Test reports Randomly Randomly witness Review of Test reports Randomly 	 Review of Test Report 	 Review of Test reports Randomly witness
Testing Frequency	 Per 100 Cum Per Source Per Source Per 200 Cum 	Per Source	 Per 500 sq. m
Reference L S. Code	IS : 2386-1963 IS: 383-2016 BIS: 812	IS 2720	
Tests to be carried out	 Gradation Combined Flakiness & Elongation Index Aggregate Impact Value/10% fine value /Los Angles Abrasion Test 	sorption Jimit Jimit OMC ous	 Density of Compacted Layer Moisture Content
Material	26. Granular sub base	I	
No.	26.		



Code of Confirmation.	As per CPWD specifications/ IRC/MoRTH			
TPI's Role	 Review of Test reports Randomly witness 	 Review of Test reports Randomly witness 	 Review of Test Report 	 Review of Test reports Randomly witness
Testing Frequency	 Per 100 Cum Per Source 	 Per Source Per 200 Cum 	 Per Source 	 Per 500 sq. m
Reference L. S. Code	IS : 2386-1963 IS: 383-2016	BIS: 812	IS 2720	
Tests to be carried out	 Gradation Gradation Combined Flakiness & Flakiness & Elongation Index Aggregate Impact Value/10%, fine 	value /Los Angles Abrasion Test	 Water absorption Liquid Limit Plastic Limit MDD & OMC 	 Density of Compacted Layer Moisture Content
Material	Wet Mix Macadam			
No.	27.			



TPI's Role Code of Confirmation.	Review of Test IS 73-2013			Review of Test									Review of Test IS 73-2013								
TPI	 Review 	reputes		 Review 	reports								Review	reports	Random	Witness					
Testing Frequency	Upto 50 container - 3 Samples 51-150 "" " - 5 Samples	151-500 " " - 7 Samples	501-above " " - 10 Samples	Upto 50 container - 3 Samples	(Combined to form 1 Sample)	51-150 " " - 5 Samples	(Combined to form 1 Sample)	151-500 " " - 7 Samples	(Combined to form 1 Sample)	501-above " " - 10 Samples	(Combined to form 1 Sample)		As per IS 73	 Per 100 cum 	 Per Source 		Two Test Per Dav Per	Plant		 Per 100 cum 	Per Source
Reference L. S. Code	 IS 1203 IS 1205 	 IS 1206 		 IS 1206 		 IS 1448 	- IS 1216				 IS 1206 	■ IS 1208	• IS 73					 IS 2386 			10 01 -
lests to be carried out	 Penetration at 25®C Softening Point 	 Absolute Viscosity 	at 60®C	 Kinematic Viscosity 	at 135 @C	 Flash Point 	 Solubility in 	trichloroethylene	Tests on residue from thin	film oven test	 Viscosity Ratio at 600 C 	 Ductility at 25®C 	Binder	 Aggregate Impact 	Value/Los Angles	Abrasion Test	 Combined Flakiness 	ttion Test	Acorecate of	 Stripping Value 	
Material	Bitumen												Bitumen	Penetration	Macadam/	Premix Carpet					
No.	28.												29.								



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Code of Confirmation.	As per CPWD Specs.	IS: 5758-1984	Relevant IS and ASTM codes	IS: 6911:1992
TPI's Role	 Review of Test reports Witness 	 Review MTC & test reports 	 Review MTC & test reports 	 Review MTC & test reports
Testing Frequency	 One test consisting of 8 specimens for 30 cum of Concrete. 	 To be procured from approved brand Submission of MTC Per 500 Nos. 	 To be procured from approved brand Submission of MTC Per 500 Sqm. 	 To be procured from approved brand Submission of MTC Per brand Per 8 MT.
Reference L S. Code	IS 526	IS:1578:1984	Relevant IS Code and ASTM codes	ASTME 1086 :2014
Lests to be carried out	 Flexural Strength 	 Dimension Water absorption Compressive strength Transverse Strength 	 Panel Thickness Aluminum Thickness Unit Weight Unit Weight Deflection Temperature Compressive strength Tensile strength Water resistance Flexural strength 	 Tensile Strength Yield Stress Elongation Mass per meter Chemical Composition
Material	Concrete Pavement (Tremix)	31. Kerb stone	Aluminum Composite Panels	Stainless steel (Steel tubular pipes)
No.	30.	31.	32.	33.

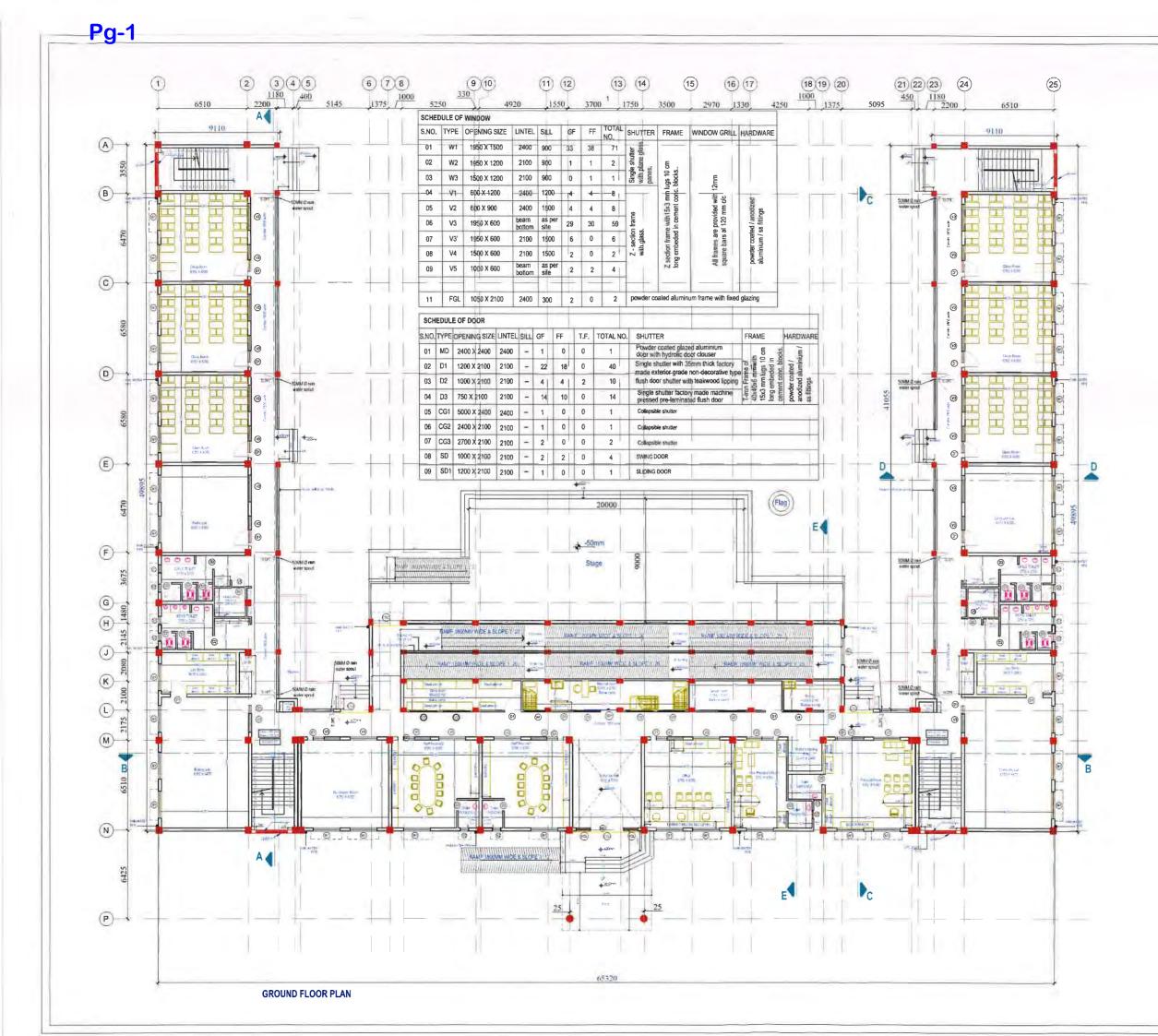


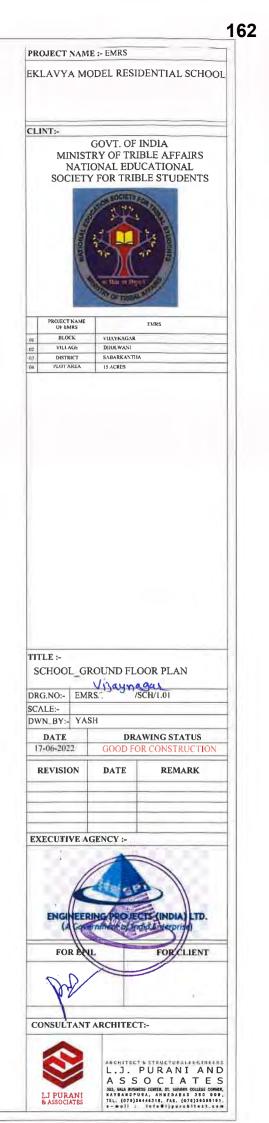
	EMRS Vijaynagar, sabarkar		t
	Architructural Draw		
S.No.	Particular	Page No.	Remark
1	School Building		
i	Ground floor Plan	1	
ii	First floor plan	2	
iii	Terrace floor plan	3	
iv	Elevations	4	
V	sections	5	
vi	Entrance porch details	6	
vii	school entry railing details	7	
2	Boys Hostel		
i	Ground floor Plan	8	
ii	First floor plan	9	
iii	Terrace floor plan	10	
iv	Front,Rear side & Side Elevation	11	
v	Rear, Fornt Rear & Side Elevation	12	
Vi	Section	13	
Vii	Entrance porch details	14	
3	Girls Hostel		
i	Ground floor Plan	15	
ĩi	First floor plan	16	
iii	Terrace floor plan	17	
iv	Front,Rear side & Side Elevation	18	
v	Rear, Fornt Rear & Side Elevation	19	
Vi	Section	20	
Vii	Entrance porch details	21	
4	Kitchen & Dinning		
i	Ground floor Plan	22	
ii	Terrace floor plan	23	
iii	Elevation	24	
iv	sections	25	
5	Warden Residence		
<u>э</u> і	Ground floor Furniture Layout plan	26	

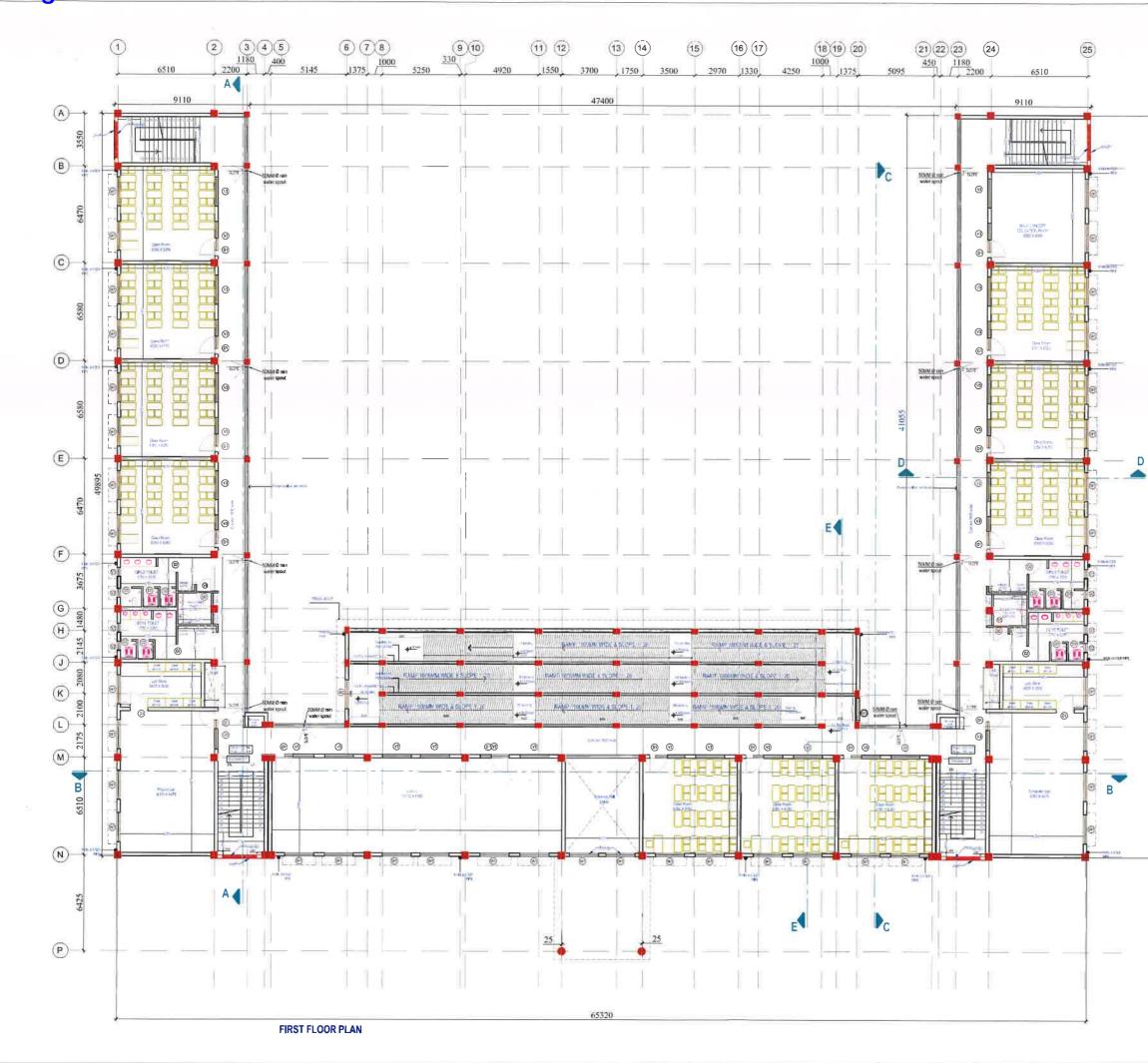
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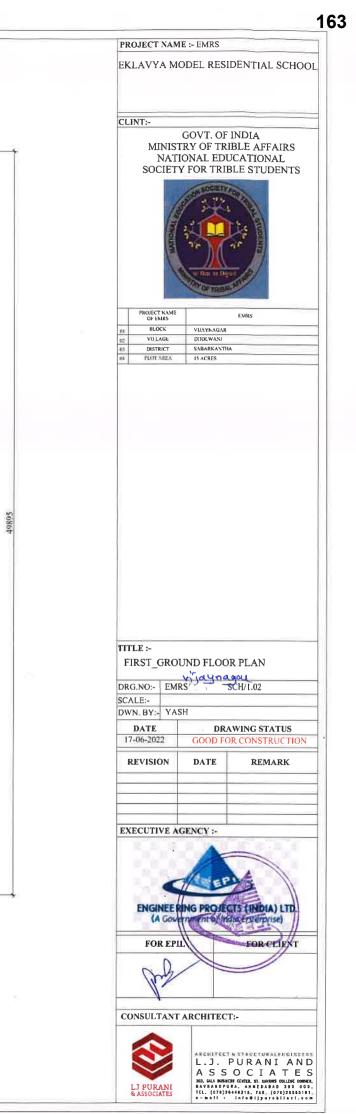
ii	Terrace floor plan	27	
iii	Elevation	28	
iv	Elevation	29	
v	section	30	
6	Principal		
i	Ground floor Plan	31	
ii	Terrace floor plan	32	
iii	Elevation and section	33	
8	Type-II	-	
1	Ground floor Plan	34	
ii	First floor plan	35	
iii	Second floor plan	36	
iv	Terrace floor plan	37	
v	Elevation	38	
vi	Section	39	
7	Type-III		
i	Ground floor Plan	40	
ii	First floor plan	41	
iii	Terrace floor plan	42	
iv	Elevation	43	
v	Section	44	
8	ESS floor plan	45	

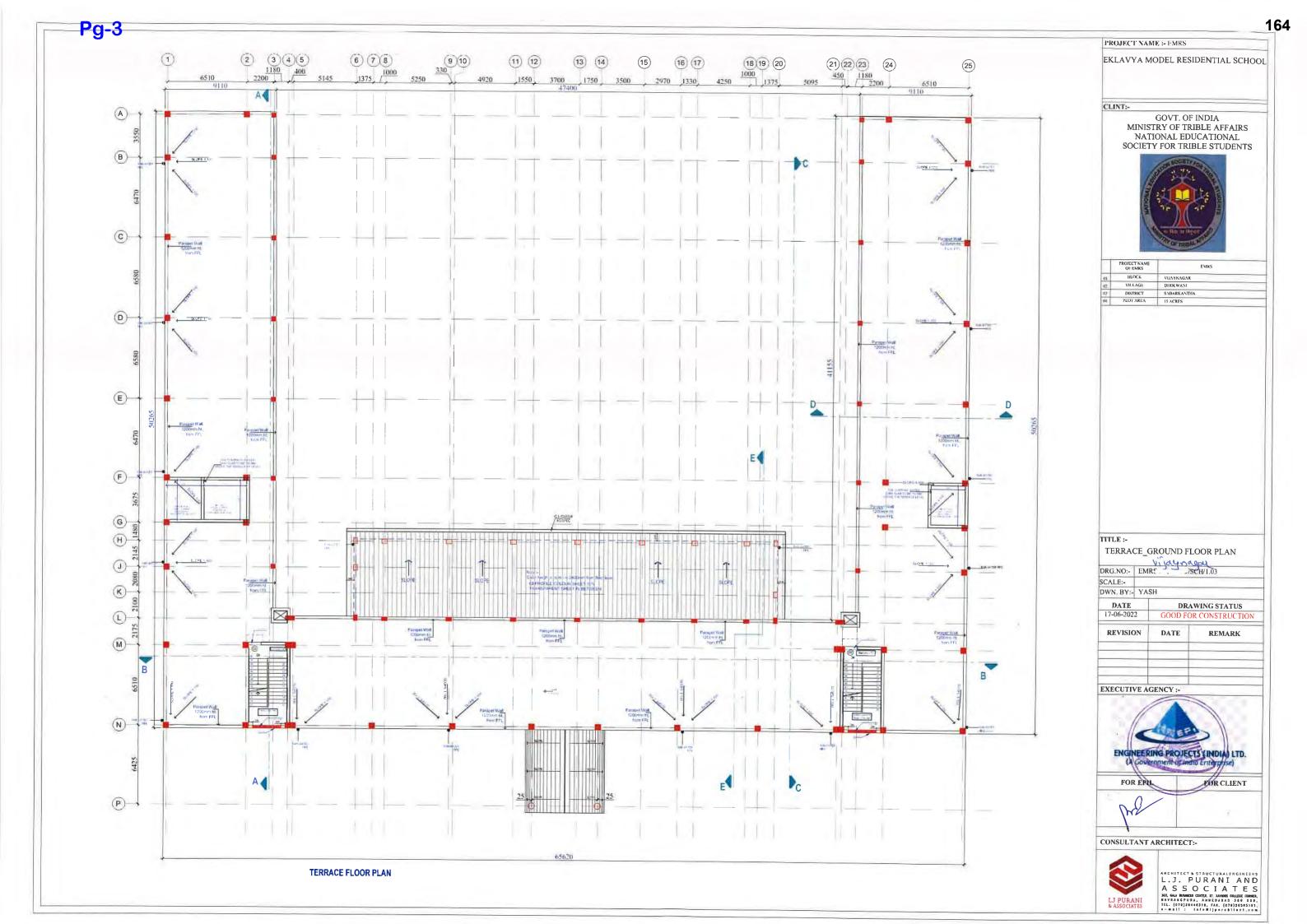
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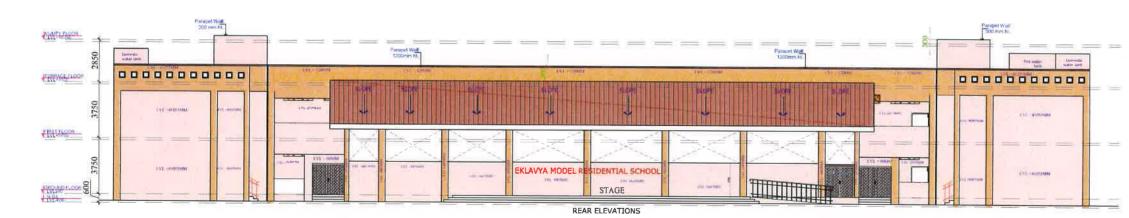




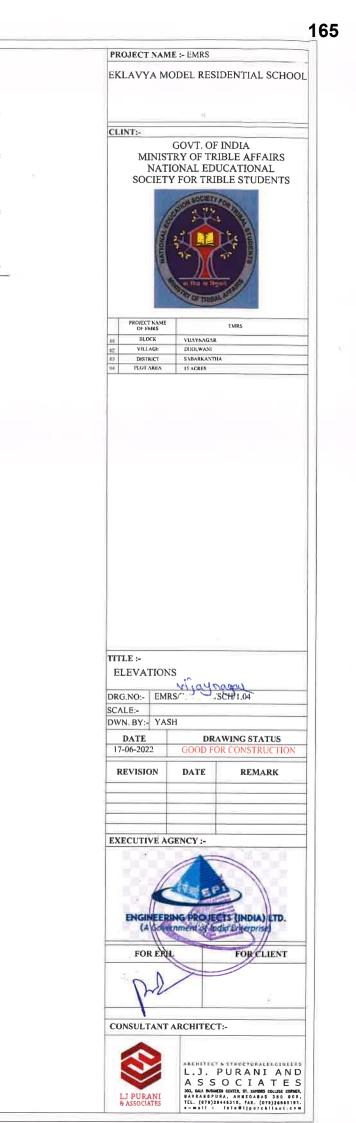


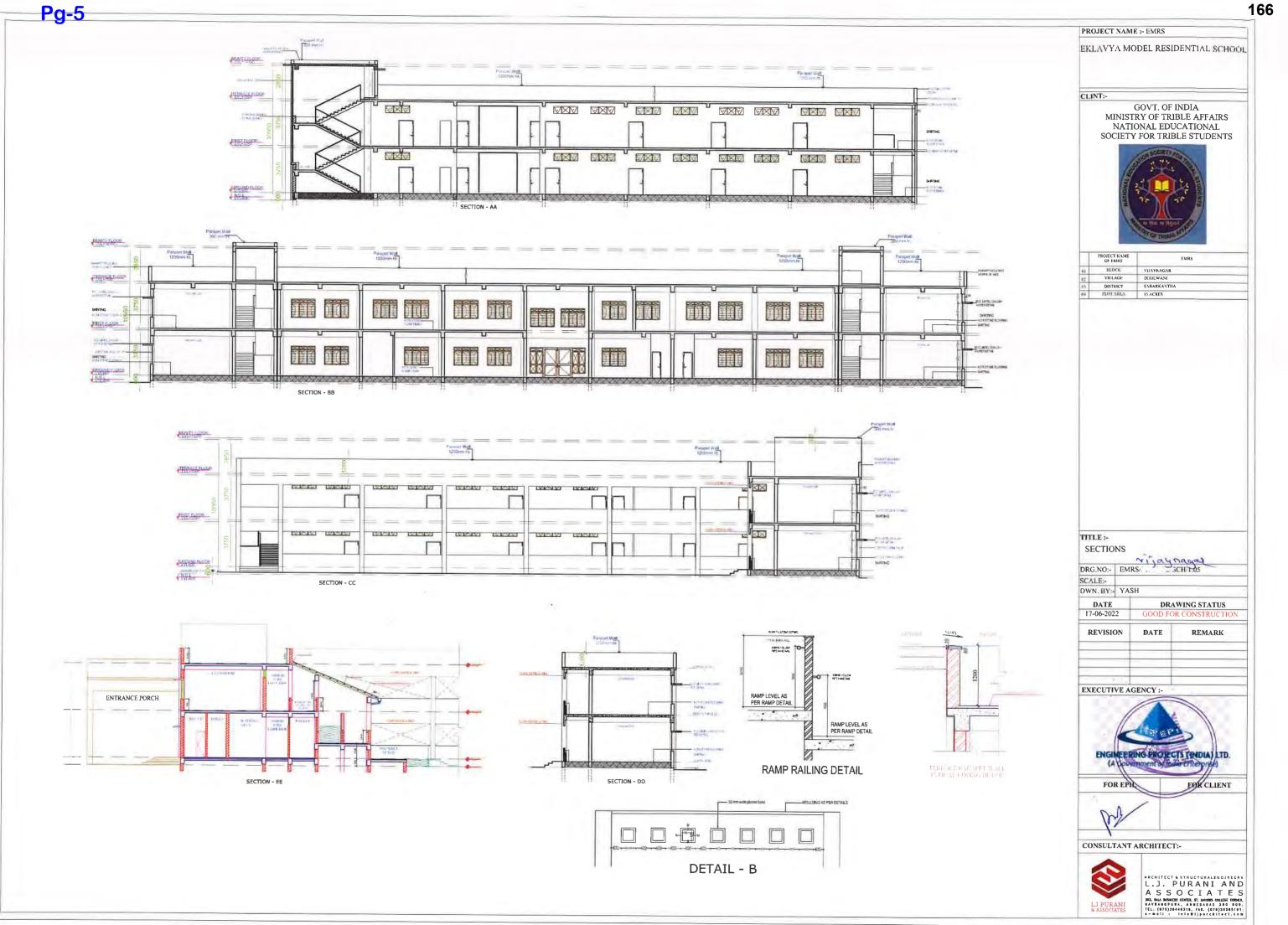








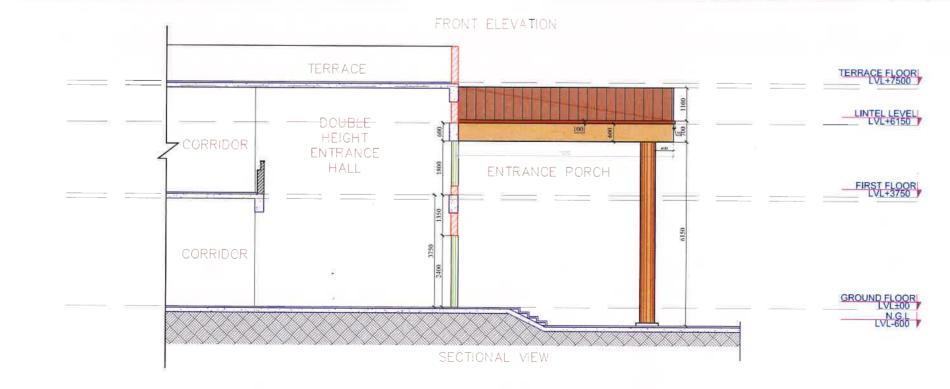


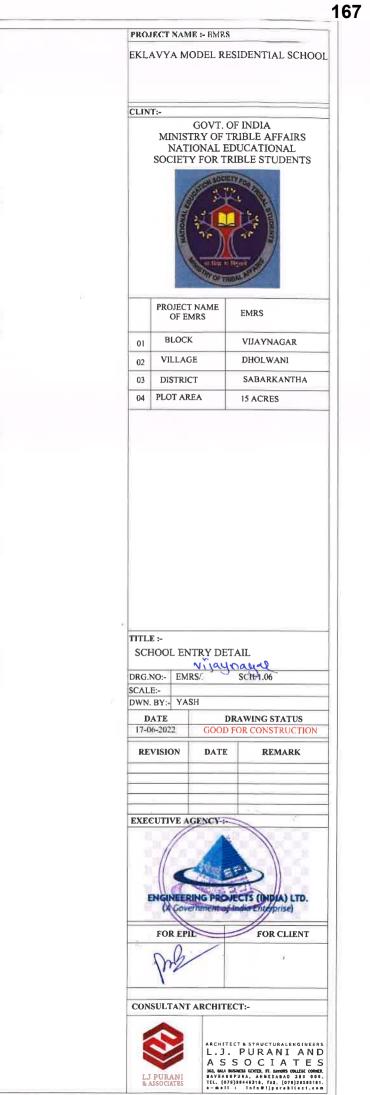


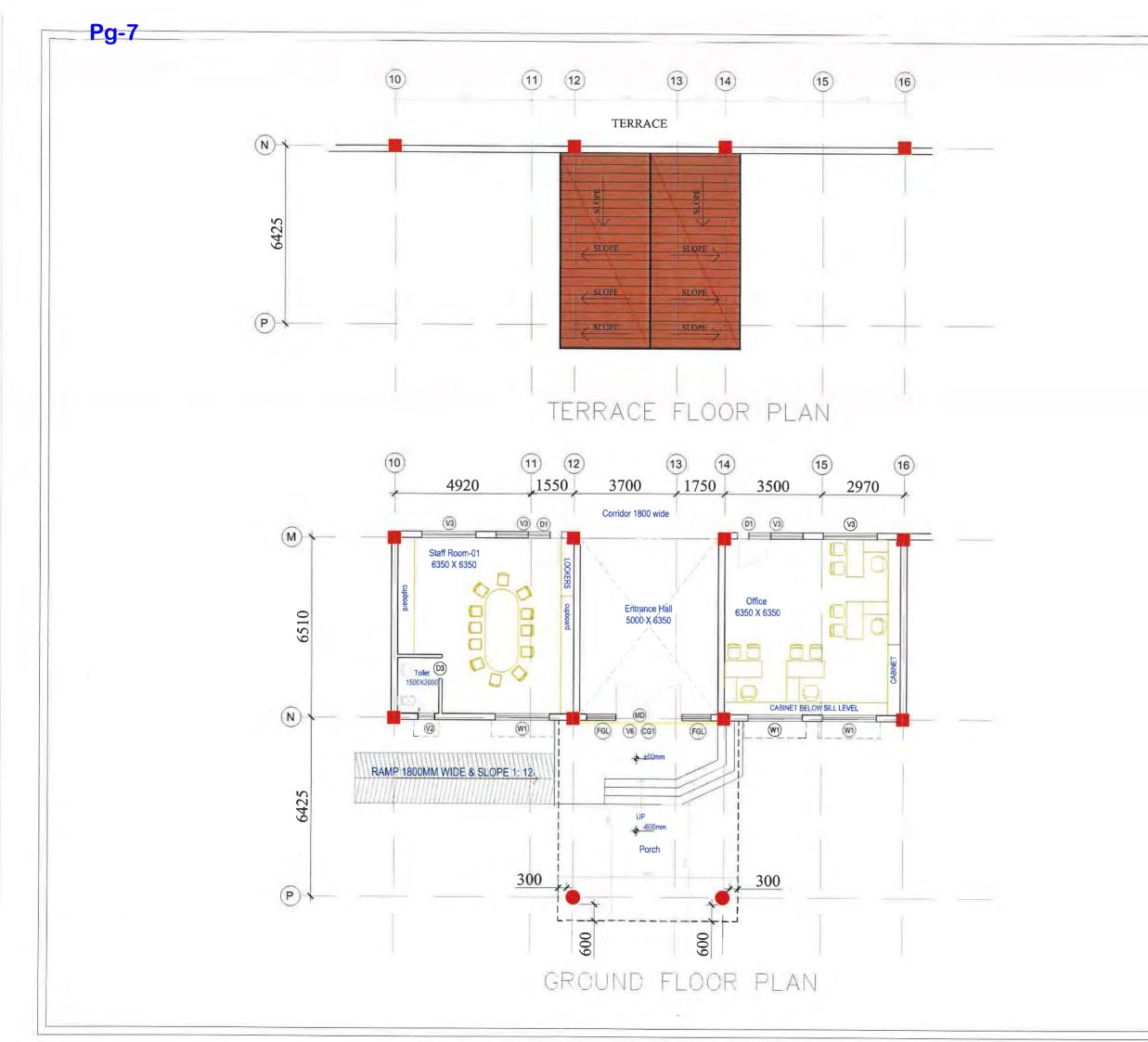


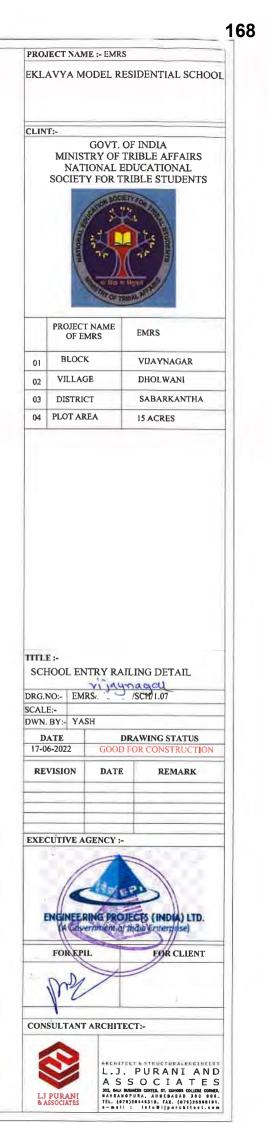
SECTIONAL FRONT VIEW

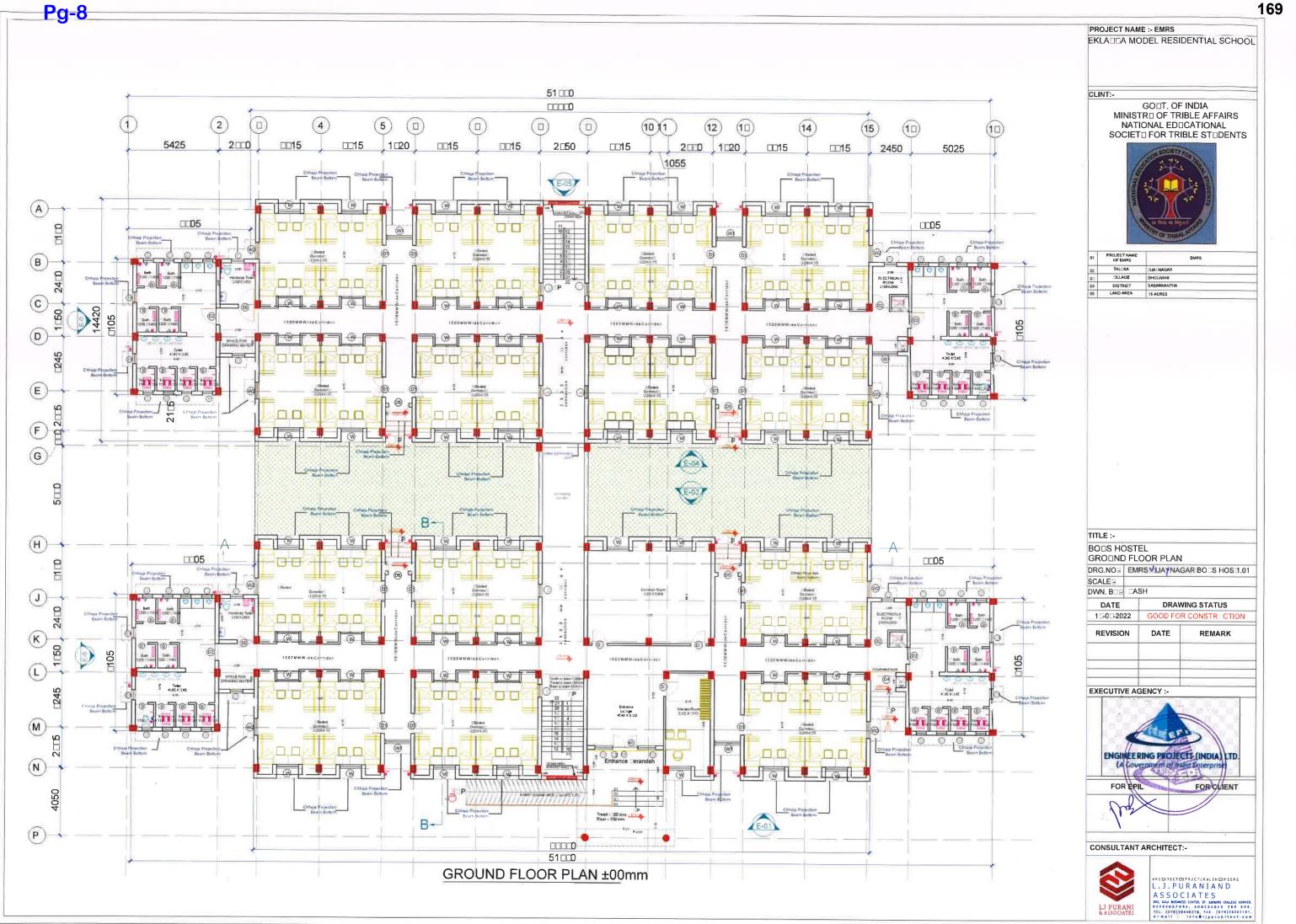


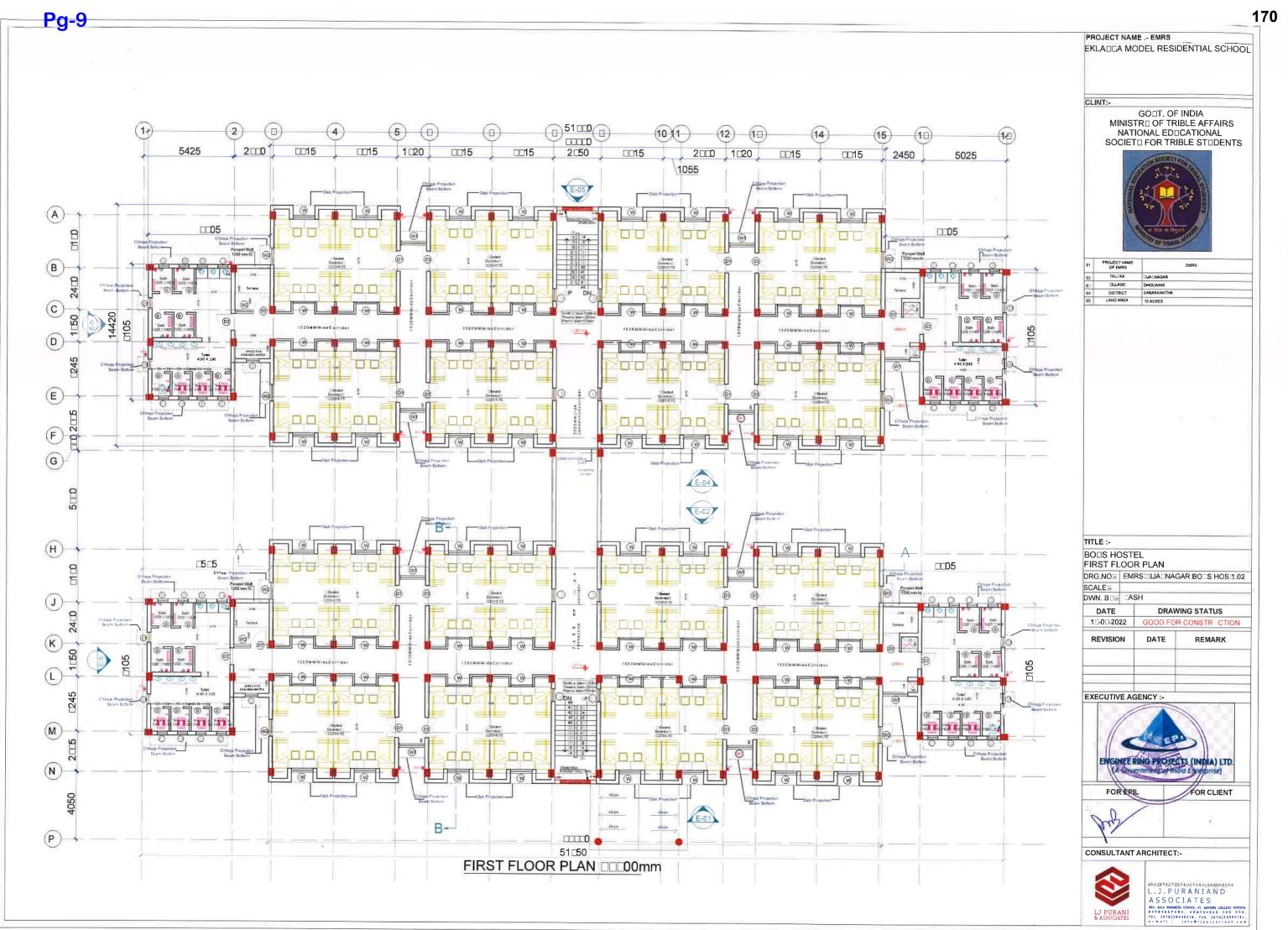


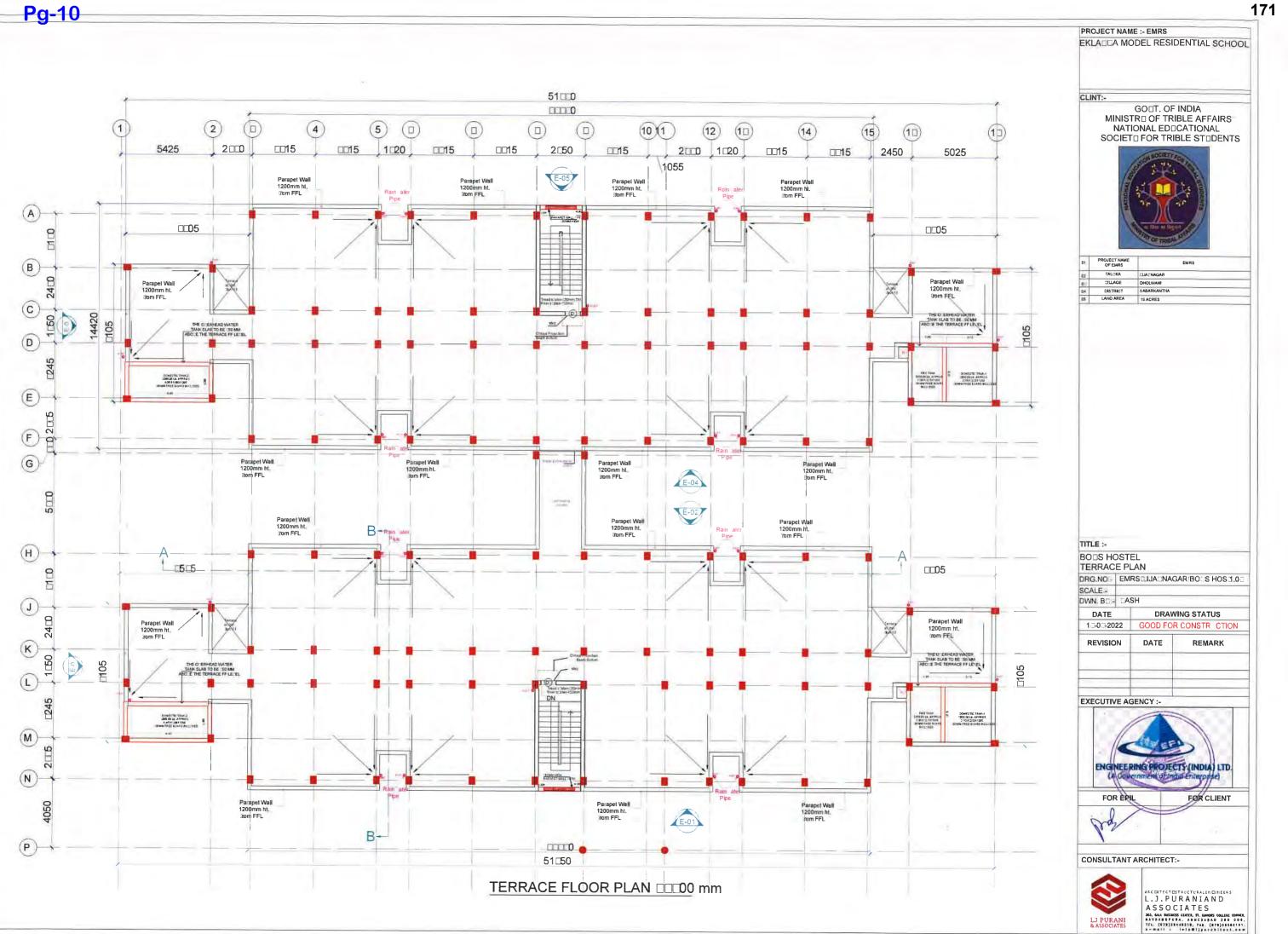


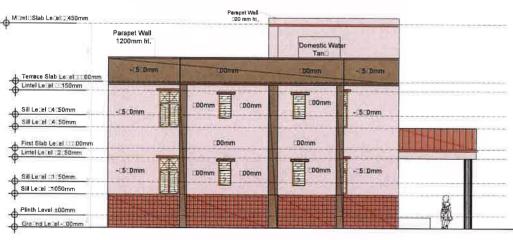






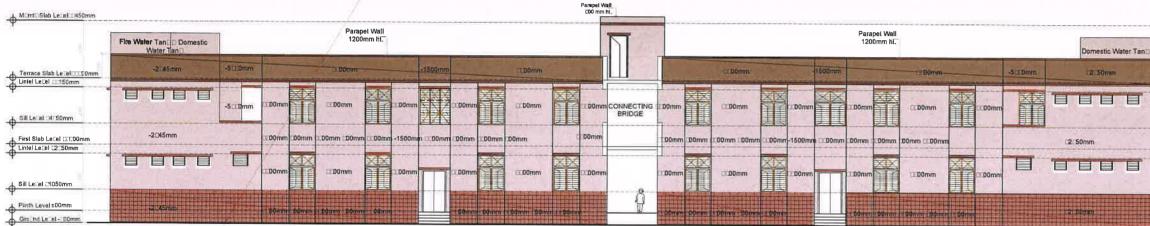








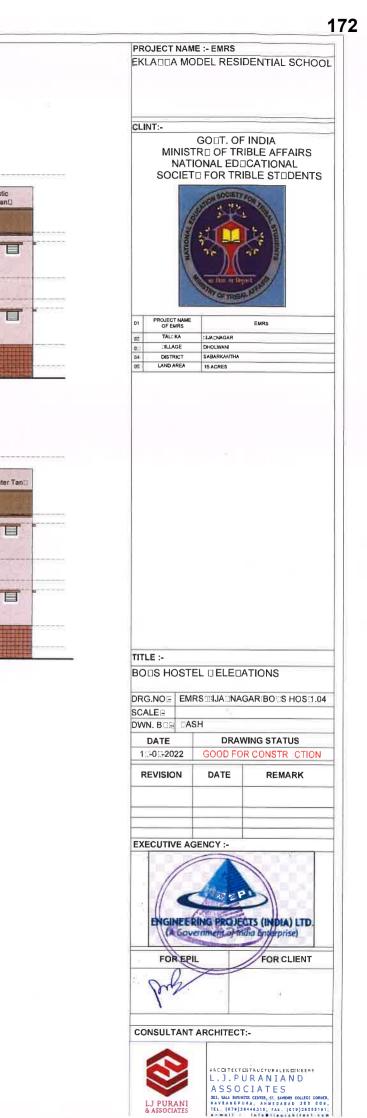
Parapet Wall 300mm ht,



Pg-11

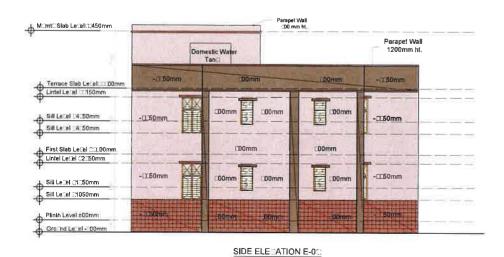
SIDE ELECATION E-0

REAR SIDE ELE®ATION E-02



-211 Drue

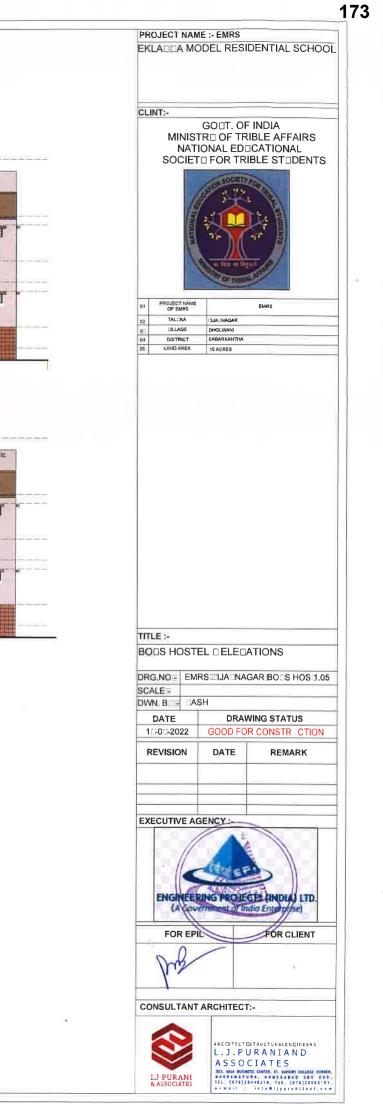
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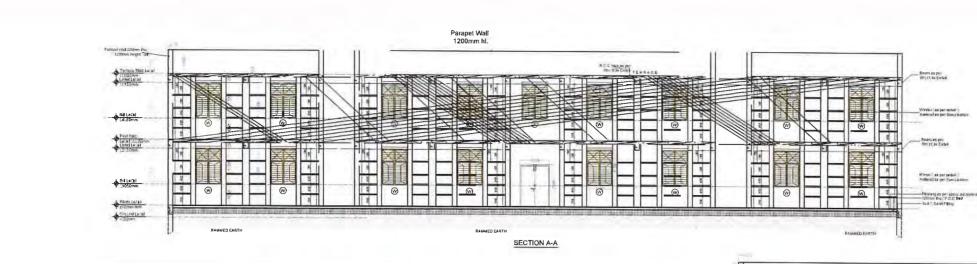


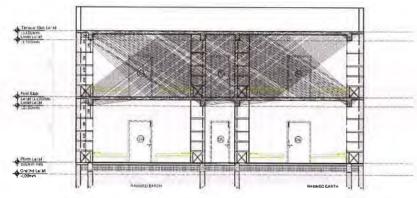
FRONT SIDE ELEDATION E-04

				/						REAR ELEOATIO	N E-05					
/l⊖nt⊡Slab Letel⊡1450mm								Parape (D0 n	Wall m M.]						
	Domestic Water Tan			Parapet W 1200mm	all ii.	-			Π				Parapet Wall 1200mm ht.			Fire Water Tan
ferrace Slab Lerel	-21 Drum	-4425mm		7 Vdomm	-1500	lmai	(EDOmin)	T	Ш		Loomm	-1500mm		12:00mm	-4:25int	-2110mm
Sill Lettel 04050mm		T		D.DOmm	00mm		CI.Domm	D0mm	CONNECTING		00 00 00 mm 00		.00mm			
inst Slab Letiel 111 00mm	-21.00mm	-4QSmm	1 mm001 mm00	111 mm0Q) mm0Q	0mm -1500mm 💷 0	0mm ::00mm ::::00	00.00 mm 0000 mm	mm		00mm 00mm 100	mm : D0mm (II:D0mm-150	0 mm (1100mm 6		00mm (100mm -4:25n		-21 @mm
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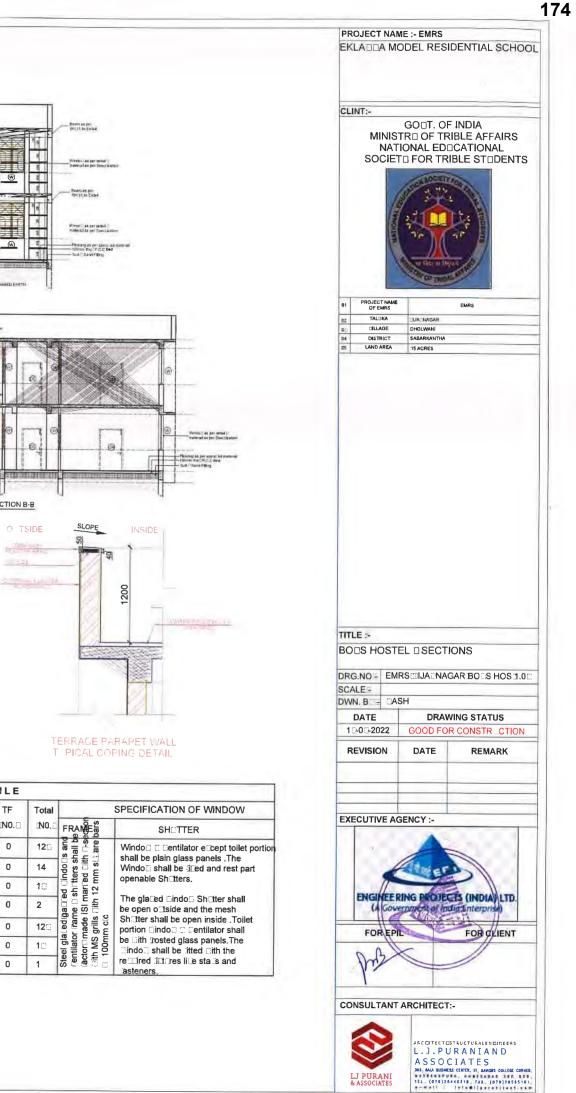






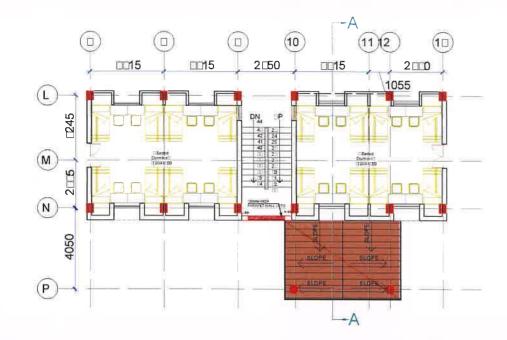


A.C.C. Not as par Mic.2 for Datas Bean is per Projection of the All hyperts formatified pair attribution shell 6 .0. Plats Large Bennin per Selar te Celui OTHER DOCUMENTS OF TAXABLE PARTY. Garindlaial SECTION B-B



				D	OOR	SCHE	DUL	E			
S N	TOPE	SICE	SILL HI	LIN. HT	GF	FF	TF	Total		SPECIFICATION OF WINDOW	s
		₫MM 🖯	JMM⊡	⊴MM⊡	INO. E	∃N0.□	:1N0.⊡	₫ N0 .⊡	EREATE	SHOTTER	
1	D	∷50 X 210	0 0	2100	2		0	⊡4	2 a	Entrance door shall be pro⊡ded ⊡ith po⊡der coated Al⊡mini⊡m Glaœd Door	1
2	D1	1200 X 210	0 0	2100	10	10	0	<u> </u>	consist o m ith 15 bedded ii o mi 11	Bith Collapsible Door .	
0	D2	1000 X 210	0 0	2100			0	14	II cons mm mbedd	Wash Area □ Toilet shall ha⊡e ℂ5mm thic⊡ ∋ shall be made machine pressed pre -laminated Fl⊡sh Door	actor
4	DO	⊒00 X 210	0 0	2100	Ð	0	0	ħ.	shall m ng en bloc	Shatter official first grade in single lea	1
5	MD	500 X 2100	0	2100	1	0	O	1	doors shall consist of T 0 U40 mm tith 15 mm long embedded in of CC bloct of mi 11	Hostel Cill hate Comm thic Non decoratice Flosh Door single leatincliding teation decoratice flosh Door	in .
п	D5 1	200 X 2100	0	2100	4	0	0	4	0400	ash area thin the loor door stoppers and sinthetic enamel paints on both sides. The door	
0	DE	DO X 2100	0	2100	0	0	2	2	Frame o trames If gs 100 the help	closer in Warden o lice.	1
11	SD 1	000 X 2100	0	2100	2	0	0	2			
10	D4	2100 X 210	0 0	2100	1	0	0	1	С	OLLAPSIBLE DOOR AS PER DETAIL	
11	CG	4540 X 210	0 0	2100	1	0	0	1	C	OLLAPSIBLE DOOR AS PER DETAIL	

1				WINDO	wsc	HED	ULE			
S N T	DPE	SICE	SILL HT	LIN. HT	GF	FF	TF	Total		SPECIFICATION OF V
		€MM⊡	:MM⊇	©MM⊡	IN0.0	⊡N0.⊡	€NO. □	ENO. E	FRANE	SHETTER
1	W1	1:00 X 1:00	1050	2:50	50	04	0	120	s and lall be	Windo 🛛 🗆 Centilator e
2	W2	1500 X1:00	1050	2::50	5	0	0	14		shall be plain glass pan Windo급 shall be inced a
tor	W	1000 X 1:00	1050	2:50	0	10	0	10	ed ⊡ind sh⊓tter lar(ed 12 mm	openable Sh Itters.
4	FGL	1050 X2550	::00	2::50	2	0	0	2		The gla⊡ed ⊡indo⊜ Shi be open o⊡tside and the
5	E.1	⊡00 X450	2250	2:50	- 4		0	120	a Ledig or iram made i s grills nm cic	Shatter shall be open in portion aindoa a centil
	21	00 X 1200	1:50	2:,50	1	E	0	10	MS Tate	be Lith Tosted glass pa
E	C2	1500 X 050	2100	2:50	1	0	0	1	Steel g rentila actor ath M 100	re lifed interes life sta

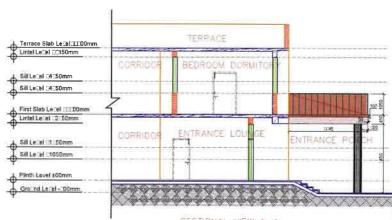




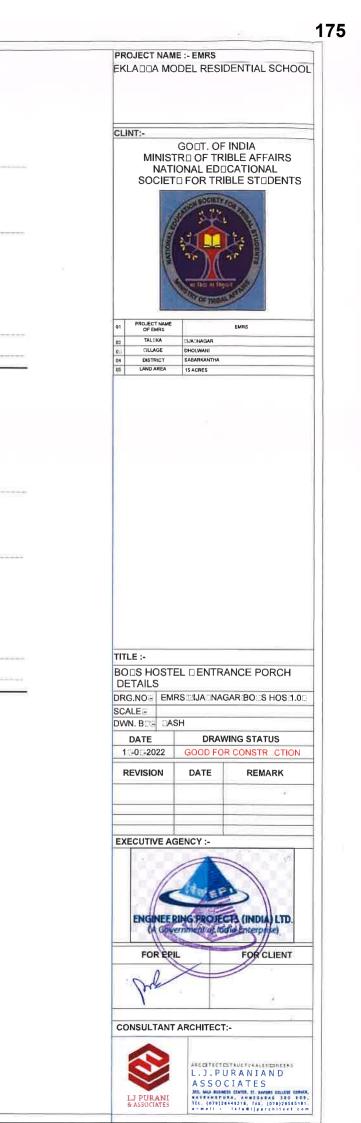
(10) (11)(2 (\Box) (10) (□ 0015 0015 2 50 0015 200 1055 L245 Entrance Lothge AS40 > 51111 Warden R 2115 X 1115 (M)-2005 10 12 10 11 11 E D Entrance Derandah DOMESTIC: (N)-+00mm 4050 and the case is 111/1 Tiesd - 100 mm 66n 🔥 128 Pres (P) -A

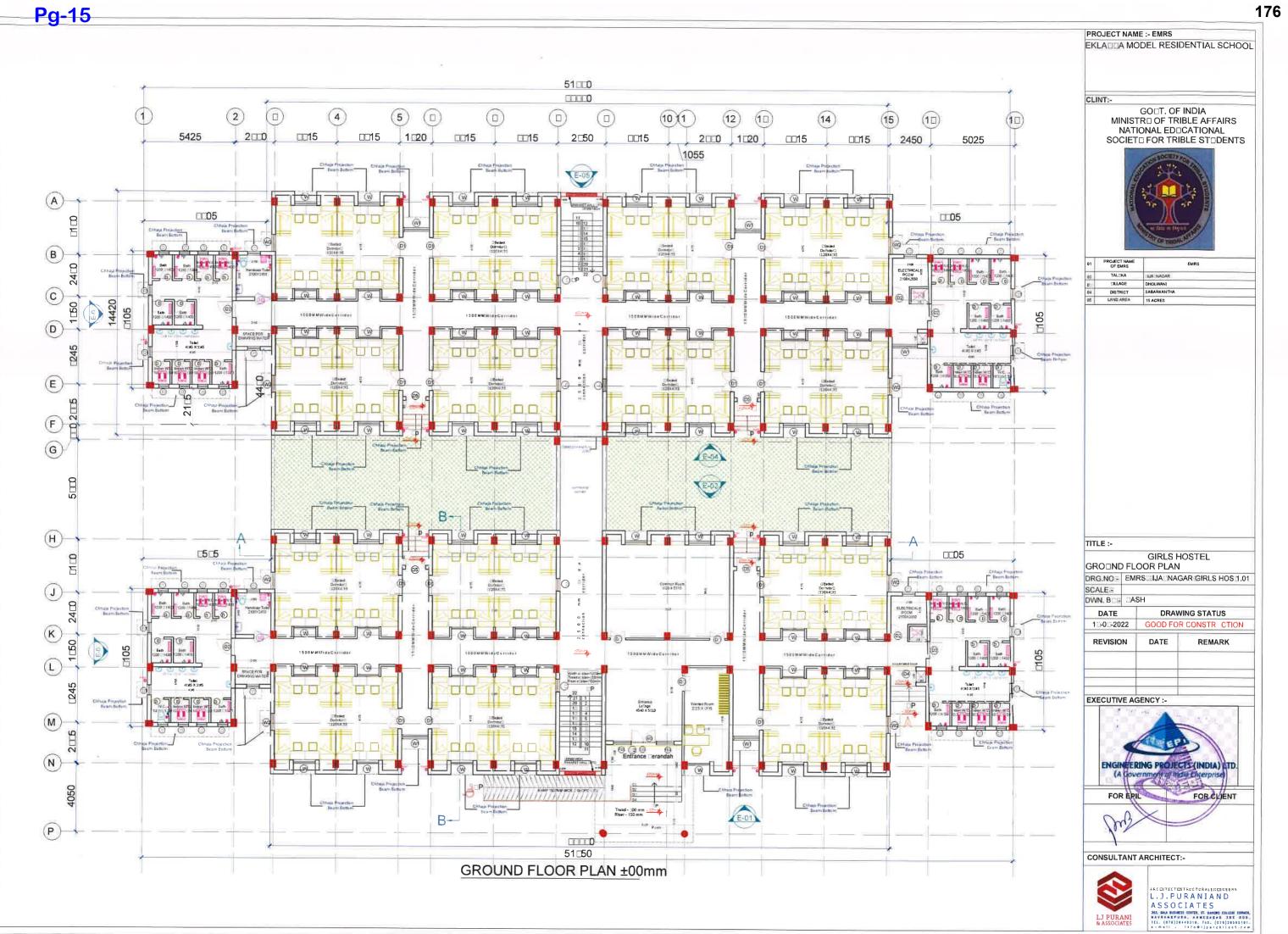


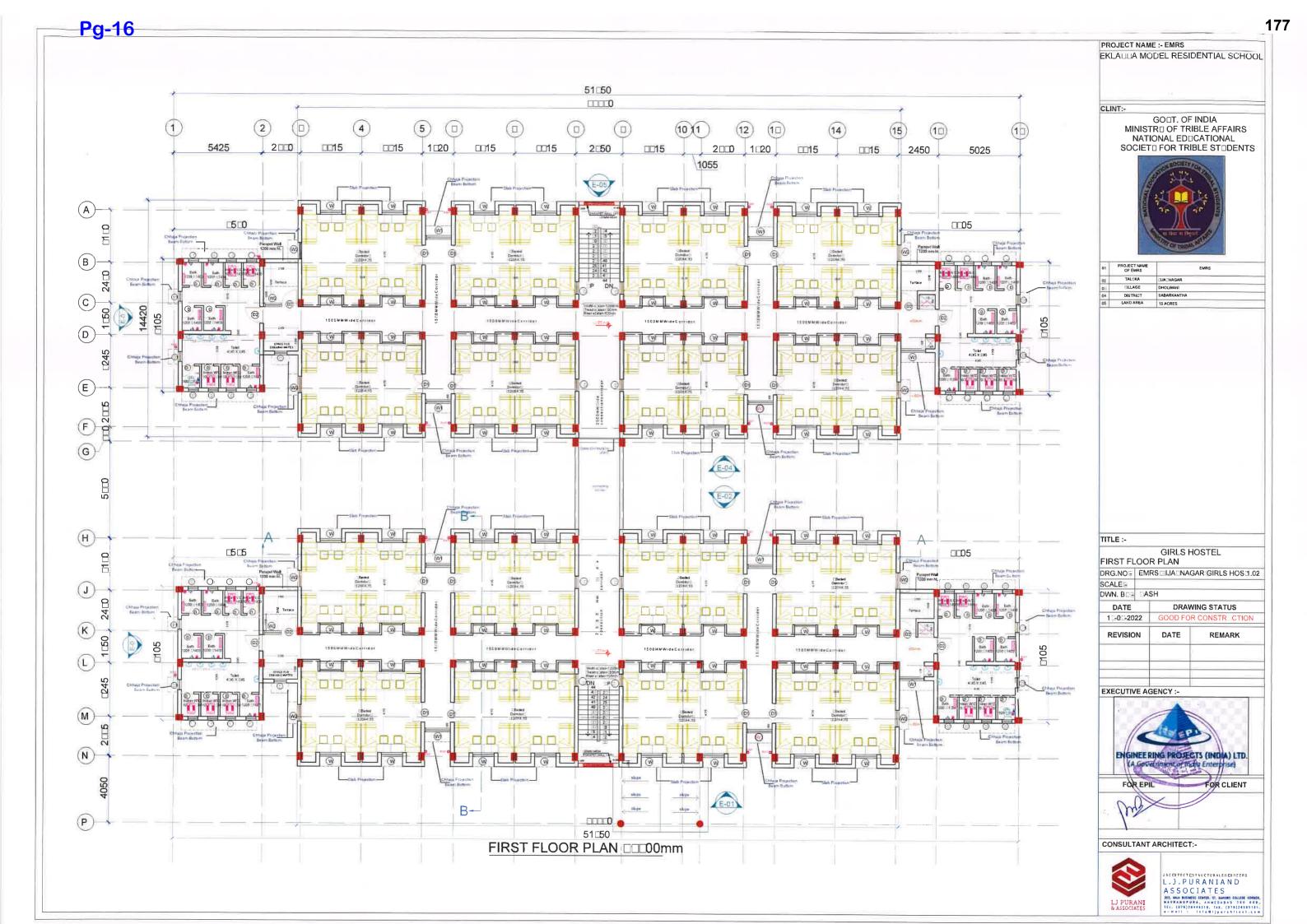
SECTIONAL FRONT VIEW

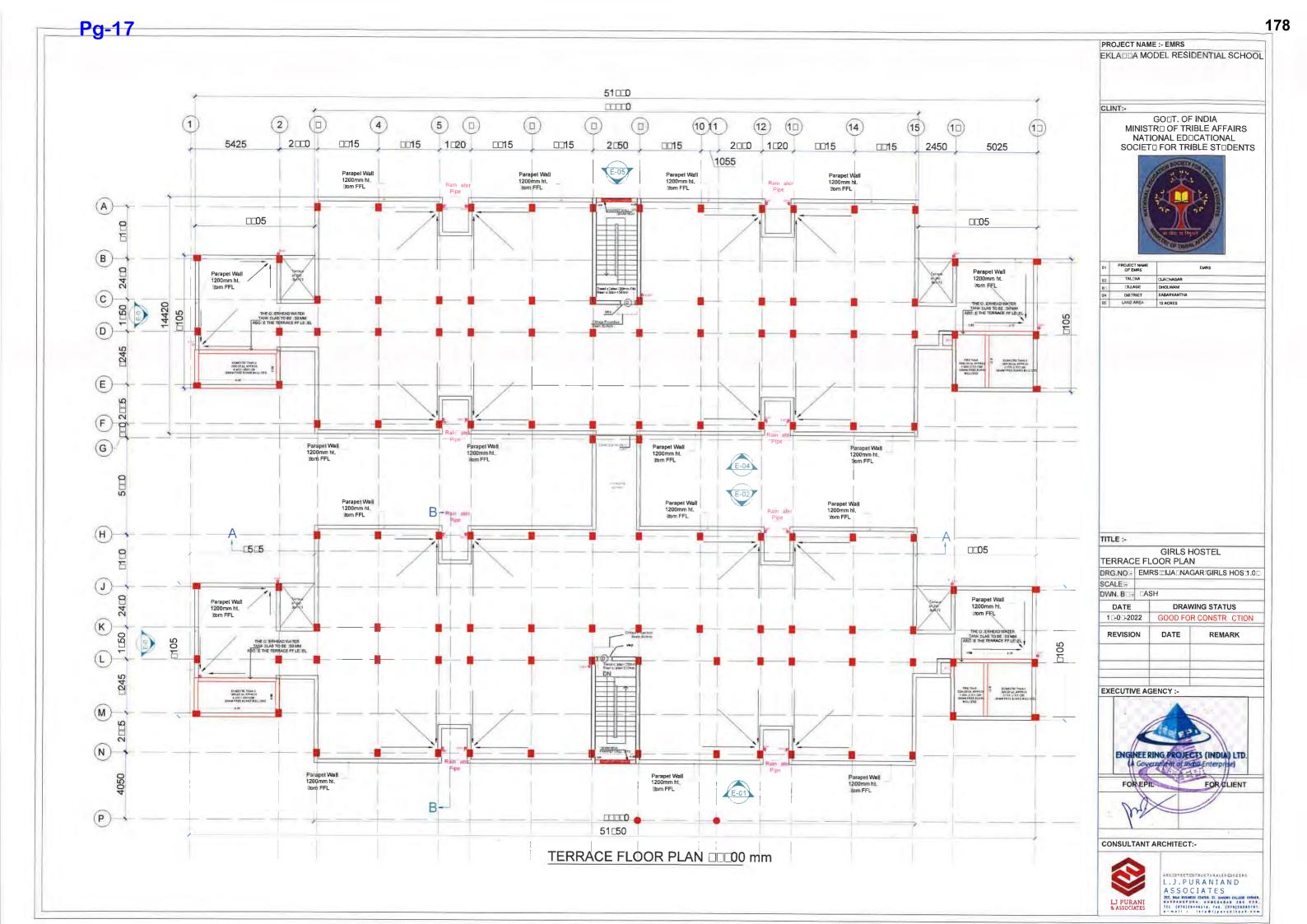


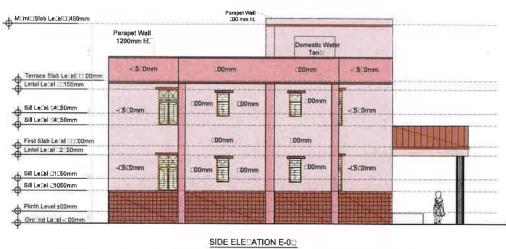
SECTIONAL VIEW A-A

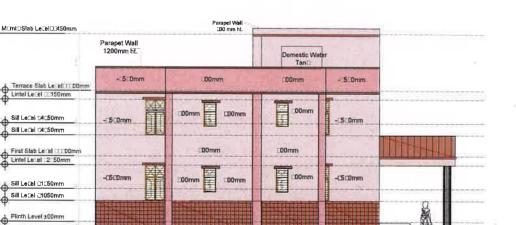


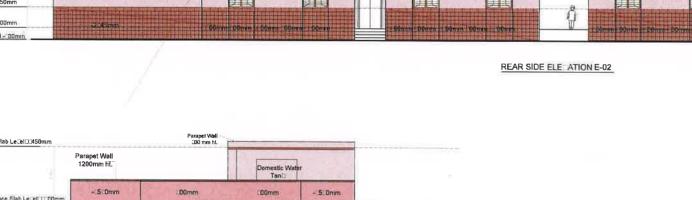












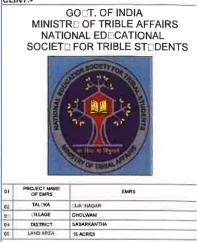
MimtoSlab LeGal90450mm					1						Parapet V LD0 min		-												
1	Fire Water Tan Domestic Water Tan	1		Pi 1	arapet Wall 200mm ht.							Π								oet Wall Imm ht.					Domestic
Terrace Slab Le el 11 00mm Lintel Lettel 12:150mm	-2::45mm	-5:10mm		1000	m	123	-1500mm	n	(III)	1100mm			T.		2:00mm			1500mm		2	ELD0mm		-5110mm		(2) 50m
Sill Let El CATSOnim		-5:10mm	3 00mm	CCD0mm	XX	1 00mm		000mm		CED0mm			DOmm		CEDOmm		1 D0mm		1 DOmm		D D0mm	1 100mm	R		
First Slab Le el CODOmm Lintel Le el 22 Somm	-2:45mm		1 00mm 00	nm 2.00mm0	Dmm (3. DOm	m - 1500m	m CLOOm	m ::00mm	11 00mm	.00mm	00mm		DOmn	n DOmm	1.00mm 1.00m	m 1100mm	-1500m	n II Dûnm	00mm	DOmm	00mm (1.00m			2.5	Dmm
Sill Le Del 21050mm			1.00mm	CIDOmm	Ĭ	1.00mm	,	LI 00mm		(II D0mm	1.00mm	n Đ	DOmn		CC200mm	Ĩ	1 00mm		1.DOmm	Ĩ	CE D0mm	1100mm	T		
Plinth Level ±00mm	2:A5mm		: ::00mm::00	ren : 00nmi : 0	New 166w			- 		(00mm) 00m	 1 0	- (-20tre	02 99imm	Denne Dir	nie Officia			- somen	99mm	1 09mm 1 00mr				Jan State

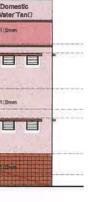
	Domestic Water Tan D		Parapet Wall 1200mm ht.	2 							GRC IFIXED	D			P	arapet Wall 200mm ht.				Fire Water Tan D	
Terrace Slab LeCel 31100mm Lintel LeCel 31150mm	-31(Dinns	Actine		CEROMIN		-1500em		12.00mm				ET.DOmm		-1500mm		EI:D0mm			-4(25mm		4
Sill LeGel C4C50mm			1.00mm	(TD0mm			EDOmm	0:00mm	200m	CHARGE ST	100mm	(1100mm			1.00mm	CI DOmm			XX T		-
First Slab Let el III i Domini	-21: Dmm	-4425mm	00mm 00mm	1 00mm (00mm	100mm -1500r	mm	00mm	0:00mm	00mm 000mm	and the second	A	5	00mm 200	mm 1500mm	Domm Domm	TI DOmm	00mm		4:25mm		-21
Sill LeCel 01050mm		•		CCOOmm				C:D0mm	100m	n 9	OTELSH				D0mm	.CC00mm	XX				1
Plinth Level ±00mm			Commi Comm	00mm 00mm		nine Sann	- Cimentinini	Different.	Service Belle		XXX		-30mm - 60	nin 1600mm	BOMIN EXAMIN	Dinen	dumin	COnm			-

179

PROJECT NAME :- EMRS EKLA A MODEL RESIDENTIAL SCHOOL

CLINT:-







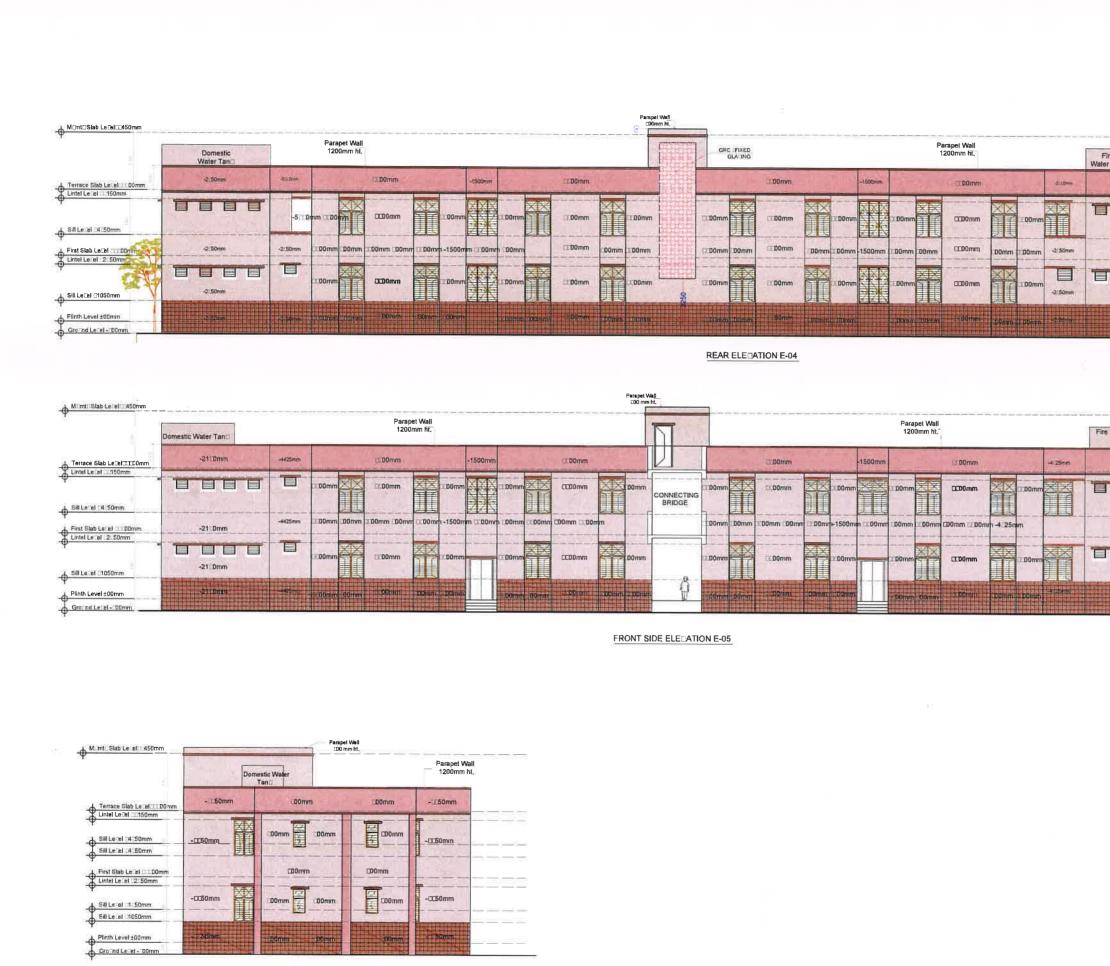
TITLE :-

DRG.NO	EM	RSEIJAENAG	BARIGIRLS HOSEL.04
SCALE			
DWN, BOE	CAS	SH	
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100220	22	GOOD FOR	CONSTR CTION
REVISIO	N	DATE	REMARK
	_		

EXECUTIVE AGENCY :-

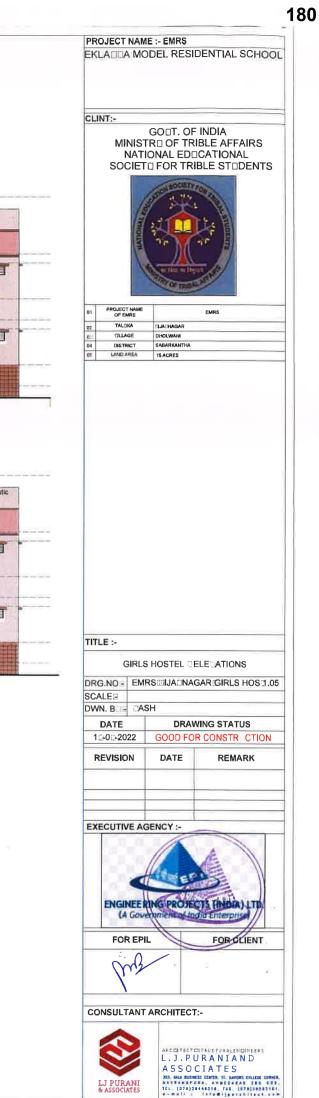






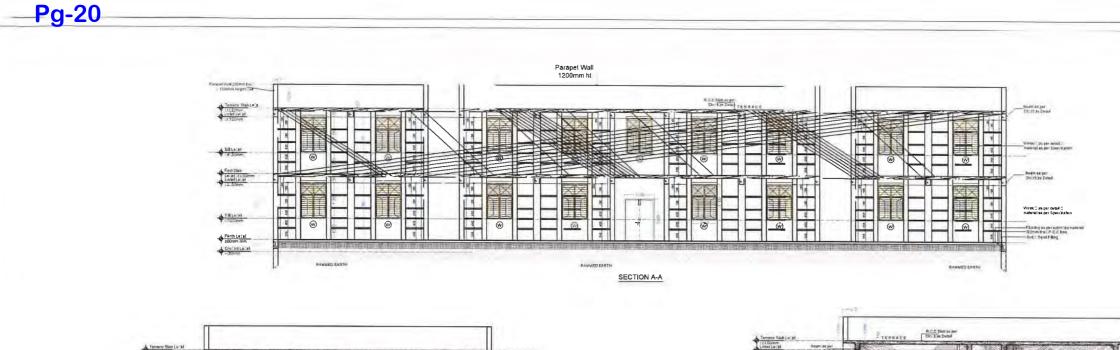
SIDE ELECATION E-00

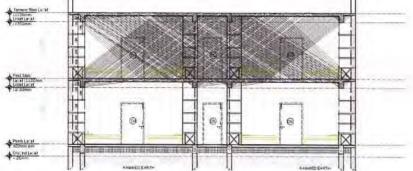
Pg-19



Fire Water TanD Water TanD 2150mm 2150mm 2150mm 2150mm 2150mm

Fire Water Tan:: Domestic Water Tan:: -21:0mm -21:0mm 21:0mm



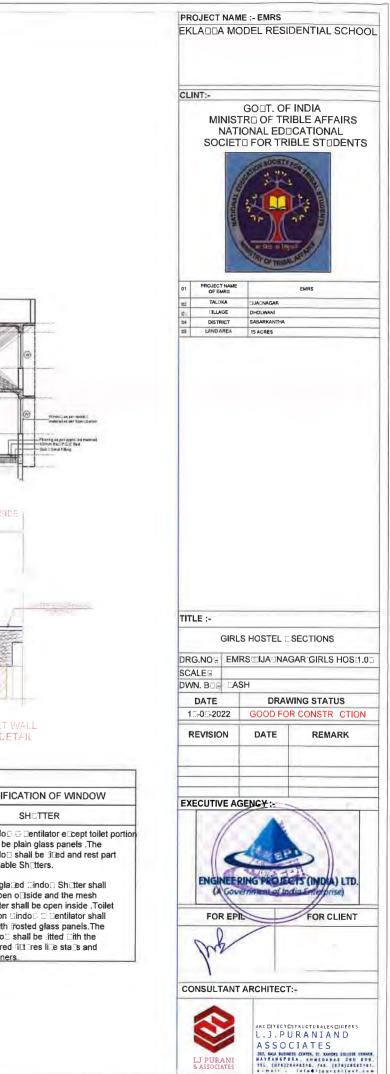


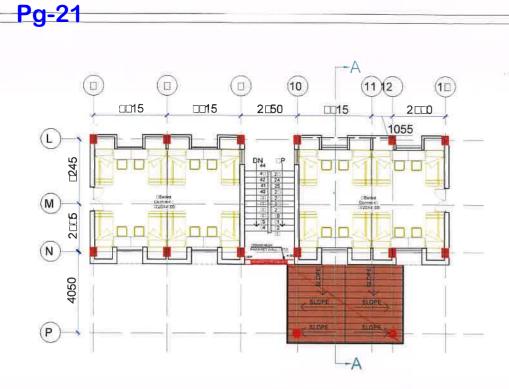
ALCE MARKET I LEARNING I LEA

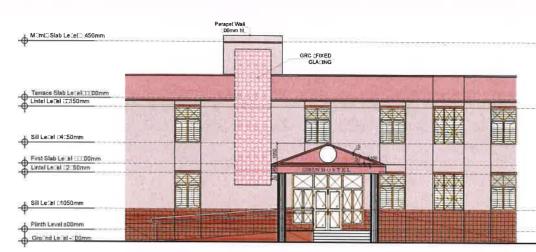
O TSIDE SLOPE INSIDE

TERRACE PARAPET WALL T. PICAL COPING DETAIL

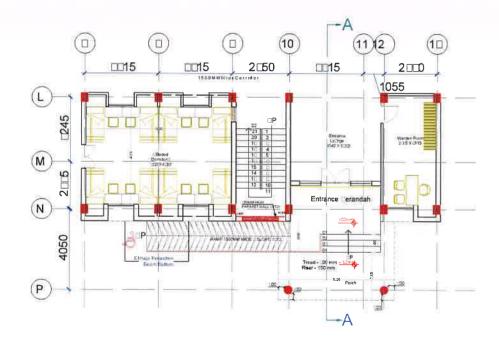
DOORSCHEDBLE									WINDOWSCHEDELE												
SN	SIN TOPE	PE SI⊡E @MM⊡	SILL HT :MMC	ILIN. HT IMMIC		FF NO.0	TF DN0.0	Total	SPECIFICATION OF WINDOW		SNT	TOPE	SICE	SILL HT	LIN. HT	GF	FF	TF	Total	SPECIFICATION OF	
-								∃N0.□	FRAME	SHOTTER			OMM⊡	⊴MM⊜	:0MM⊜	IN0.2	1N0.0	3N0.0	INO.	FRAME	SHUTTER
1	D	≣50 X 210	00	2100	40	40	0	50	in Ca	Entrance door shall be pro⊡ded ∷ith po⊡der coated Al⊡mini⊖m Gla∷ed Door	1	W	1000 X 1000	1050	2::50	50	::4	0	120	and 	Windo C C Centilator
2	D1	1200 X 210	0 0	2100	10	10	0	:2	ist our ith 15 u ded in in 1 un	aith Collapsible Door .	2	W1	1500 X1 00	1050	2::50	5	8	0	14		shall be plain glass p Windo shall be ite openable Shatters.
21.	D2	1000 X 210	0 0	2100	0	Ē	0	14	consist o im tith 1 nbedded iotmith1	Wash Area ⊟ Toilet shall ha⊡e ⊡5mm thic⊟⊡ shall be Fa made machine pressed pre -laminated Fl⊡sh Door	actor	W2	1000 X 1:00	1050	2:50	1	10	0	10	h Citrato h Citters s arced Dit	
4	DO	⊡00 X 210	0 0	2100		0	0	Ц	n0n n0n bloc⊓	Shatter oferatione pressed pre-samilated PLSh Door Shatter oferations grade in single lead Hostel all hate to minimum thic Non decoration Flight Door single leading tead of ode dege liping elicept		FGL	1050 X2550	::00	2::50	2	0	0	2	a⊡tec Sima Sima	The gla∷ed ∷indo⊡ S be open o⊡side and t Sh∷tter shall be open portion ⊜indo⊙ ⊡ ∷er
5	MD	500 X 2100	0	2100	1	0	0	1	doors 0 140 mm lo			C.I	50 X 00	2250	2:50	40	42	0	:5	redigacted U rimame U shift lade ISI marte grills Lith 12 r m c.c	
L	D5 1	200 X 2100	0	2100	4	0	0	4	le o es 40 100 n ielp o	ash area Dith rEber floor door stoppers and sinthetic enamel paints on both sides. The door	10	-:1	D0 X 1200	1.50	2:50	E	10	0	10	Steel glar Tentilator actorLim ith MS g	be Dith Tosted glass p Dindo: shall be titted
-	Der	DO X 2100	0	2100	0	0	2	2	Fram Iram ILgs the h		10	2	1500 X	2100	2.50	1	0	0	1	Steel action	relitired filtures lite s asteners.
-	SD	000 X 2100	0	2100	2	0	0	2													
10	D4	2100 X 210	0 0	2100	1	0	0	1	С	OLLAPSIBLE DOOR AS PER DETAIL											
11 0	G	4540 X 210	0 0	2100	1	0	0	1	с	OLLAPSIBLE DOOR AS PER DETAIL											





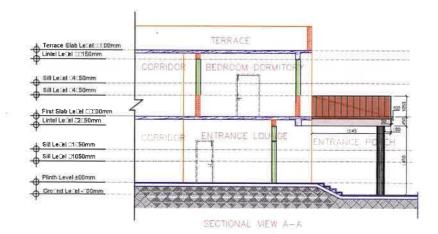


FRONT ELEVATION

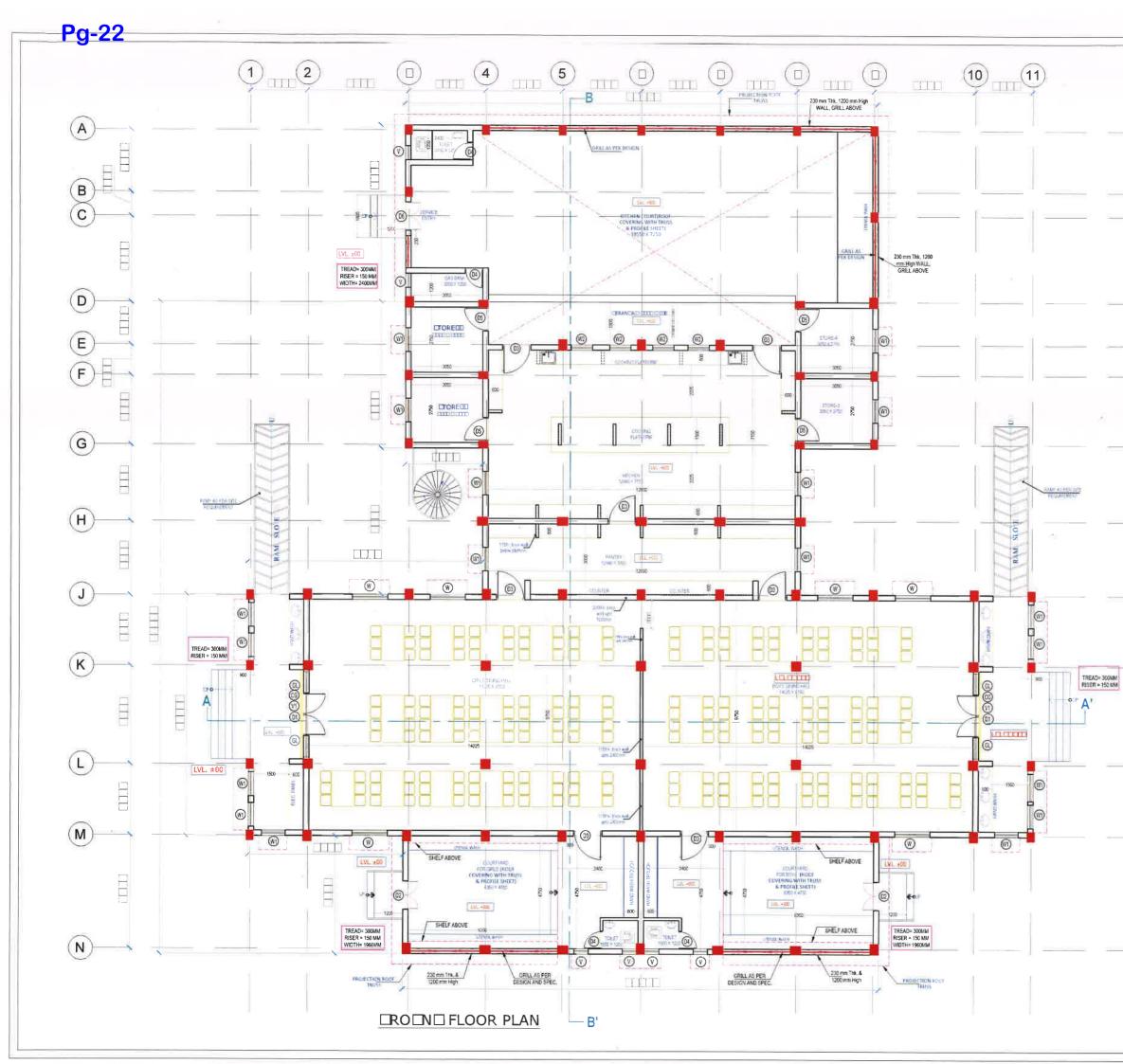


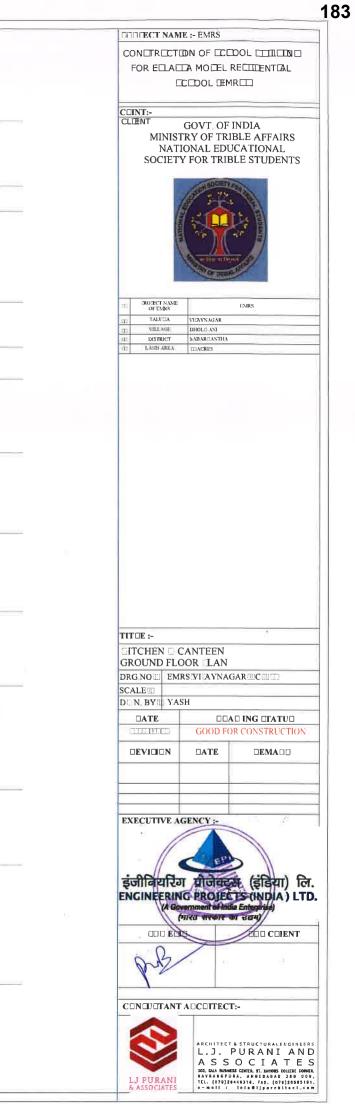


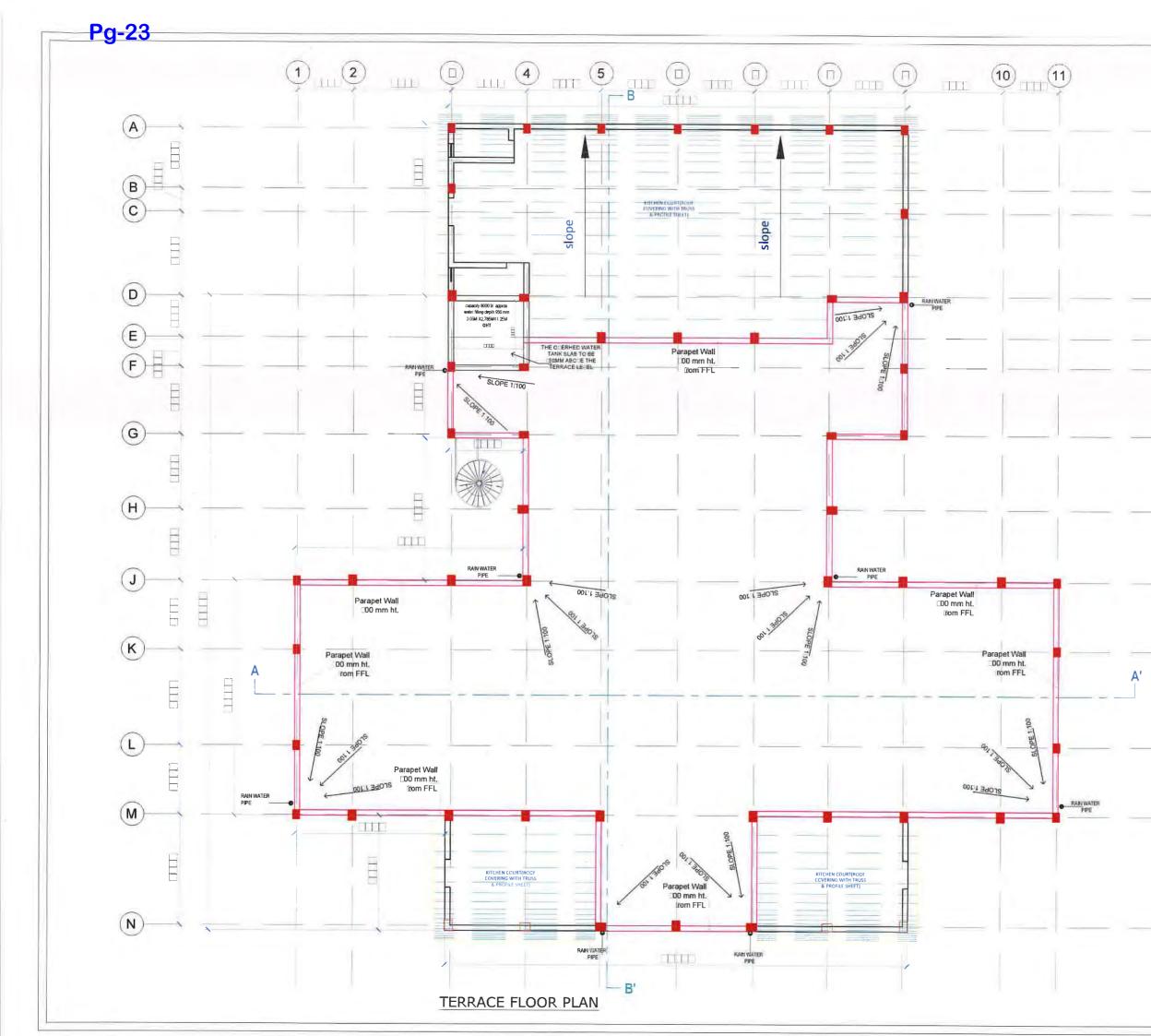
SECTIONAL FRONT MEW











CDINT:-CLEENT

GOVT, OF INDIA MINISTRY OF TRIBLE AFFAIRS NATIONAL EDUCATIONAL SOCIETY FOR TRIBLE STUDENTS



σ	CROTECT SAME OF EMRS	EMRS
1	TALUGA	VIDAYNAGAR
13	VILLAGE	DHOLG ANI
11	DISTRICT	S AD ARCANDIA
113	LAND AREA	TUACRES

-	-

III DE ,-							
□ITCHEN TERRACI		CANTEEN OOR ILAN	ł				
DRG NOT EM		RSIVITAYNA	GAR				
SCALE							
DEN BYS	YAS	SH					
DATE			AD ING DIATUD				
0.10.1611	<u>it</u>	GOOD FOR CONSTRUCTION					
OEVICIO	IN	DATE	IEMABD				

EXECUTIVE AGENCY :--

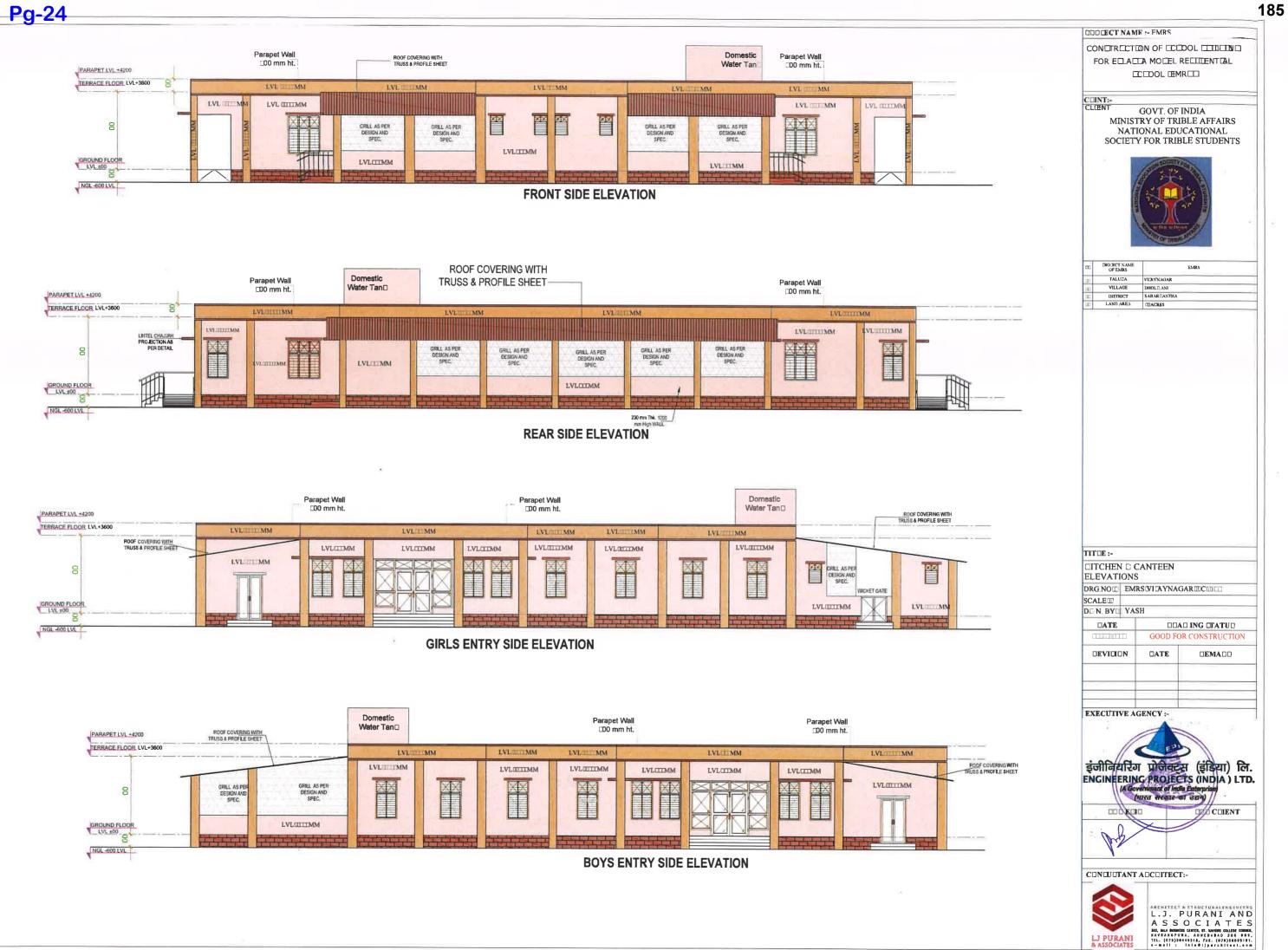
TITOF .

इंजीनियरिंग प्रोजेक्ट्स (इंडिया) लि. ENGINEERING PROJECTS (INDIA) LTD. Government of India Enterproje (मारव सरकार का उद्यम) DOD EDI DO COIENT

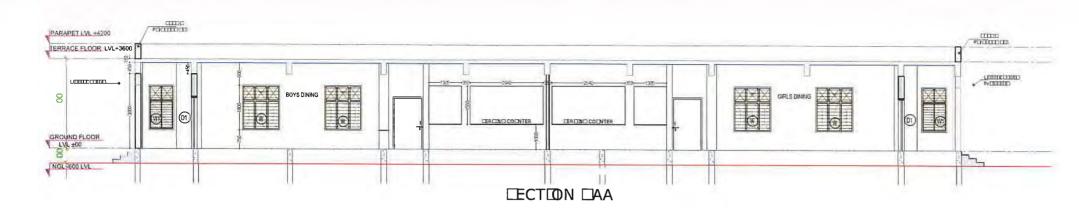
ARCHITECT & STRUCTURALENGINEERS L.J. PURANIAND A S S O C I A T E S SOLGAN STRUCTURE COMEL WAYEAUEPUSA, AN ECO ADD DO DOBL WAYEAUEPUSA, AN ECO ADD DO DOBL (CL. (070)306440310, FAL (CL. (070)306440310, FAL (070)30641011, com

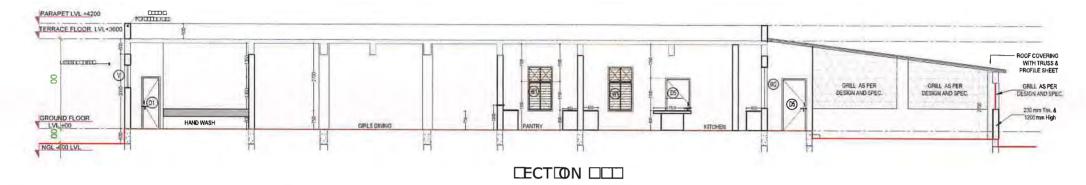
CONDUCTANT ADCOITECT:-





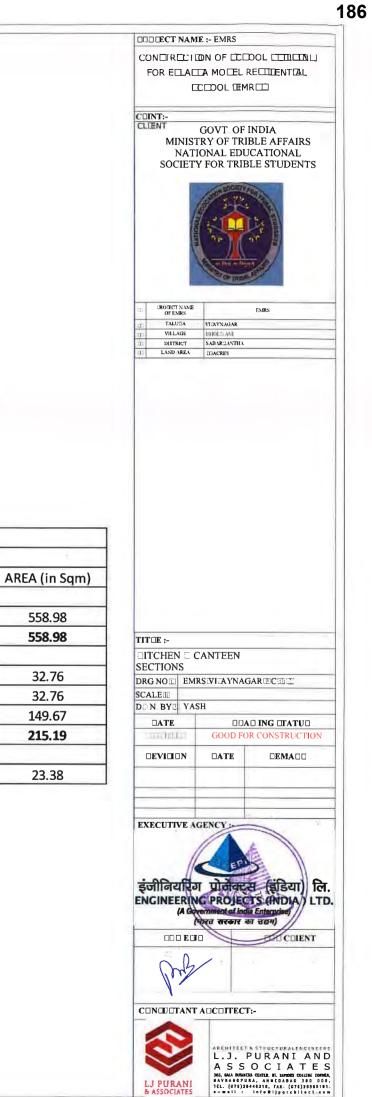


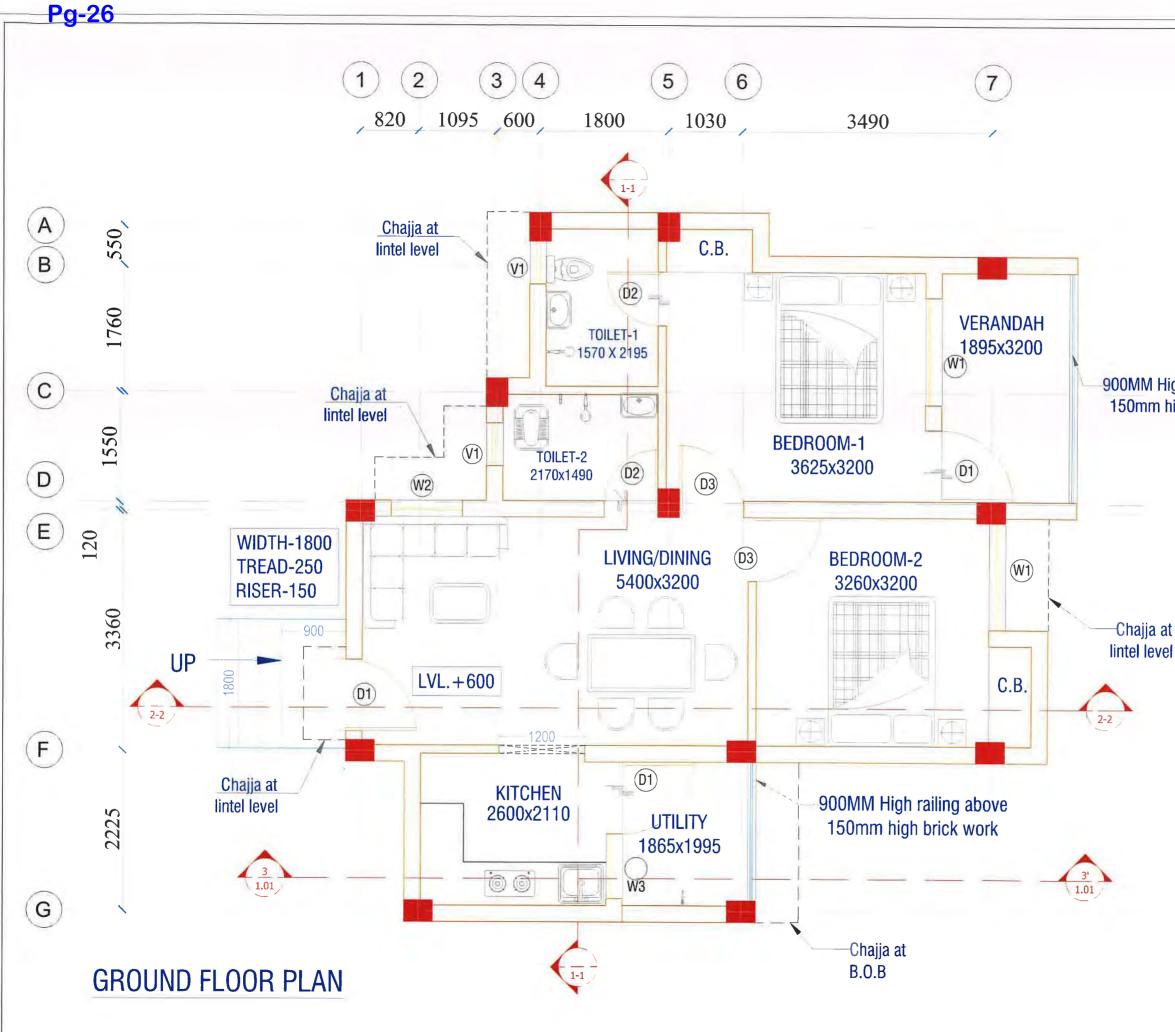


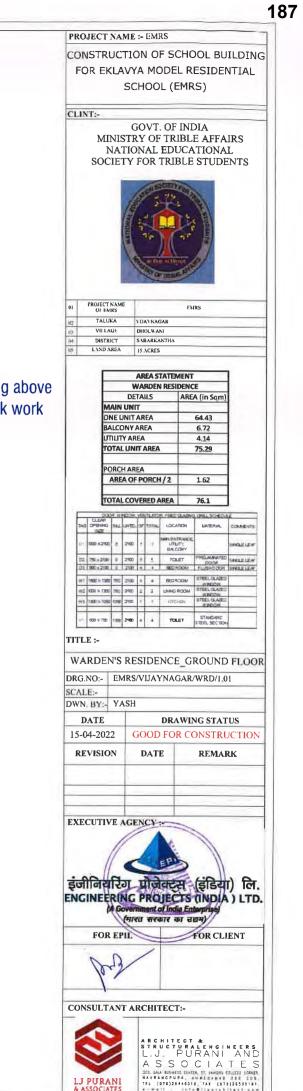


SCH	HEDUL	E OF DOOR										
S.NO.	TYPE	OPENING SIZE	LINTEL	. SILL	. NO.		SHUTTER	SHUTTER		FRAME		
01	D1	1800 X 2100	2100	-	02		oated glazed alu hydrolic door clo					
02	D2	1200 X 2100	2100	-	02	-	Single shutter with 35mm thick factory made exterior grade			T-iron Frame of 40x40x6 mm with 15x3 mm lugs 10 cm long embeded in		
03	D3	1200 X 2100	2100	-	07		non-decorative type flush door shutter with teakwood lipping					
04	D4	750 X 2100	2100	-	04					cement conc. blocks,		
05	D5	1000 X 2100 2100 - 04 Single shutter factory made machine pressed pre-laminat flush door						-				
06	D6	1200 X 1200	1200	-	01	wicket gat	te as per spec.					
07	CG	3760 X 2100	2100	-	02	COLLAPS	SIBLE GATE					
SCH	EDULE	OF WINDOW										
S.NO.	TYPE	OPENING SIZE	LINTEL	SILL	NO.	SHUTTER	FRAME	WIND	OW GRILL	HARDWARE		
01	W	1500 X 1800	2550	750	06	ith es.	s 10 1 in cks.	All fre	mes are			
02	W1	1000 X 1800	2550	750	18		led with aluminium		pated / anodized n / ss fittings			
03	W2	900 X 1650	2550	900	04	jle shi e glas	Z section frame with15x3 mm lu cm long embede cement conc. bl		n square at 120 mm			
04	V	600 X 900	2550	1650	06	Sinç plan	Z sec with1 cm lo ceme	c/c				
05	V1	1800 x 450	2550	2100	02				-			
07	GL	900 X 2250	2550	300	04	as per spe	ec.					

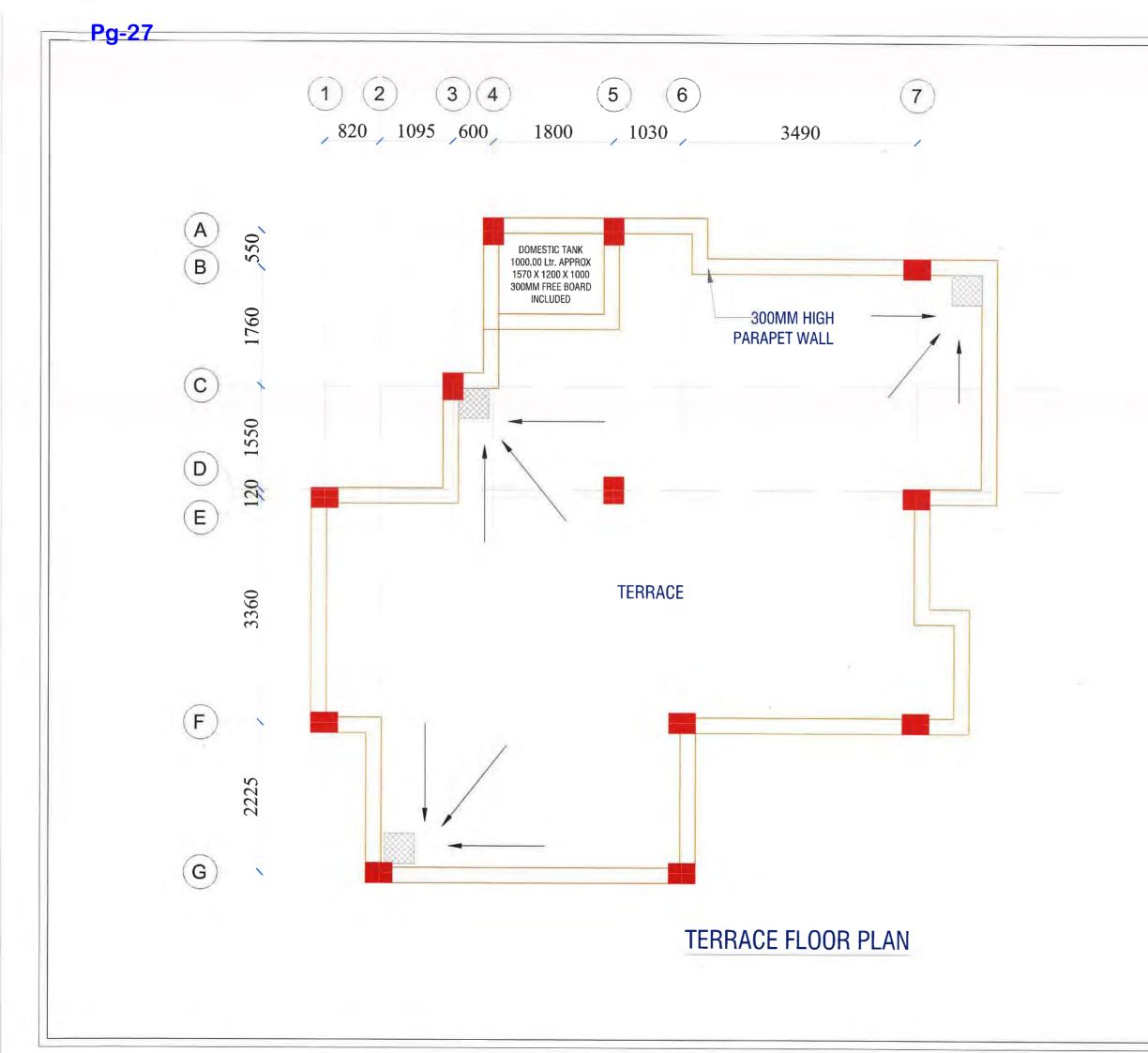
AREA STATEME	NT
KITCHEN AND DINING	BUILDING
DETAILS	
MAIN BUILDING	
GROUND FLOOR PLINTH AREA	
TOTAL AREA	
BOYS UTENSILS WASH AREA	
GIRLS UTENSILS WASH AREA	
REAR COURTYARD	
TOTAL COURTYARD AREA	

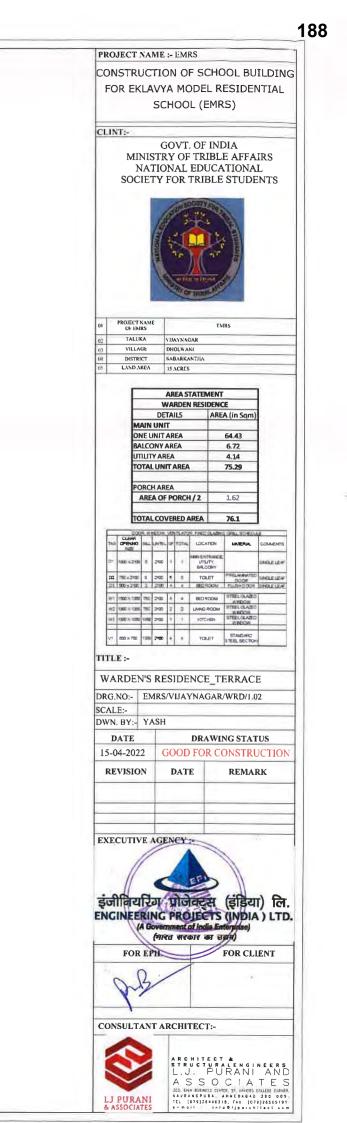


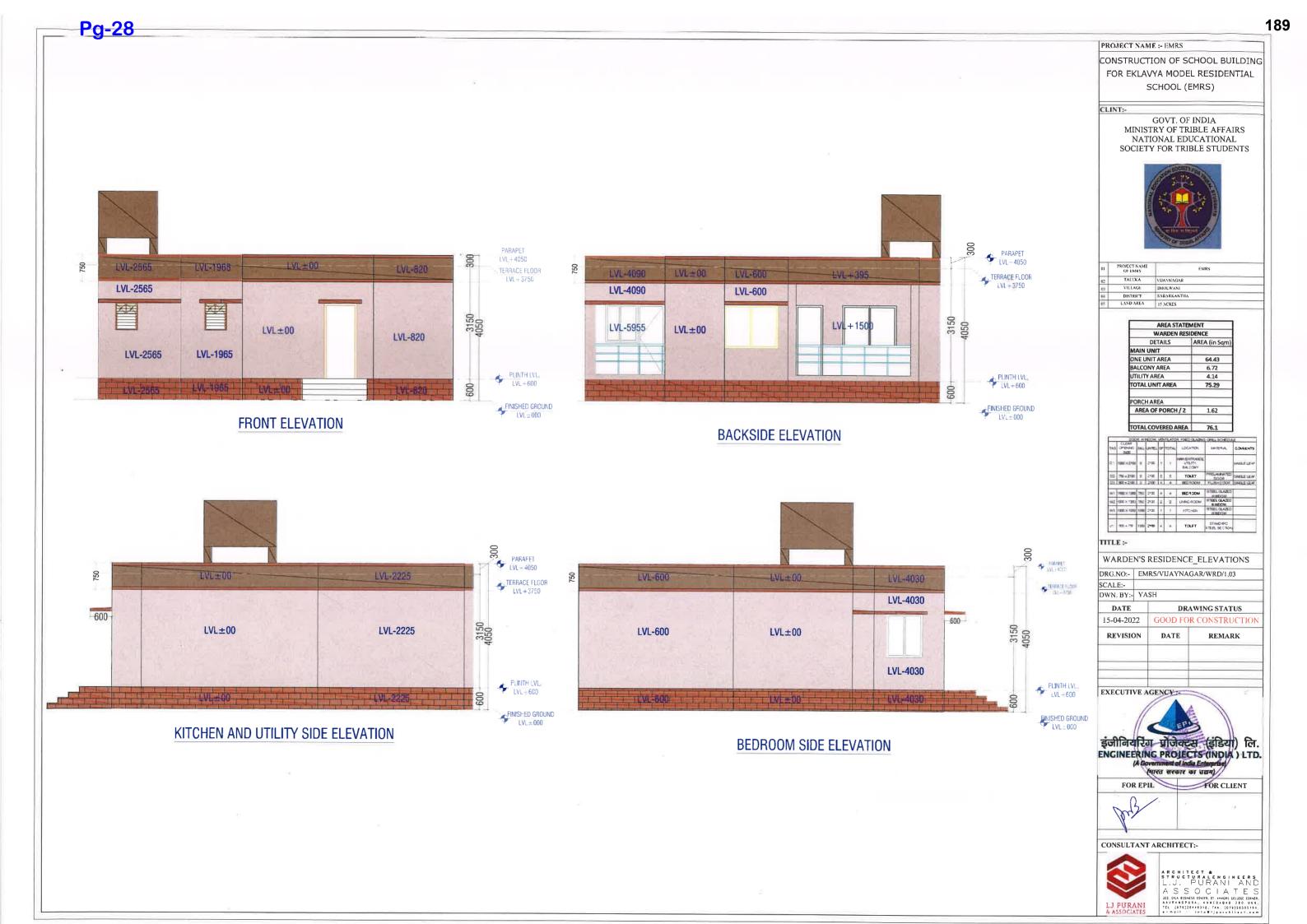


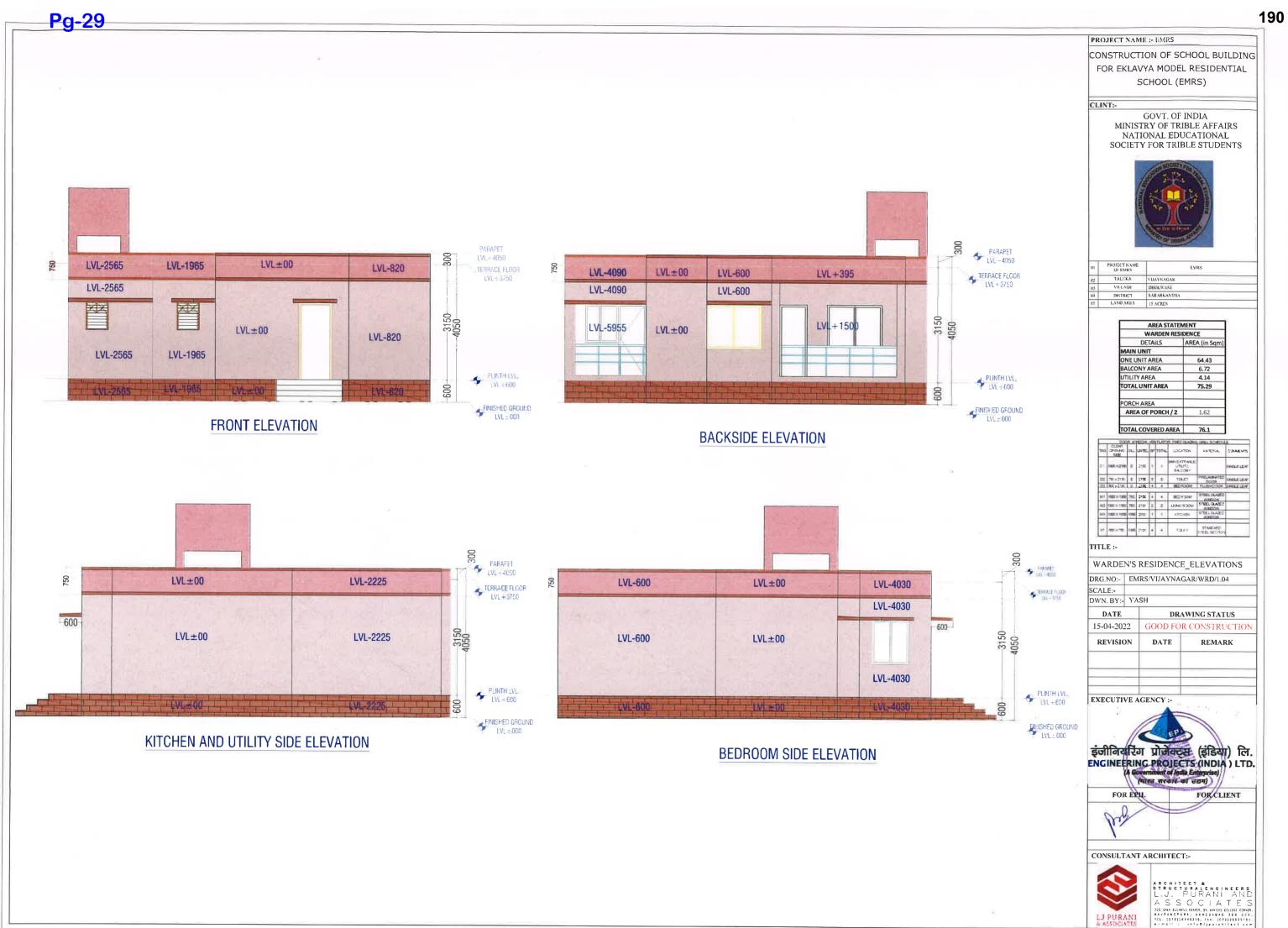


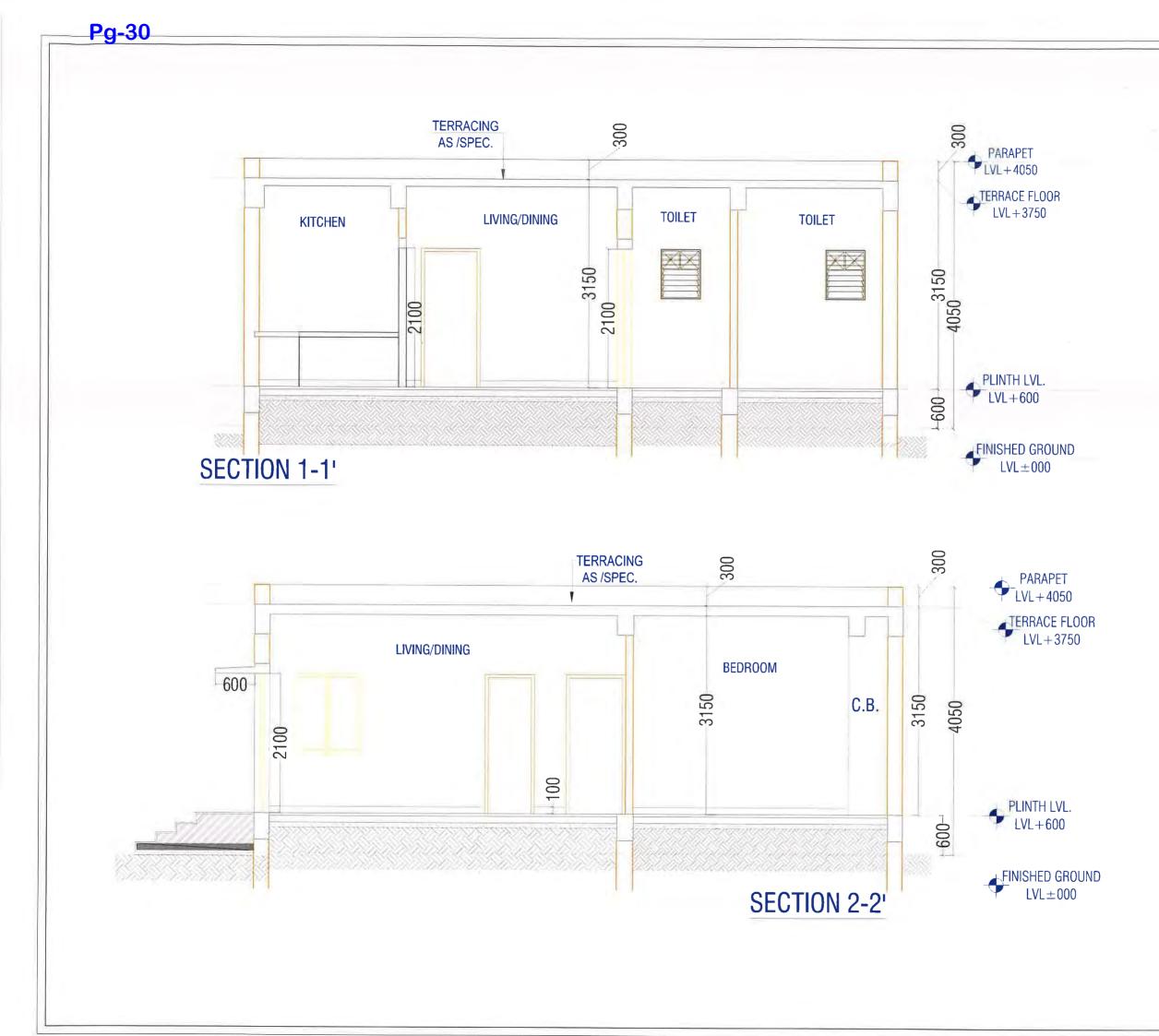
900MM High railing above 150mm high brick work

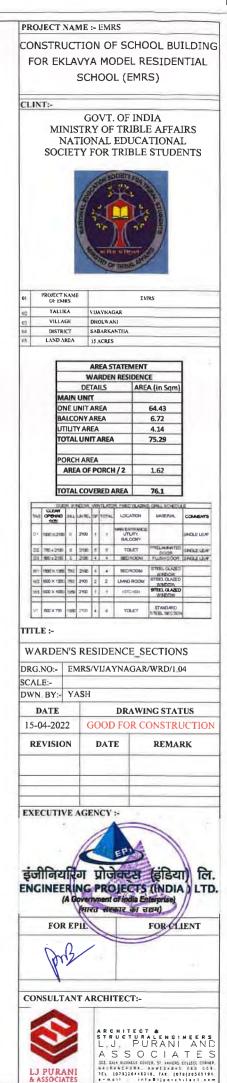


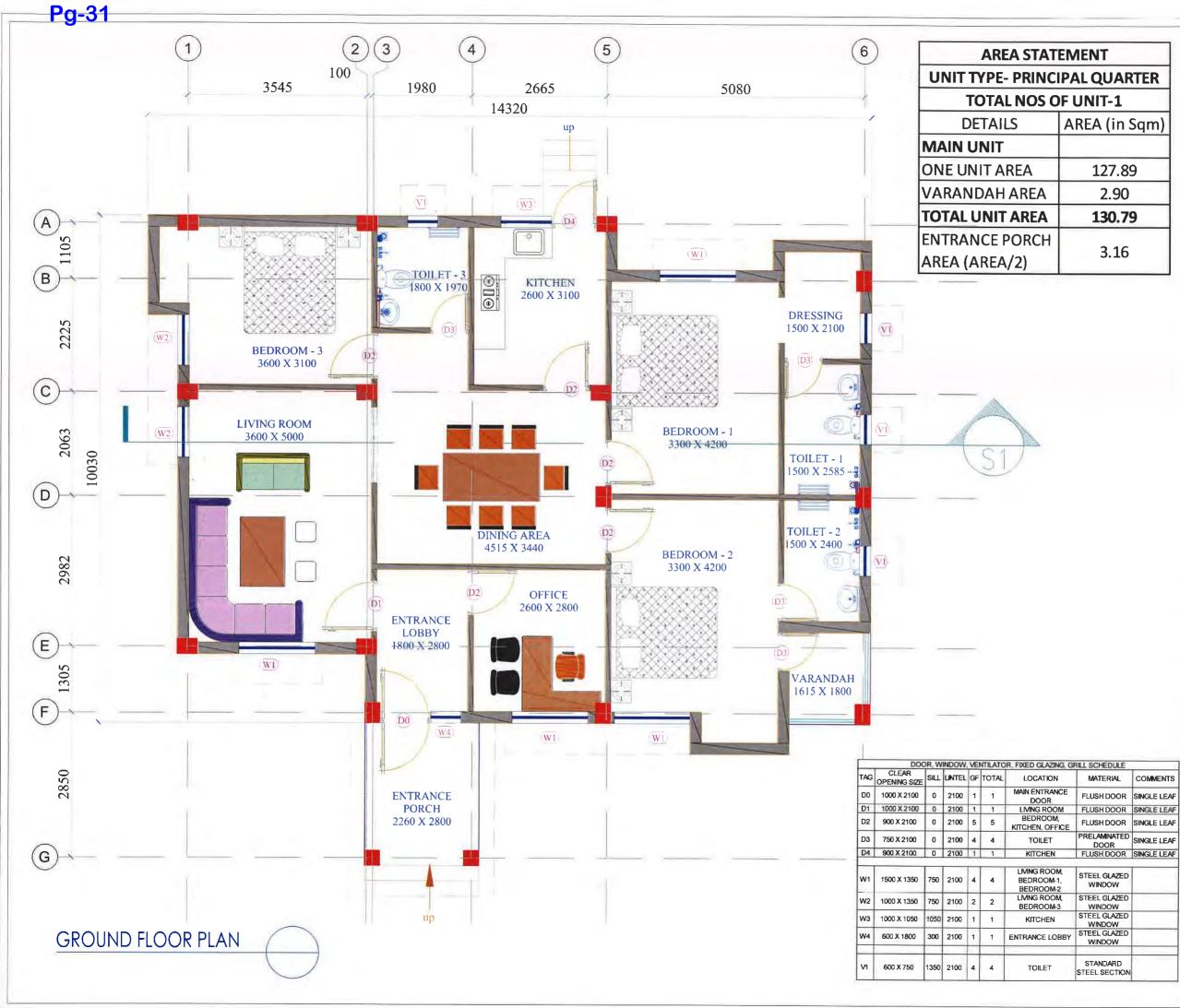




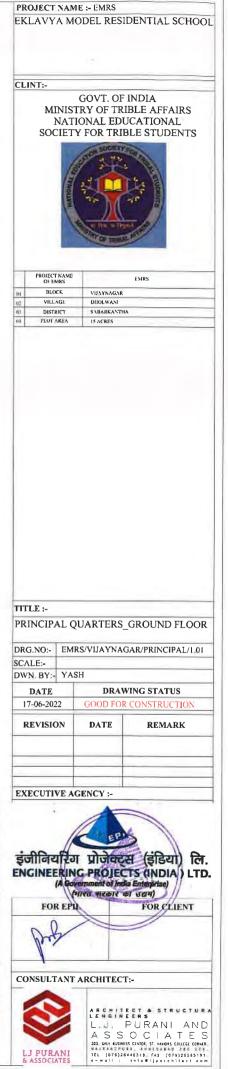




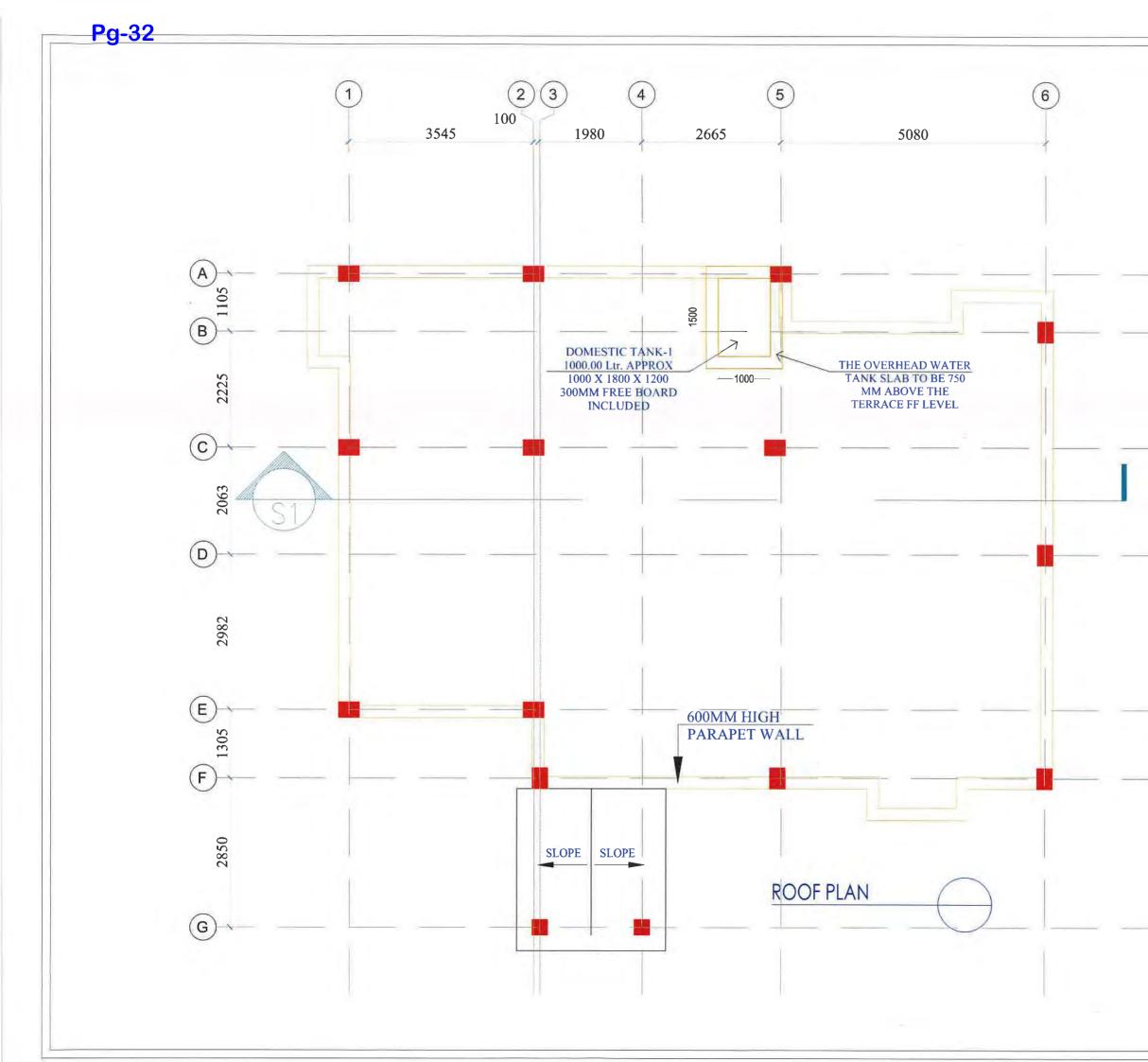


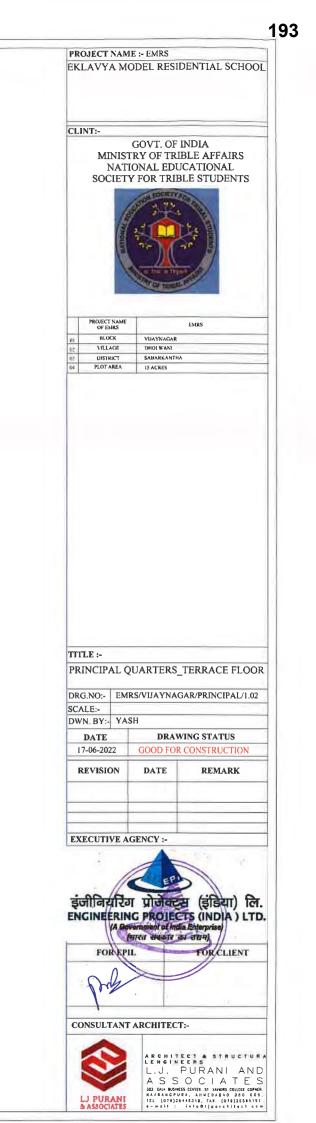


MENT
PAL QUARTER
UNIT-1
AREA (in Sqm)
127.89
2.90
130.79
3.16

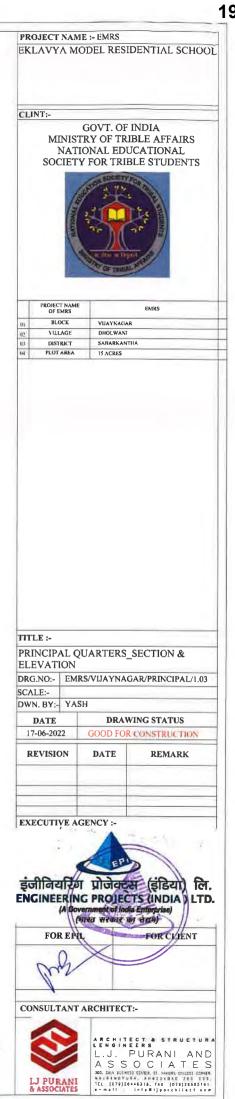


LJ PURANI & ASSOCIATES













PROJECT NAME :- EMRS CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLINT:-

GOVT. OF INDIA MINISTRY OF TRIBLE AFFAIRS NATIONAL EDUCATIONAL SOCIETY FOR TRIBLE STUDENTS



	PROJECT NAME OF EMRS	EMRS			
411	DLOČK	VUAYNAGAR			
02	VILLAGE	DIIOLWANI			
03.	DISTRICT	SABARKANTHA			
64	PLOT AREA	15 ACRES			

L	L	L	L	Ľ.,	-

QUART	'ER	TYPE II_GI	ROUND FLOOR
DRG.NO:-	EM	RS/VIJAYNA	GAR/QUARTERS/1.01
SCALE:-			
DWN BY:-	YA	SH	
DATE		DR	AWING STATUS
17-06-202	22	GOOD FC	R CONSTRUCTION

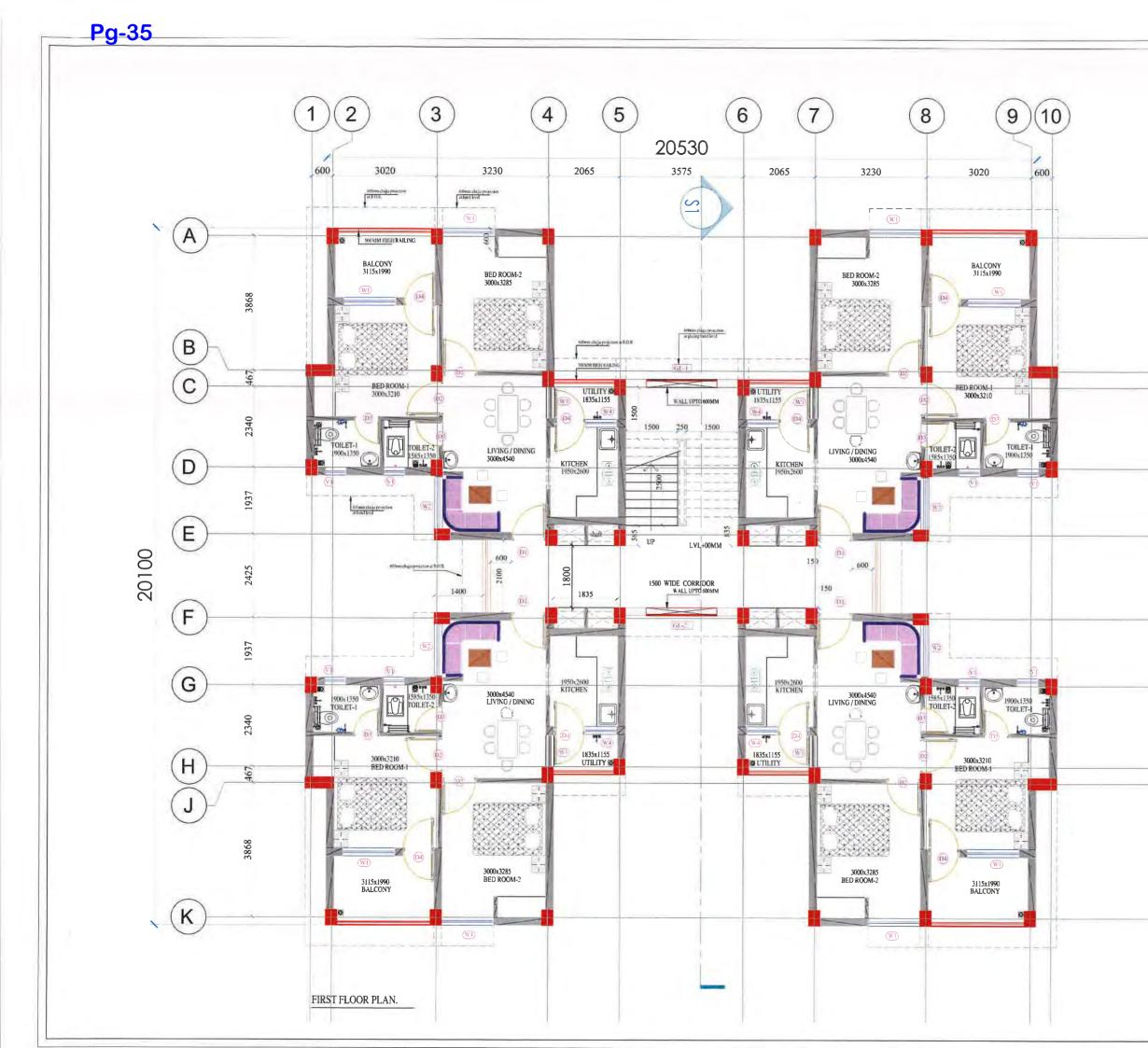
REVISION	DATE	REMARK

EXECUTIVE AGENCY :-

इंजीवियरिंग प्राजेक्ट्स (इंहिया) लि. ENGINEERING PROJECTS (INDIA) LTD. A Government of India Enterprise) (मारव सरकार का प्रार्थन) FOR EPIL FOR CLIENT

CONSULTANT ARCHITECT:-





PROJECT NAME -- EMRS CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLINT:-

GOVT. OF INDIA MINISTRY OF TRIBLE AFFAIRS NATIONAL EDUCATIONAL SOCIETY FOR TRIBLE STUDENTS

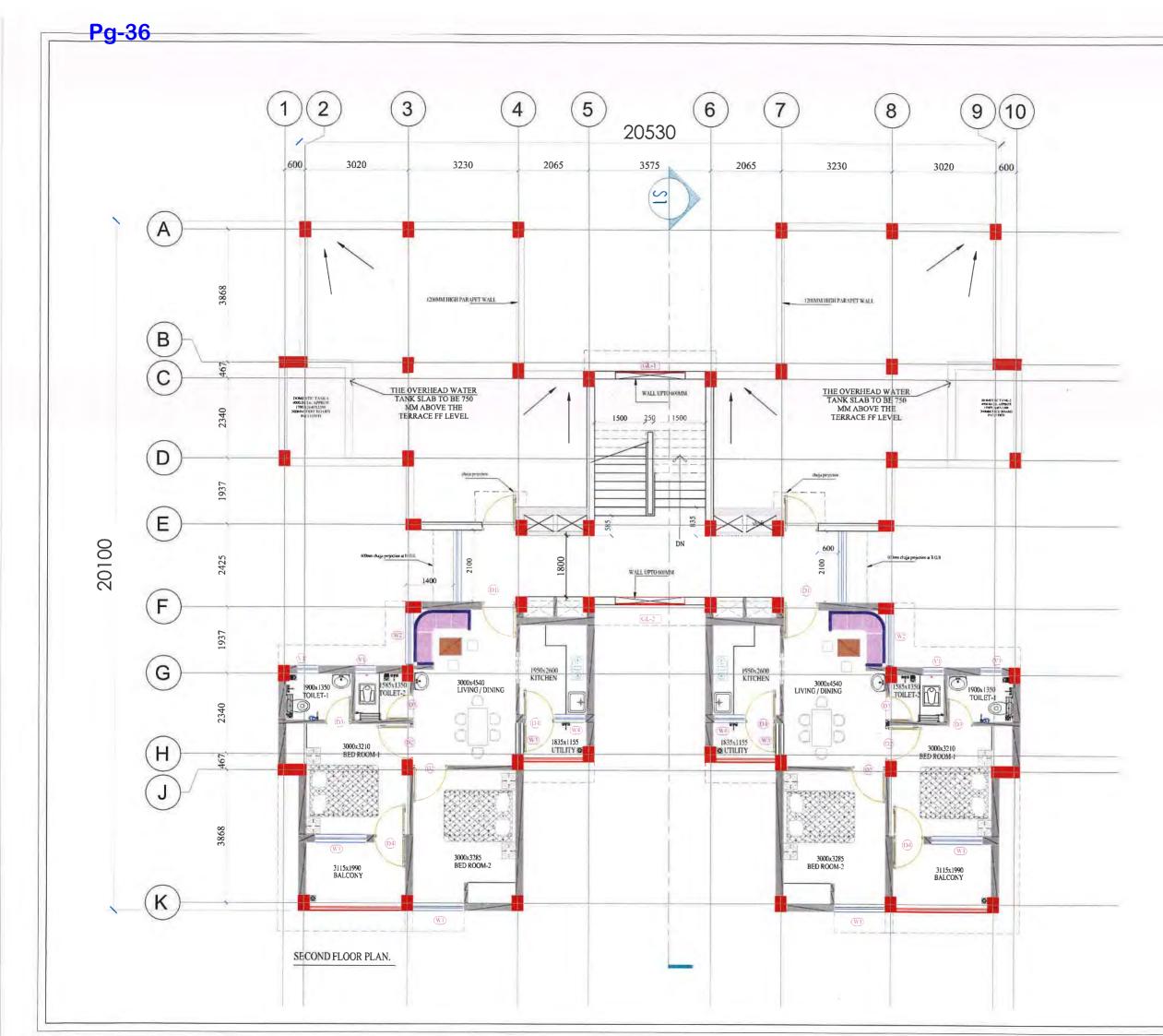


	PROJECT NAME OF EMRS	EMRS		
ot	BLOCK	VUAYNAGAR		
112	VILLAGE	DHOLWANI		
63	DISTRICT	SABARKANTIIA		
104	PLOT AREA	15 ACRES		

TTLE :-						
	TYPE II_FIF	RST FLOOR				
		GAR/QUARTERS/1.02				
SCALE:-						
OWN. BY:- YA	SH					
DATE	DR	WING STATUS				
17-06-2022	GOOD FO	GOOD FOR CONSTRUCTION				
REVISION	DATE	REMARK				
		1				
EXECUTIVE	AGENCY :	स (इंडियां) लि.				
ENGINEERII	NG PROJEC	TS (INDIA) LTD				
FOR EP	лГ Г	FOR CLIENT				
pol						
CONSULTAN	T ARCHITEC	T:-				
-						

A S S O C | A T E S 303 GANA BUSINESS CEVIER. SI JAVIORS COLLECT CORNER NAVRANG PURA AHULDARAD 380 005, TEL (075)26446318, FAX (079)2655151 -moil info⁶liporchilect.com

LJ PURANI



PROJECT NAME :- LMRS CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLINT:-

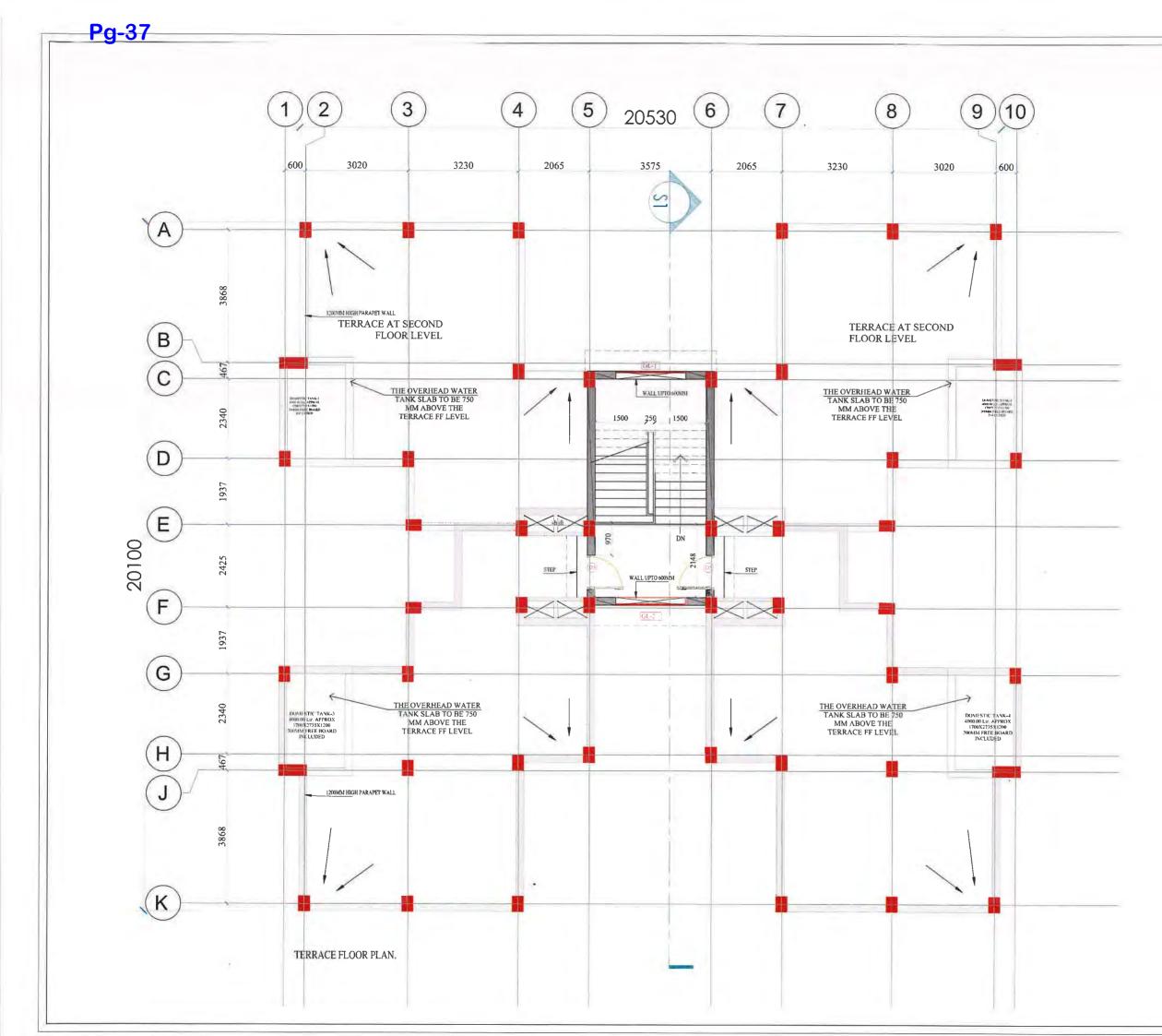
GOVT. OF INDIA MINISTRY OF TRIBLE AFFAIRS NATIONAL EDUCATIONAL SOCIETY FOR TRIBLE STUDENTS

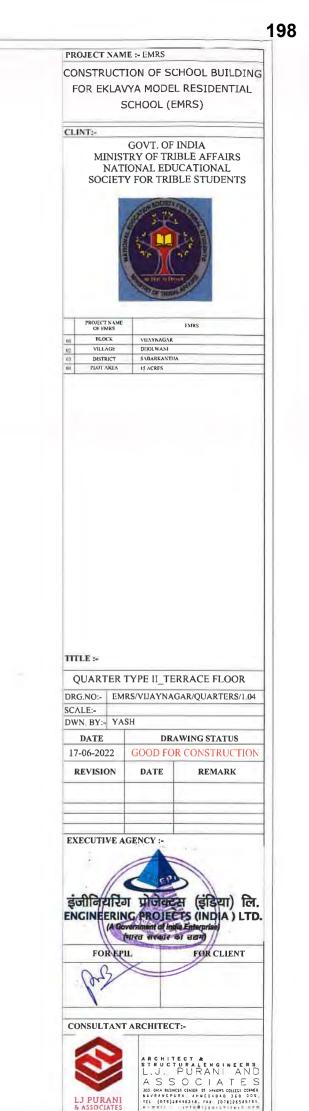


	PROJECT NAME OF EMRS	EMRS			
01	BLOCK	VUAYNAGAR			
42	VILLAGE	DHOLWANI			
103	DISTRICT	SADARKANTILA	-		
04	PLOT AREA	15 ACRES	-		

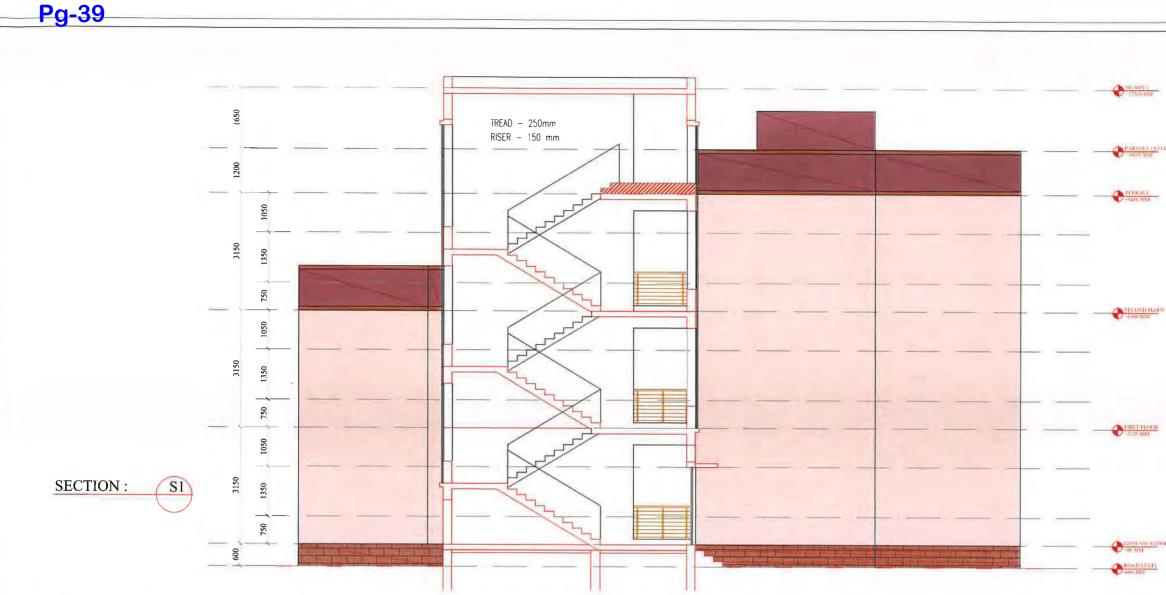
TITLE :-

DRG.NO:-	RG.NO:- EMRS/VIJAYNAGAR/QUARTERS/1.03					
SCALE:-						
DWN, BY:-	YAS	SH				
DATE		DRA	WING STATUS			
17-06-20	17-06-2022 GOOD FOR CONSTRUCT					
REVISION		DATE	REMARK			
EXECUTI	VE AG	GENCY :-				
इंजीमिर ENGINEI	A Gov	ernment of Ind	TS (INDIA) LTI			
l	A Gov	G PROJEC	TS (INDIA) LTI			
l	(A Gov (*	G PROJEC	TS (INDIA) LTI la Enterprise) El GENI			
Pr	A Gow	G PROJEC	FOR CLIENT			



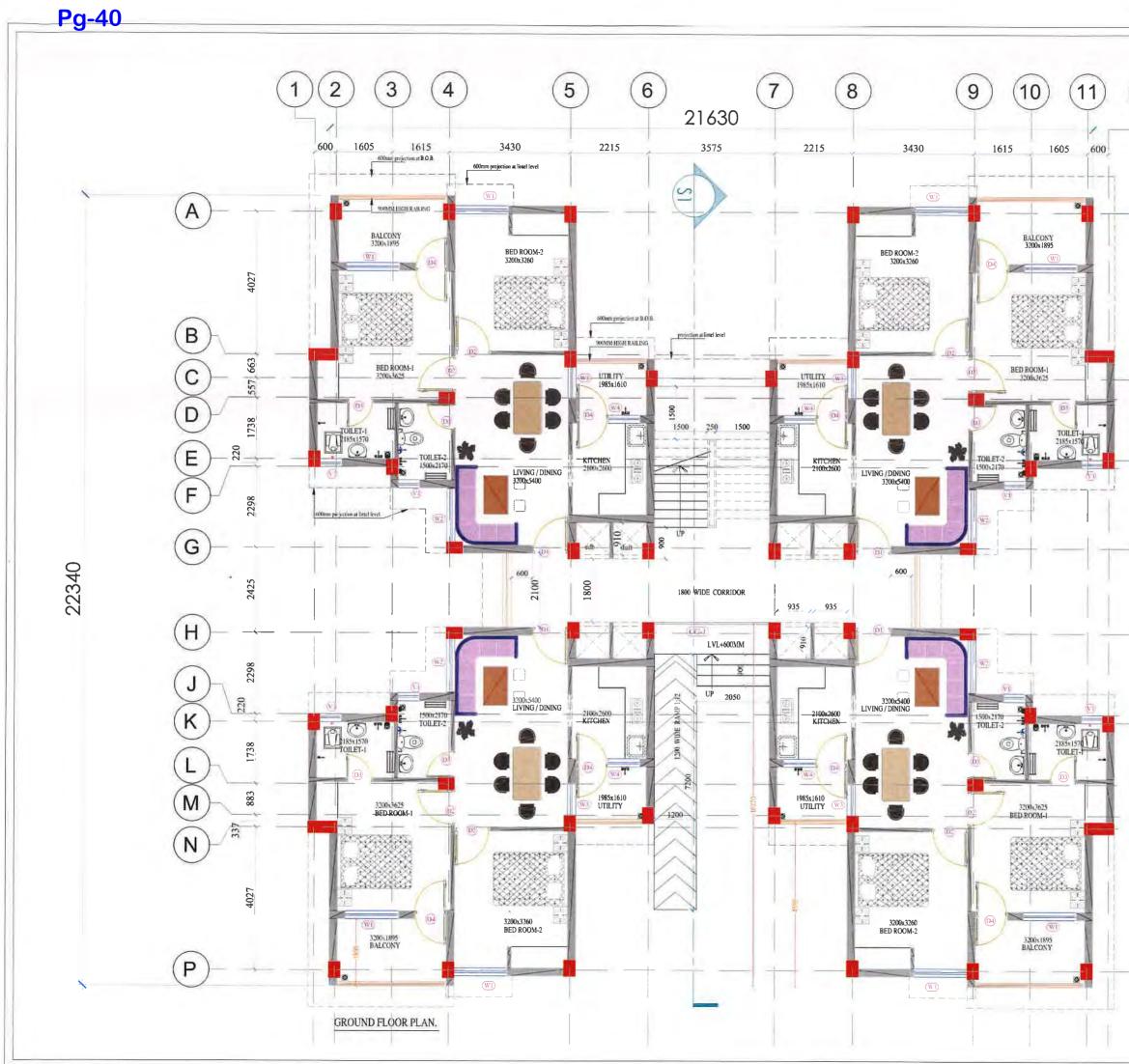






			DOOR, W	/INDOW, \	/ENTILATO	R, FIXED	GLAZING, GRILL SCHEDULE FO	OR TYPE II QUARTER	
TAG	CLEAR OPENING SIZE	SILL	LINTEL	Nos. (for 1 qtr)	Total nos. of qtrs	TOTAL	LOCATION	MATERIAL	COMMENTS
D1	1000 X 2100	0	2100	1	10	10	MAIN ENTRANCE DOOR	FLUSH DOOR	
D2	1000 X 2100	0	2100	2	10	20	BEDROOMDOOR	FLUSH DOOR	SINGLE LEAF
D3	750 X 2100	0	2100	2	10	20	TOILET DOOR	PRELAMINATED DOOR	SINGLE LEAF
D4	900 X 2100	0	2100	2	10	20	UTILITY, BALCOONY	PRELAMINATED DOOR WITH WIRE MESH	SINGLE LEAF
D5	1000 X 2100	0	2100	2	1	2	TERRACE DOOR		SINGLE LEAF
W1	1500 X 1350	750	2100	2	10	20	BEDROOM-1, BEDROOM-2	STEEL GLAZED WINDOW	
W2	1500 X 1200	900	2100	1	10	10	LIMING / DINING HALL	STEEL GLAZED WINDOW	
W3	900 X 1200	900	2100	1	10	10	LIVING / DINING HALL	STEEL GLAZED WINDOW	
W4	900 X 1050	1050	2100	1	10	10	KITCHEN	STEEL GLAZED WINDOW	
V1	600 X 600	1500	2100	2	10	20	TOILET	STANDARD STEEL SECTION	
CG-1	3250 X 2100	0	2100	1	1	1	BLOCK FRONT ENTRY GATE	STANDARD STEEL SECTION	COLLAPSIBLE GATE

PROJECT NAME :- EMRS CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS) CLINT:-GOVT. OF INDIA MINISTRY OF TRIBLE AFFAIRS NATIONAL EDUCATIONAL SOCIETY FOR TRIBLE STUDENTS PROJECT NAME OF EMRS EMRS BLOCK VIJAYNAGAR VILLAGE DHOLWANI DISTRICT E4 BLOCK VIJAYNAGAR a2 VILLAGF DHOLMANI B3 DISTRICT SAIJARKANTRA 64 PLOLARIA 15 ACRES TITLE :-QUARTER TYPE II_SECTIONS DRG.NO:- EMRS/VIJAYNAGAR/QUARTERS/1.06 SCALE:-DWN. BY:- YASH DATE DRAWING STATUS 17-06-2022 GOOD FOR CONSTRUCTION REVISION DATE REMARK EXECUTIVE AGENCY :-इंजीवियरिंग, प्रोजेक्ट्स (इंडिया) लि. ENGINEERING PROJECTS (INDIA) LTD. (A Government of India Enterprise) (शारव सरकार का वहन्य FOR CLIENT FOR EPH At2 CONSULTANT ARCHITECT:-TE ARCHITECT & STRUCTURALENGINEERS L.J. PURANI AND A S S O C I A T E S SID DUA MONTS (MITE 31 SWASS COLLET COMEN MARTANETURA, AND LONG 350 OCC 164 (079)52445344 Frag (079)2651551 164 (079)5245374 Frag (079)2651551 LJ PURANI & ASSOCIATES





PROJECT NAME :- EMRS CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL

SCHOOL (EMRS)

CLINT:-

GOVT. OF INDIA MINISTRY OF TRIBLE AFFAIRS NATIONAL EDUCATIONAL SOCIETY FOR TRIBLE STUDENTS



	OF EMRS	EMRS		
01	BLOCK	VIJAYNAGAR		
02	VILLAGE	DIIOLWANI		
63	DISTRICT	SABARKANTHA		
04	PLUT AREA	15 ACRES		

TITLE :-

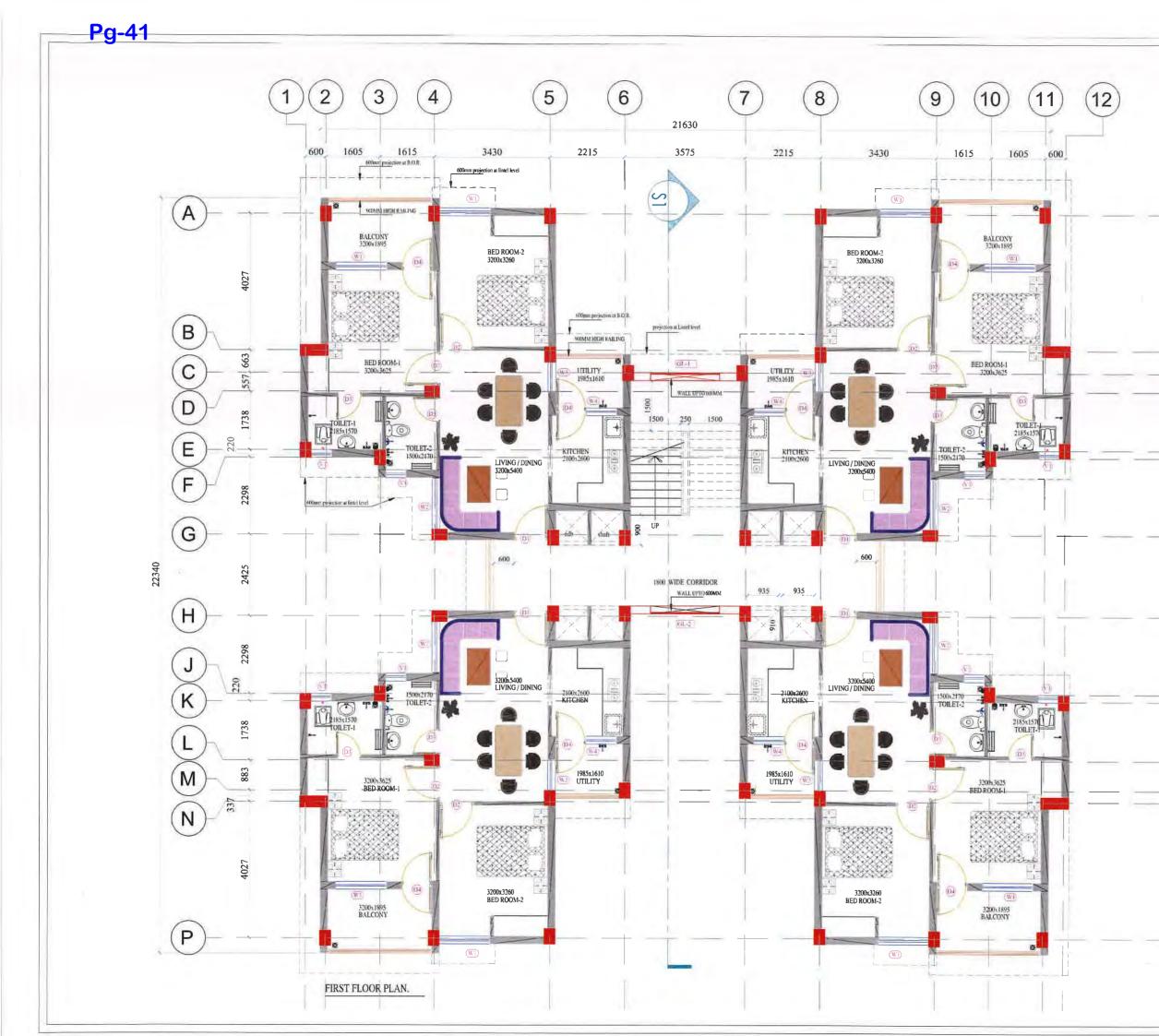
DRG.NO:-	EM	RS/VIJAYNAG	AR/QUARTERS/1.01	
SCALE:-				
DWN. BY:-	YA	SH		
DATE	1	DRA	WING STATUS	
17-06-202	22	GOOD FOR CONSTRUC		
REVISIO	ON	DATE	REMARK	
	-			
EXECUTIV	VE A	GENCY		

इंजीनियरिंग मोजेक्ट्स (इंडिया) लि. ENGINEERING PROJECTS (INDIA) LTD. (A Covernment of India Enterprise (Mitter करकार का जहन) FOR EPIL FOR CLIENT

> ARCHITECT & STRUCTURALENGINEERS L.J. PURANI AND ASSOCIATES

CONSULTANT ARCHITECT:-





PROJECT NAME :- EMRS CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLINT:-

GOVT. OF INDIA MINISTRY OF TRIBLE AFFAIRS NATIONAL EDUCATIONAL SOCIETY FOR TRIBLE STUDENTS



	PROJECT NAME OF EMRS	EMRS	
at	BLOCK	VUAYNAGAR	
tia .	VILLAGE	DHOLWANI	
07	DISTRICT	SABARKANTHA	_
64.	PLOT AREA	15 ACRES	-

TITLE :-

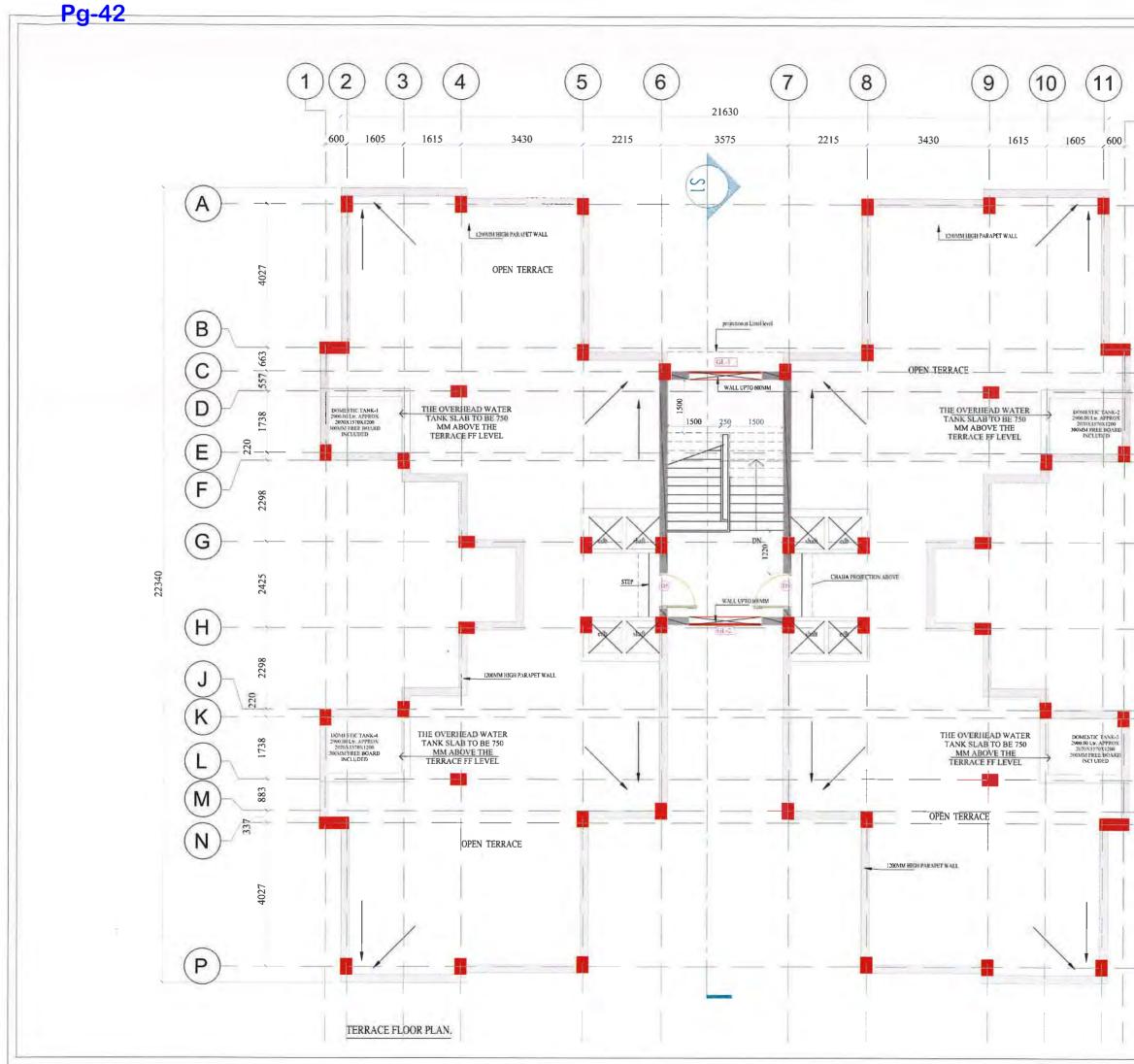
QUART	'ER	TYPE III_FIF	RST FLOOR				
DRG.NO:-	EM	RS/VIJAYNAG	AR/QUARTERS/1.02				
SCALE:-							
DWN. BY:-	YA	SH					
DATE		DRA	WING STATUS				
17-06-202	22	GOOD FOR CONSTRUCTIO					
REVISIO	ON	DATE	REMARK				
EXECUTIV	VE A	GENCY					
	-	EP					
डजीनिर	nta	गं पोलेक्टर	म हिडिया) लि				

Solitoralizat Choraces (SISAI) IC. ENGINEERING PROJECTS (INDIA) LTD. (A Government of India Enterprise) (Mirci ercerc en dam)

FOR EPIL FOR CLIENT

CONSULTANT ARCHITECT:-





PROJECT NAME :- EMRS CONSTRUCTION OF SCHOOL BUILDING 12 FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS) CLINT:-GOVT, OF INDIA MINISTRY OF TRIBLE AFFAIRS NATIONAL EDUCATIONAL SOCIETY FOR TRIBLE STUDENTS PROJECT NAM OF EMRS EMRS BLOCK VUAYNAGAR VILLAGE DHOLWANI SABARKANTHA DISTRICT PLOT AREA 15 ACRES TITLE :-QUARTER TYPE III_TERRACE FLOOR DRG NO:- EMRS/VIJAYNAGAR/QUARTERS/1.03 SCALE:-DWN. BY:- YASH DATE DRAWING STATUS 17-06-2022 GOOD FOR CONSTRUCTION REVISION DATE REMARK EXECUTIVE AGENCY इंजीनियरिंग प्रोजवट्स (इंडिया) लि. ENGINEERING PROJECTS (INDIA) LTD. (A Government of India Enterprise) (भारत सरकार का जवन) FOR EFIL FOR CLIENT Dre CONSULTANT ARCHITECT:-3 ARCHITECT & STRUCTURALENGINEERS L.J. PURANI AND ASSOCIATES 303, GALA BUSINES CENTER ST TAVIORS COLLECT COMMEN 101 (C70)26446318 FA3 (079)26565181 10 1 LJ PURANI & ASSOCIATES





PROJECT NAME :- EMRS CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLINT:-

GOVT. OF INDIA MINISTRY OF TRIBLE AFFAIRS NATIONAL EDUCATIONAL SOCIETY FOR TRIBLE STUDENTS



	PROJECT NAME OF EMRS	EMRS
111	BLOCK.	VIJAYNAGAR
02	VILL NGE	DIKOLWANI
07	DISTRICT	SADARKANTIIA
614	PLOT AREA	15 ACRES

PAPAPET LLVI

THRACE

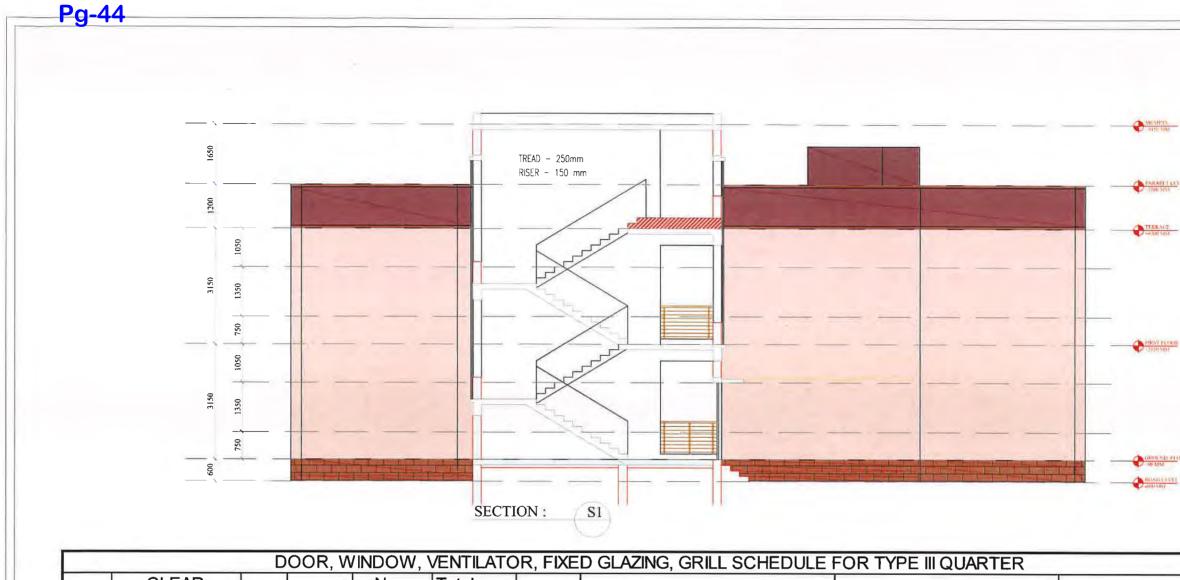
GROUND FLOOR

TITLE :-QUARTER TYPE III_ELEVATIONS DRG.NO:- EMRS/VIJAYNAGAR/QUARTERS/1.04 SCALE:-DWN. BY:- YASH DATE DRAWING STATUS 17-06-2022 GOOD FOR CONSTRUCTION REVISION DATE REMARK **EXECUTIVE AGENCY :-**इंजीनियरिंग प्रोजेक्ट्स (इंडिया) लि. ENGINEERING PROJECTS (INDIA) LTD. (A Government of India Enterprise) (भारत सरकार का रावम) FOR EPIL FOR CLIENT he

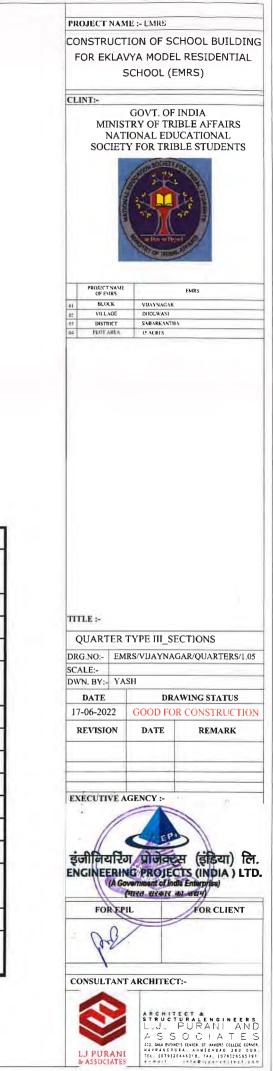
CONSULTANT ARCHITECT:-



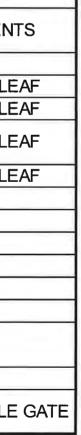
ARCHITECT & STRUCTURALENGINEERS L.J. PURANI AND ASSOCIATES AOJ MIA BUSHIESS CENTER ST JAHORS COLLEC COMER NAVRANG PURA AHMEDABAD 380 005, TEL (DT9)26445318, FAX (DT9)26565181 e-meil info0)jperceilect com

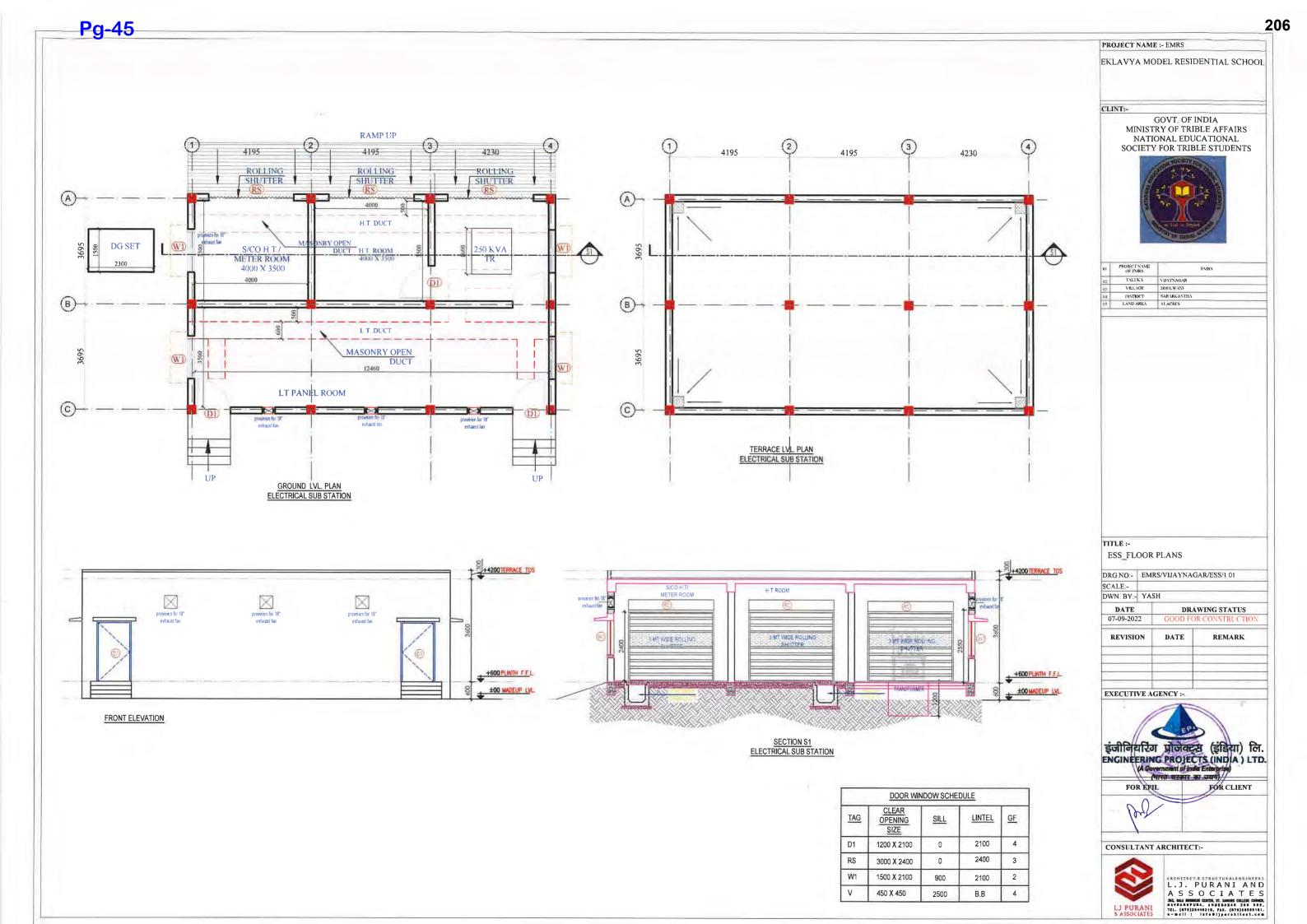


		0014,11				D GLAZING, GRILL SCHEDULE	FURTIFEILQUARTER	
CLEAR OPENING SIZE	SILL	LINTEL	Nos. (for 1 atr)	Total nos. of gtrs	TOTAL	LOCATION	MATERIAL	COMMENT
1000 X 2100	0	2100	1	16	16	MAIN ENTRANCE DOOR	FLUSH DOOR	
1000 X 2100	0	2100	2	16	32	BEDROOMDOOR	FLUSH DOOR	SINGLE LE
750 X 2100	0	2100	2	16	32	TOILET DOOR	PRELAMINATED DOOR	SINGLE LE
900 X 2100	0	2100	2	16	32	UTILITY, BALCOONY	PRELAMINATED DOOR WITH WIRE MESH	SINGLE LE
1000 X 2100	0	2100	2	2	4	TERRACE DOOR		SINGLE LE
1500 X 1350	750	2100	2	16	32	BEDROOM-1, BEDROOM-2	STEEL GLAZED WINDOW	
1500 X 1200	900	2100	1	16	16	LIVING / DINING HALL	STEEL GLAZED WINDOW	
900 X 1200	900	2100	1	16	16	LIVING / DINING HALL	STEEL GLAZED WINDOW	
900 X 1050	1050	2100	1	16	16	KITCHEN	STEEL GLAZED WINDOW	
600 X 600	1500	2100	2	16	32	TOILET	STANDARD STEEL SECTION	
3250 X 2100	0	2100	1	2	2	BLOCK FRONT ENTRY GATE	STANDARD STEEL SECTION	COLLAPSIBLE
	OPENING SIZE 1000 X 2100 1000 X 2100 750 X 2100 900 X 2100 1000 X 2100 1500 X 1350 1500 X 1200 900 X 1200 900 X 1050 600 X 600	OPENING SIZE SILL 1000 X 2100 0 1000 X 2100 0 750 X 2100 0 900 X 2100 0 1000 X 2100 0 1000 X 2100 0 1000 X 2100 0 1000 X 2100 0 1500 X 1350 750 1500 X 1200 900 900 X 1200 900 900 X 1050 1050 600 X 600 1500	OPENING SIZE SILL LINTEL 1000 X 2100 0 2100 1000 X 2100 0 2100 750 X 2100 0 2100 900 X 2100 0 2100 1000 X 2100 0 2100 900 X 2100 0 2100 1000 X 2100 0 2100 1000 X 2100 0 2100 1500 X 1350 750 2100 900 X 1200 900 2100 900 X 1050 1050 2100 900 X 1050 1050 2100 900 X 1050 1050 2100	OPENING SIZE SILL LINTEL (for 1 qtr) 1000 X 2100 0 2100 1 1000 X 2100 0 2100 2 750 X 2100 0 2100 2 900 X 2100 0 2100 2 900 X 2100 0 2100 2 1000 X 2100 0 2100 2 1000 X 2100 0 2100 2 1000 X 2100 0 2100 2 1500 X 1350 750 2100 2 1500 X 1200 900 2100 1 900 X 1200 900 2100 1 900 X 1050 1050 2100 1 600 X 600 1500 2100 2	OPENING SIZE SILL LINTEL (for 1 qtr) of qtrs 1000 X 2100 0 2100 1 16 1000 X 2100 0 2100 2 16 750 X 2100 0 2100 2 16 900 X 2100 0 2100 2 16 900 X 2100 0 2100 2 16 1000 X 2100 0 2100 2 16 900 X 2100 0 2100 2 16 1000 X 2100 0 2100 2 2 1500 X 1350 750 2100 2 16 1500 X 1200 900 2100 1 16 900 X 1200 900 2100 1 16 900 X 1050 1050 2100 1 16 600 X 600 1500 2100 2 16	OPENING SIZE SILL LINTEL (for 1 qtr) of qtrs IOTAL 1000 X 2100 0 2100 1 16 16 1000 X 2100 0 2100 2 16 32 750 X 2100 0 2100 2 16 32 900 X 2100 0 2100 2 16 32 900 X 2100 0 2100 2 16 32 1000 X 2100 0 2100 2 16 32 1000 X 2100 0 2100 2 2 4 1500 X 1350 750 2100 2 16 32 1500 X 1200 900 2100 1 16 16 900 X 1050 1050 2100 1 16 16 900 X 600 1500 2100 2 16 32	OPENING SIZE SILL LINTEL (for 1 qtr) of qtrs IOTAL LOCATION 1000 X 2100 0 2100 1 16 16 MAIN ENTRANCE DOOR 1000 X 2100 0 2100 2 16 32 BEDROOM DOOR 750 X 2100 0 2100 2 16 32 TOILET DOOR 900 X 2100 0 2100 2 16 32 UTILITY, BALCOONY 1000 X 2100 0 2100 2 2 4 TERRACE DOOR 900 X 2100 0 2100 2 16 32 UTILITY, BALCOONY 1000 X 2100 0 2100 2 16 32 BEDROOM-1, BEDROOM-2 1500 X 1350 750 2100 2 16 32 BEDROOM-1, BEDROOM-2 1500 X 1200 900 2100 1 16 16 LIVING / DINING HALL 900 X 1050 1050 2100 1 16 32 TOILET	OPENING SIZE SILL LINTEL (for 1 qtr) of qtrs IOTAL LOCATION MATERIAL 1000 X 2100 0 2100 1 16 16 MAIN ENTRANCE DOOR FLUSH DOOR 1000 X 2100 0 2100 2 16 32 BEDROOM DOOR FLUSH DOOR 750 X 2100 0 2100 2 16 32 TOILET DOOR PRELAMINATED DOOR 900 X 2100 0 2100 2 16 32 UTILITY, BALCOONY PRELAMINATED DOOR 900 X 2100 0 2100 2 2 4 TERRACE DOOR PRELAMINATED DOOR 1000 X 2100 0 2100 2 16 32 UTILITY, BALCOONY PRELAMINATED DOOR 1500 X 1350 750 2100 2 16 32 BEDROOM-1, BEDROOM-2 STEEL GLAZED WINDOW 1500 X 1200 900 2100 1 16 16 LIVING / DINING HALL STEEL GLAZED WINDOW 900 X 1050 1050 2100 1 1



ND FLOOR NA 14 BOLL 14 BOLL 14







AN ISO 9001 & 14001 COMPANY

TENDER DOCUMENT

TENDER No: WRO/CON/EMRS/866/330

FOR

Construction of Eklavya Model Residential School (EMRS) in Single- Phase comprise of school building, Boys hostel (240 students), Girls-hostel (240 students), Kitchen & Dinning block, 2 blocks of Type-III quarters including guest house (8+8 Nos), Type-II quarters (10 Nos), Principal Residence, Warden Residence (Boys & Girls), electrical provision, water supply and Sanitary installations, External sewerage system and Drainage facility, Campus development such as road, Compound wall etc. at Vijaynagar in Sabarkantha District of Gujarat State.

VOLUME- III

EXECUTING AGENCY

Engineering Projects (India) Limited Western Regional Office: Mumbai



Percentage BoQ

Tender Inviting Authority: ENGINEERING PROJECTS (INDIA) LIMITED, WESTERN REGIONAL OFFICE - MUMBAI

Name of Work: Construction of Eklavya Model Residential School (EMRS) in Single-Phase comprise of School Building, Boys Hostel (240 Students), Girls-Hostel (240 Students), Kitchen & Dining Block, 2 Blocks of Type-III, Quarters including Guest House (8+8 Nos), Type-II Quarters (10 Nos), Principal Residence, Warden Residence (Boys & Girls), Electrical Provision, Water Supply & Sanitary Installations, External Sewerage System and Drainage Facility, Campus Development such as Road, Compound Wall etc. at Vijaynagar in Sabarkantha District of Gujarat State.

Contract No: WRO/CON/EMRS/866/330 DTD. 19.12.2023

Name of the Bidder/ Bidding Firm Company :	1					
(This BOQ te	mplate must not be modified/replaced by the bidder and the same shou				else the bidder is liabl	e to be rejected for this tender. Bidders are allowed to
SI. No.	Item Description	Quantity	Units	Estimated Rate (including 18% GST) in Rs. P	Total Amount (including 18% GST) in Rs. P	TOTAL AMOUNT (INCLUDING 18% GST) In Words
1	2	3	4	5	6	7
1	EMRS - VIJAYNAGAR, GUJARAT					
1.01	Construction of Eklavya Model Residential School (EMRS) in Single- Phase comprise of School Building, Boys Hostel (240 Students), Girls- Hostel (240 Students), Kitchen & Dining Block, 2 Blocks of Type-III, Quarters including Guest House (8+8 Nos), Type-II Quarters (10 Nos), Principal Residence, Warden Residence (Boys & Girls), Electrical Provision, Water Supply & Sanitary Installations, External Sewerage System and Drainage Facility, Campus Development such as Road, Compound Wall etc. at Vijaynagar in Sabarkantha District of Gujarat State.	1.000	Nos	320672818.00	320672818.00	Eight Hundred & Eighteen Only
Total in Figur	es				320672818.00	INR Thirty Two Crore Six Lakh Seventy Two Thousand Eight Hundred & Eighteen Only
Quoted Rate	in Figures		Select		0.00	INR Zero Only
Quoted Rate	in Words		ł	•	INR Zero Only	,

	t Estimate (on DSR 2019/ Market rate basis) of single Phase is	₹ 32,06,72,818.00	
	Name of Work:- Vijay ABSTRACT C		
	SUMMARY		
			T (IN RS)
S.No	PARTICULARS	DSR	NON DSR
1	Earth Work	79,52,619.01	
2	Concrete Work	90,71,896.37	
3	Reinforced Cement Concrete	12,77,65,108.60	
4	Masonry Work	3,10,46,710.21	
5	Stone Work	85,047.00	
6	Cladding Work	40,38,706.00	
7	Wood & PVC Work	37,10,722.10	
8	Steel Work	1,33,38,830.80	
9	Flooring	1,77,51,650.49	
10	Roofing	9,71,906.80	
11	Finishing	2,57,49,971.95	
12	Aluminium Work	4,12,850.67	
13	Water Proofing	88,32,521.30	
14	Road Work	76,87,218.10	
15	Non-Schedule Items		60,13,457.00
	TOTAL AMOUNT (DSR)	25,84,15,759.39	
	TOTAL AMOUNT (NON DSR)	0504457.50	60,13,457.00
	Add enhancement @ 1.00% (assumed) over DSR 2019,	2584157.59	
	due to increase in Cost Index		00 70 40 070 00
	GRAND TOTAL (CIVIL WORKS) (In Rs)	26,09,99,916.99	26,70,13,373.99
	PLUMBING WORKS		
16	Sanitary Installations	23,56,124.60	3,51,249.61
17	Drainage Installations	3,19,738.50	13,04,994.65
18	Water supply Installations	14,95,390.45	16,528.60
19	External Sewage Drainage System	31,27,930.73	
	Future al Channes Matters Duraits and Constants	01,21,000.10	
20	External Storm Water Drainage System	16,85,038.60	
20 21	External Storm Water Drainage System External Fresh Water Supply System		
	External Fresh Water Supply System Bore well	16,85,038.60	
21	External Fresh Water Supply System Bore well TOTAL AMOUNT (DSR)	16,85,038.60 8,98,465.10	
21	External Fresh Water Supply System Bore well TOTAL AMOUNT (DSR) TOTAL AMOUNT (NON DSR)	16,85,038.60 8,98,465.10 2,88,331.20	16,72,772.86
21	External Fresh Water Supply System Bore well TOTAL AMOUNT (DSR) TOTAL AMOUNT (NON DSR) Add enhancement @ 1.00% (assumed) over DSR 2019,	16,85,038.60 8,98,465.10 2,88,331.20 1,01,71,019.18	16,72,772.86
21	External Fresh Water Supply System Bore well TOTAL AMOUNT (DSR) TOTAL AMOUNT (NON DSR) Add enhancement @ 1.00% (assumed) over DSR 2019, due to increase in Cost Index	16,85,038.60 8,98,465.10 2,88,331.20	
21	External Fresh Water Supply System Bore well TOTAL AMOUNT (DSR) TOTAL AMOUNT (NON DSR) Add enhancement @ 1.00% (assumed) over DSR 2019,	16,85,038.60 8,98,465.10 2,88,331.20 1,01,71,019.18	
21	External Fresh Water Supply System Bore well TOTAL AMOUNT (DSR) TOTAL AMOUNT (NON DSR) Add enhancement @ 1.00% (assumed) over DSR 2019, due to increase in Cost Index GRAND TOTAL (PLUMBING WORKS) (In Rs)	16,85,038.60 8,98,465.10 2,88,331.20 1,01,71,019.18	
21 22	External Fresh Water Supply System Bore well TOTAL AMOUNT (DSR) TOTAL AMOUNT (NON DSR) Add enhancement @ 1.00% (assumed) over DSR 2019, due to increase in Cost Index GRAND TOTAL (PLUMBING WORKS) (In Rs) FIRE FIGHTING WORKS	16,85,038.60 8,98,465.10 2,88,331.20 1,01,71,019.18 101710.19	1,19,45,502.23
21 22 	External Fresh Water Supply System Bore well TOTAL AMOUNT (DSR) TOTAL AMOUNT (NON DSR) Add enhancement @ 1.00% (assumed) over DSR 2019, due to increase in Cost Index GRAND TOTAL (PLUMBING WORKS) (In Rs) FIRE FIGHTING WORKS Piping & Valves	16,85,038.60 8,98,465.10 2,88,331.20 1,01,71,019.18 101710.19 101710.19 5,77,327.60	1,19,45,502.23
21 22 23 23 24	External Fresh Water Supply System Bore well TOTAL AMOUNT (DSR) TOTAL AMOUNT (NON DSR) Add enhancement @ 1.00% (assumed) over DSR 2019, due to increase in Cost Index GRAND TOTAL (PLUMBING WORKS) (In Rs) FIRE FIGHTING WORKS Piping & Valves Fire Hydrant Accessories	16,85,038.60 8,98,465.10 2,88,331.20 1,01,71,019.18 101710.19	1,19,45,502.23 2,046.00
21 22 	External Fresh Water Supply System Bore well TOTAL AMOUNT (DSR) TOTAL AMOUNT (NON DSR) Add enhancement @ 1.00% (assumed) over DSR 2019, due to increase in Cost Index GRAND TOTAL (PLUMBING WORKS) (In Rs) FIRE FIGHTING WORKS Piping & Valves Fire Hydrant Accessories Fire Extinguishers & Miscellaneous Items	16,85,038.60 8,98,465.10 2,88,331.20 1,01,71,019.18 101710.19 5,77,327.60 2,01,912.00	1,19,45,502.23 2,046.00 1,33,038.00
21 22 2 2 2 3 24 25	External Fresh Water Supply System Bore well TOTAL AMOUNT (DSR) TOTAL AMOUNT (NON DSR) Add enhancement @ 1.00% (assumed) over DSR 2019, due to increase in Cost Index GRAND TOTAL (PLUMBING WORKS) (In Rs) FIRE FIGHTING WORKS Piping & Valves Fire Hydrant Accessories	16,85,038.60 8,98,465.10 2,88,331.20 1,01,71,019.18 101710.19 5,77,327.60 2,01,912.00 3,09,900.00	1,19,45,502.23 2,046.00 1,33,038.00
21 22 2 2 2 3 24 25	External Fresh Water Supply System Bore well TOTAL AMOUNT (DSR) TOTAL AMOUNT (NON DSR) Add enhancement @ 1.00% (assumed) over DSR 2019, due to increase in Cost Index GRAND TOTAL (PLUMBING WORKS) (In Rs) FIRE FIGHTING WORKS Piping & Valves Fire Hydrant Accessories Fire Extinguishers & Miscellaneous Items Fire Pumps & Accessories	16,85,038.60 8,98,465.10 2,88,331.20 1,01,71,019.18 101710.19 5,77,327.60 2,01,912.00	1,19,45,502.23 2,046.00 1,33,038.00
21 22 2 2 2 3 24 25	External Fresh Water Supply System Bore well TOTAL AMOUNT (DSR) TOTAL AMOUNT (NON DSR) Add enhancement @ 1.00% (assumed) over DSR 2019, due to increase in Cost Index GRAND TOTAL (PLUMBING WORKS) (In Rs) FIRE FIGHTING WORKS) (In Rs) Fire FIGHTING WORKS Fire Hydrant Accessories Fire Hydrant Accessories Fire Extinguishers & Miscellaneous Items Fire Pumps & Accessories TOTAL AMOUNT (DSR)	16,85,038.60 8,98,465.10 2,88,331.20 1,01,71,019.18 101710.19 5,77,327.60 2,01,912.00 3,09,900.00 10,89,139.60	1,19,45,502.23 2,046.00 1,33,038.00 1,04,967.00
21 22 2 2 2 3 24 25	External Fresh Water Supply System Bore well TOTAL AMOUNT (DSR) TOTAL AMOUNT (NON DSR) Add enhancement @ 1.00% (assumed) over DSR 2019, due to increase in Cost Index GRAND TOTAL (PLUMBING WORKS) (In Rs) FIRE FIGHTING WORKS) (In Rs) FIRE FIGHTING WORKS Piping & Valves Fire Hydrant Accessories Fire Extinguishers & Miscellaneous Items Fire Pumps & Accessories Fire Pumps & Accessories TOTAL AMOUNT (DSR)	16,85,038.60 8,98,465.10 2,88,331.20 1,01,71,019.18 101710.19 5,77,327.60 2,01,912.00 3,09,900.00	1,19,45,502.23 2,046.00 1,33,038.00 1,04,967.00
21 22 2 2 2 3 24 25	External Fresh Water Supply System Bore well TOTAL AMOUNT (DSR) TOTAL AMOUNT (NON DSR) Add enhancement @ 1.00% (assumed) over DSR 2019, due to increase in Cost Index GRAND TOTAL (PLUMBING WORKS) (In Rs) FIRE FIGHTING WORKS) (In Rs) FIRE FIGHTING WORKS Piping & Valves Fire Hydrant Accessories Fire Extinguishers & Miscellaneous Items Fire Pumps & Accessories TOTAL AMOUNT (DSR) TOTAL AMOUNT (NON DSR) Add enhancement @ 1.00% (assumed) over DSR 2019,	16,85,038.60 8,98,465.10 2,88,331.20 1,01,71,019.18 101710.19 5,77,327.60 2,01,912.00 3,09,900.00 10,89,139.60	1,19,45,502.23 2,046.00 1,33,038.00 1,04,967.00

27	Internal Wiring	60,36,947.00	35,861.00
28	Distribution Boards & MCB's	7,16,943.00	19,175.00
29	Telephone, Television & Data System (socket, wiring &		
	conduting only)	5,08,064.00	15,400.00
30	Light Fixtures & Fan	5,60,780.00	20,36,053.00
	TOTAL AMOUNT (DSR)	78,22,734.00	
	TOTAL AMOUNT (NON DSR)		21,06,489.00
	Add enhancement @ 1.00% (assumed) over DSR 2019, due to increase in Cost Index	78227.34	
G	RAND TOTAL (ELECTRICAL WORKS INTERNAL) (In Rs)		1,00,07,450.34
	ELECTRICAL WORKS (External)		
31	Transformer and HT Panel		11,80,113.00
32	LT Panel, Feeder Pillar and Capacitor Panels		15,11,553.00
33	LT Cables	8,26,046.00	14,20,319.00
34	HT Cables	34,237.00	55,700.00
35	Miscellaneous	7,765.00	20,063.00
36	Earthing	3,82,700.00	
37	Pole Erection	4,38,884.00	
38	External Lighting System	5,40,610.00	24,43,519.00
39	UPS - 10 kVA		2,25,122.00
40	Lightning Arrestor System for Transformer		12,021.00
41	Pumps		2,68,190.00
42	CCTV System	1,55,470.00	5,90,371.00
43	Lightning Conductor	4,06,800.00	
44	62.5 KVA D.G.Set and associated works		7,28,820.00
	TOTAL AMOUNT (DSR)	27,92,512.00	
	TOTAL AMOUNT (NON DSR)		84,55,791.00
	Add enhancement @ 1.00% (assumed) over DSR 2019,	27925.12	
	due to increase in Cost Index	21020.12	
G	RAND TOTAL (ELECTRICAL WORKS EXTERNAL) (In Rs)		1,12,76,228.12
		TOTAL (A) (In Rs)	30,15,82,636.67
	ESTIMATED COST PUT TO TENDER WITH		
	18% GST- GRAND TOTAL (in Rs.) SAY		32,06,72,818
т	otal Estimated Cost with 18% GST (in Rs.)		32,06,72,818

Estimate cost put to tender is excluding Esi & EPF charges and it will be reimbursement after submission of actual proof of submission i.e. Deposite challans from construction agency

	SCHEDULE OF QUANTITIES Name of Work:- Construction of EMRS at Block-Vijaynagar , Dist-Sabarkantha -Gujrat. Single Phase_With Elect Updation ABSTRACT OF COST									
S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)				
	2019									
1.0	2	CIVIL WORKS Earth Work								
1.0	2									
1.01	2.1	Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including getting out and disposal of excavated earth upto 50 m and lift upto 1.5 m, as directed by Engineer-in- Charge:	cum	5800	92.55	5,36,790.00				
1.02	2.6	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50m and lift upto 1.5m, as directed by Engineer-in-charge.								
1.02.1	2.6.1	All kinds of soil	Cum	2873	181.85	5,22,391.58				
1.03	2.7	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50m and lift upto 1.5m, as directed by Engineer-in-charge.								
1.03.1	2.7.1	Ordinary Rock	Cum	2967	352.45	10,45,570.77				
1.03.02	2.7.2	Hard rock (requiring blasting)	Cum	16	609.65	9,754.40				
1.04	2.8	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soil as directed within al lead of 50m.								
1.04.1	2.8.1	All kinds of soil.	Cum	4200	252.30	10,59,559.08				
1.05	2.9	Excavation work 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, lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soils as directed within a lead of 50m.								
1.05.01	2.9.1	Ordinary Rock	Cum	102	448.15	45,711.30				
1.05.02	2.9.2	Hard rock (requiring blasting)	Cum	53	729.00	38,637.00				
1.06	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering lead upto 50m and lift upto 1.50m.	Cum	15401	219.65	33,82,846.12				
1.07	2.26	Extra for every additional lift of 1.5 m or part thereof in								
1.07.01	2.26.1	excavation / banking excavated or stacked materials.	Cu	105	00.40	0.402.00				
1.07.01	2.26.1	All kinds of soil	Cum	105	90.40	9,492.00				
1.08	2.27	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	Cum	530	1953.05	10,35,116.50				
1.09	2.31	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish upto a distance of 50m outside the periphery of the area cleared.	Sqm	21255	12.55	2,66,750.25				
		Total of sub-head (1.0)				79,52,619.01				
2.0 2.01	4 4.1	Concrete Work Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :								
2.01.2	4.1.10	1:5:10 (1 cement : 5 coarse sand (zone-III) derived from natural sources: 10 graded stone aggregate 40 mm nominal size derived from natural sources)	Cum	1133	5520.30	62,55,051.93				
2.01.3	4.1.10	1:2:4 (1 Cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 40 mm nominal size)	Cum	130	6788.60	8,81,072.03				

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
2.01.3	4.2.3	1:2:4 (1 Cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)	Cum	82	8554.50	7,00,703.71
2.02	4.3	Centering and shuttering including strutting, propping etc. and removal of form work for :				
2.02.1	4.3.1	Foundations, footings, bases for columns	Sqm	339	284.85	96,564.15
2.03	4.10	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources: 4 graded stone aggregate 12.5mm nominal size derived from natural sources)	Sqm	769	347.90	2,67,535.10
2.04	4.13	Providing & applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	Sqm	834	110.00	91,740.00
2.05	4.17	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation, levelling & dressing & finishing the top smooth.	Sqm	1269	614.05	7,79,229.45
		Total of sub-head (2.0)				90,71,896.37
2.0						, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
3.0	5 5.9	Reinforced Cement Concrete Centering and shuttering including strutting, propping etc. and				
3.01.1	5.9.1	removal of form for : Foundations, footings, bases of columns, etc. for mass concrete	Sqm	4780	284.85	13,61,583.00
2.01.2	5.0.2		_	2282	(00.20	12.00.422.00
3.01.2	5.9.2	Walls (any thickness) including attached pilasters, butteresses, plinth and string courses etc. Suspended floors, roofs, landings, balconies and access platform	Sqm Sqm	2282 9720	609.30 693.05	13,90,422.60 67,36,446.00
3.01.4 3.01.5	5.9.4 5.9.5	Shelves (Cast in situ) Lintels, beams, plinth beams, girders, bressumers and cantilevers	Sqm Sqm	1162 11670	693.05 552.05	8,05,324.10 64,42,147.48
3.01.6	5.9.6	Columns, Pillars, Piers, Abutments, Posts and Struts	Sqm	6549	733.07	48,00,875.43
3.01.7 3.01.7A	5.9.7 5.9.14	Stairs, (excluding landings) except spiral-staircases Extra for shuttering in circular work(20% of respective centering	Sqm Sqm	189 48	622.35 146.61	1,17,624.15 7,037.28
3.01.8	5.9.15	and shuttering items) Small lintels not exceeding 1.5 m clear span, moulding as in cornices, window sills, string courses, bands, copings, bed plates, anchor blocks and the like	Sqm	38	284.85	10,824.30
3.01.9	5.9.16	Edges of slabs and breaks in floors and walls				
2 01 10	5.9.16.1	Under 20 cms wide	Metre	759	173.25	1,31,496.75
3.01.10	5.9.19	Weather shade, Chajjas, corbels etc., including edges	Sqm	915	766.75	7,01,576.25
3.02	5.11	Extra for additional height in centering, shuttering where ever required with adequate bracing, propping etc., including cost of de- shuttering and decentering at all levels, over a height of 3.5 m, for every additional height of 1 metre or part thereof (Plan area to be measured).				
	5.11.1	Suspended floors, roofs, landing, beams and balconies (Plan area to be measured)	Sqm	2450	287.50	7,04,375.00
3.03	5.22	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.				
	5.22.6	Thermo-Mechanically Treated bars of grade Fe-500D or more.	kg	210322	83.50	1,75,61,887.00
3.04	5.22A	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.				
	5.22A.5	Hard drawn steel wire fabric	Kg	2016	92.15	1,85,774.40
	5.22A.6	Thermo-Mechanically Treated bars of grade Fe-500D or more.	kg	431646	83.50	3,60,42,441.00
3.05	5.30	Add for plaster drip course/ groove in plastered surface or moulding to R.C.C. projections.	Metre	904	58.90	53,245.60

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
3.06	5.33	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. (Note :- Cement content considered in this item is @ 330 kg/cum. Excess/ less cement used as per design mix is payable/recoverable separately).				
	5.33.1	All works upto plinth level	Cum	2331	7997.30	1,86,38,718.92
	5.33.2	All works above plinth level upto floor V level.	Cum	3218	9400.85	3,02,51,935.30
3.07	5.34	Extra for providing richer mixes at all floor levels. Note:- Excess/less cement over the specified cement content used is payable/recoverable separately.	â	210		
	5.34.1	Providing M-30 grade concrete instead of M-25 grade BMC/ RMC. (Note:- Cement content considered in M-30 is @ 340 kg/cum)	Cum	249	69.75	17,355.74
3.08	5.35	Add for using extra cement in the items of design mix over and above the specified cement content therein.	quintal	1778	673.30	11,97,024.20
3.09	5.43	Providing and fixing in position Stainless steel Grade 304 plate- 1.0 mm thick as per design for expansion joints.				
	5.43.1	200 mm wide.	Metre	129	711.90	91,835.10
3.10	5.44 (Modified)	Providing and fixing of expansion joint system related with floor location as per drawings and direction of Engineer-In-Charge. The joints system will be of extruded aluminum base members, self aligning / self centering arrangement and support plates etc. as per ASTM B221-02. The system shall be such that it provides floor to floor /floor to wall expansion control system for various vertical localtion in load application areas that accommodates multi directional seismic movement without stress to it's components. System shall consist of metal profiles with a universal aluminum base member designed to accommodate various project conditions and finish floor treatments.				
		The cover plate shall be designed of width and thickness required to satisfy projects movement and loading requirements and secured to base members by utilizing manufacturer's pre- engineered self- centering arrangement that freely rotates / moves in all directions. The Self - centering arrangement shall exhibit circular sphere ends that lock and slide inside the corresponding aluminum extrusion cavity to allow freedom of movement and flexure in all directions including vertical displacement. Provision of Moisture Barrier Membrane in the Joint System to have watertight joint is mandatory requirement all as per the manufactures design and as approved by Engineer -in-Charge. (Material shall confirm to ASTM 6063).				
	5.44.1	Floor Joint of 50 mm gap	Metre	53	4390.70	2,32,707.10
3.11	5.45 (Modified)	Providing and fixing of expansion joint system related with wall joint (internal/ external) location as per drawings and direction of Engineer-In- Charge. The joints shall be of extruded aluminum base members, self aligning / centering arrangement and support plates as per ASTM B221-02. The material shall be such that it provides an Expansion Joints System suitable for vertical wall to wall/ wall to corner application, both new and existing construction in office Buildings & complexes with no slipping down tendency amongst the components of the Joint System. The Joint System shall utilize light weight aluminum profiles exhibiting minimal exposed aluminum surfaces mechanically snap locking the multicellular to facilitate movement. (Material shall confirm to ASTM 6063.)				
	5.45.1	Wall Joint of 50 mm gap	Metre	38	4123.10	1,56,677.80
				20		1,20,077100

bars at every third course of half brick masonry. Image: Course of half brick masonry. Image: Course of half brick masonry. Image: Course of half brick masonry. Image: Course of half brick masonry. Image: Course of half brick masonry. Image: Course of half brick masonry. Image: Course of half brick masonry. Image: Course of half brick masonry. Image: Course of half brick masonry. Image: Course of half brick masonry. Image: Course of half brick masonry. Image: Course of half brick masonry. Image: Course of half brick masonry. Image: Course of half brick masonry. 5.01 T.1 Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) upto plinth level with : Image: Course of half brick masonry.	S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
Image: biologic programment and locating requirements and security is marker by utilizing manufactures' programment wile solution biologic programment wile solution wile solution programment wile solution wile	3.12		and manufactures for various roof locations as per approved drawings and direction of Engineer-In-Charge. The joints shall be of extruded aluminum base members with, self aligning and self centering arragement support plates asper ASTM B221-02. The system shall be such that it provides watertight roof to roof/roof to corner joint cover expansion control system that is capable of accommodating multidirectional seismic movement without stress to its components. System shall consist of metal profile that incorporates a universal aluminum base member designed to				
Instruction Total of sub-head (3.0) Image: control of sub-head (3.0) Image: control of sub-head (3.0) 4.0 6 Masonry Work Image: control of sub-head (3.0) 4.01 6.1 Brick work with common burnt chay E.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in: Image: control of sub-head (3.0) Image: control of class designation 7.5 in foundation and plinth in: 6.12 Cement motar 1:6 (1 cement : 6 coarse sand) Cum 767 6157.45 47.22,764.15 4.02 (Modified) Brick work with non modular fly ash bricks conforming to foundation and plinth in: Image: control of sub-head (3.0) Image: control of sub-head (3.0) Image: control of sub-head (3.0) 4.03 6.4 Brick work with non modular fly ash bricks conforming to floor V level in all shapes and sizes in : Image: control of sub-head (3.0) Image: control of sub-head (3.0) 4.04 6.4.2 Cement mortar 1:6 (1 cement : 6 coarse sand) Cum 85 7590.45 6.45,188.25 4.05 Arick work with non modular fly ash bricks conforming to floor V level in : image: sub-sub-sub-sub-sub-sub-sub-sub-sub-sub-			to satisfy movement and loading requirements and secured to base members by utilizing manufacturer's preengineered self-centering arrangement that freely rotates / moves in all directions. The Self centering arrangement shall exhibit circular sphere ends that lock and slide inside the corresponding aluminum extrusion cavity to allow freedom of movement and flexure in all directions including vertical displacement. The Joint System shall resists damage or deterioration from the impact of falling ice, exposure to UV, airborne contaminants and occasional foot traffic from maintenance personnel. Provision of Moisture Barrier Membrane in the Joint System to have water tight joint is mandatory				
Instrumental system Total of sub-head (30) Image: system system Image: system system 4.0 6 Maxmy Work Image: system system Image: system sy		5.46.1	Roof Joint of 50 mm gap	Metre	27	4658.30	1,25,774.10
4.0 6 Maxony Work 1 1 1 1 1 1 4.01 6.1 Brick work with common barnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in: 1 </th <th></th> <th></th> <th>Total of sub-bead (3.0)</th> <th></th> <th>97321241 12</th> <th></th> <th>12 77 65 108 60</th>			Total of sub-bead (3.0)		97321241 12		12 77 65 108 60
4.01 6.1 Brick work with common burnt flay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in: 1 1 1 1 1 4.01 6.1.2 Cement motar 1.6 (1 ement : 6 coarse sand) Cum 767 6157.45 47,22,764.15 4.02 6.1 Brick work with non modular fly ash bricks conforming to foundation and plinth in: 1 1 1 4.02 6.1.2 Cement motar 1.6 (1 ement : 6 coarse sand) Cum 5982.35 - 4.03 6.4 Brick work with common burnt flay F.P.S. (non modular) bricks of flass designation 7.3 in superstructure above plinth level up to floor V level in all shapes and sizes in : 0 5982.35 - 4.03 6.4.4 Cement motar 1.6 (1 ement : 6 coarse sand) Cum 85 7590.45 6.45,188.25 4.04 6.34 Brick work with non modular fly ash bricks conforming to Bi.1289.4, class designation 10 average compressive strength in super structure above plinth level up in floor V level in : um as 2215 917.00 2.34.69,782.47 4.05 6.45 Cement motar 1.6 (1 ement : 4 coarse sand) Cum 3224 7280.70 2.34.69,782.47 4.06 6.15 Brick work with non modular fly ash bricks or class designat							
and of class designation 7.5 in foundation and plinth in: and and and bits cment mortar 1:6 (1 cement : 6 coarse sand) Cum 767 6157.45 47,22,764.15 cment bits bits work with non modular fly ash bricks conforming to isolation (10 verage compressive strength in foundation and plinth in: and 5982.35 and cment cment mortar 1:6 (1 cement : 6 coarse sand) Cum 5982.35 and cment cment mortar 1:6 (1 cement : 6 coarse sand) Cum 5982.35 and cment bits bits bits bits and and d.03 6.4 Bits bits cment mortar 1:6 (1 cement : 6 coarse sand) Cum 85 7590.45 6.45.188.25 d.04 6.4.2 Cement mortar 1:6 (1 cement : 6 coarse sand) Cum 3224 7280.70 2.34.69.782.47 d.04 Bits bits bits bits bits and	4.0	6	Masonry Work				
Image: constraint of the second sec	4.01	6.1					
(Modified)IIS:12894, class designation 10 average compressive strength in foundation and plinth in:CumSuper-structure6.1.2Cement mortar 1:6 (1 cement : 6 coarse sand)Cum5982.35		6.1.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	767	6157.45	47,22,764.15
4.03 6.4 Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in : Image: Common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in : Image: Common burnt clay F.P.S. (non modular) bricks of class designation 10 average compressive strength in super structure above plinth level up to floor V level in : Image: Common burnt clay F.P.S. (non modular) bricks of class designation 10 average compressive strength in super structure above plinth level up to floor V level in : Image: Common burnt clay F.P.S. (non modular) bricks of class designation 10, conforming 15 :12894, in super structure above plinth level up to floor V level in : Image: Common burnt clay F.P.S. (non modular) bricks of class designation 10, conforming 15 :12894, in super structure above plinth level up to floor V level in : Image: Common burnt clay F.P.S. (non modular) bricks of class designation 10, conforming 15 :12894, in super structure above plinth lavel up to floor V level in : Image: Common burnt clay F.P.S. (non modular) bricks of class designation 10, conforming 15 :12894, in super structure above plinth lavel up to floor V level in : Image: Common burnt clay F.P.S. (non modular) bricks of class designation 10, conforming 15 :12894, in super structure above plinth lavel up to floor V level in : Image: Common burnt clay F.P.S. (non modular) bricks of class designation 10, conforming 16 :12894, in super structure above plinth lavel up to floor V level in : Image: Common burnt clay F.P.S. (non modular) bricks of class designation 10, conforming 16 :12894, in super structure above plinth lavel up to floor V level in :	4.02		IS:12894, class designation 10 average compressive strength in				
of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in : <		6.1.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum		5982.35	-
4.04 6.34 Brick work with non modular fly ash bricks conforming to IS:12894, class designation 10 average compressive strength in super structure above plinth level up to floor V level in :	4.03	6.4	of class designation 7.5 in superstructure above plinth level up to				
IS:12894, class designation 10 average compressive strength in super structure above plinth level up to floor V level in : 6.34.2 Cement mortar 1:6 (1 cement : 6 coarse sand) Cum 3224 7280.70 2,34,69,782.47 4.05 6.45 Half brick masonry with non modular fly ash bricks of class designation 10, conforming IS :12894, in super structure above plinth and upto floor V level. 4.05 6.45.2 Cement mortar 1:4 (1 cement :4 coarse sand) Sqm 2215 917.00 20,31,521.80 6.45.2 Cement mortar 1:4 (1 cement :4 coarse sand) Sqm 2215 80.10 1,77,453.54 4.06 6.15 Extra for providing and placing in position 2 Nos 6mm dia. M.S. Sqm Sqm 2215 80.10 1,77,453.54 4.06 6.15 Extra for providing and placing in position 2 Nos 6mm dia. M.S. Sqm Sqm 2215 80.10 1,77,453.54 6.5.0 Total of sub-head (4.0) Image: Stone Work Image: Stone Work <t< td=""><td></td><td>6.4.2</td><td>Cement mortar 1:6 (1 cement : 6 coarse sand)</td><td>Cum</td><td>85</td><td>7590.45</td><td>6,45,188.25</td></t<>		6.4.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	85	7590.45	6,45,188.25
6.34.2 Cement mortar 1:6 (1 cement : 6 coarse sand) Cum 3224 7280.70 2,34,69,782.47 4.05 6.45 Half brick masonry with non modular fly ash bricks of class designation 10, conforming IS :12894, in super structure above plinth and upto floor V level.	4.04	6.34	IS:12894, class designation 10 average compressive strength in				
designation 10, conforming IS :12894, in super structure above plinth and upto floor V level.Sqm2215917.0020,31,521.806.45.2Cement mortar 1:4 (1 cement :4 coarse sand)Sqm2215917.0020,31,521.804.066.15Extra for providing and placing in position 2 Nos 6mm dia. M.S. bars at every third course of half brick masonry.Sqm221580.101,77,453.54111111111111111112111111131111111311111113111111141111111511111111517.1Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) upto plinth level with :1111111111111111111111111111111221111111211111 <td></td> <td>6.34.2</td> <td></td> <td>Cum</td> <td>3224</td> <td>7280.70</td> <td>2,34,69,782.47</td>		6.34.2		Cum	3224	7280.70	2,34,69,782.47
4.06 6.15 Extra for providing and placing in position 2 Nos 6mm dia. M.S. bars at every third course of half brick masonry. Sqm 2215 80.10 1,77,453.54 Image: Constraint of the second	4.05	6.45	designation 10, conforming IS :12894, in super structure above				
bars at every third course of half brick masonry. Image: Course of half brick masonry. Image: Course of half brick masonry. Image: Course of half brick masonry. Image: Course of half brick masonry. Image: Course of half brick masonry. Image: Course of half brick masonry. Image: Course of half brick masonry. Image: Course of half brick masonry. Image: Course of half brick masonry. Image: Course of half brick masonry. Image: Course of half brick masonry. 5.0 Image: Course of half brick masonry. Image: Course of half brick masonry. Image: Course of half brick masonry. 5.01 7.1 Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) upto plinth level with : Image: Course of half brick masonry. Image: Course of half brick masonry. 5.01 7.1 Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) upto plinth level with : Image: Course of half brick masonry. Image: Course of half brick masonry.		6.45.2		Sqm	2215	917.00	20,31,521.80
5.0 Stone Work Image: Constraint of the second	4.06	6.15		Sqm	2215	80.10	1,77,453.54
5.01 7.1 Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) upto plinth level with : Image: Comparison of the store o			Total of sub-head (4.0)				3,10,46,710.21
5.01 7.1 Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) upto plinth level with : Image: Comparison of the store o							
including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) upto plinth level with :	5.0		Stone Work				
7.1.1 Cement mortar 1:6 (1 cement : 6 coarse sand) Cum 9 6120.80 55,087.20	5.01	7.1	including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) upto				
		7.1.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	9	6120.80	55,087.20

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
5.02	7.2	Random rubble masonry with hard stone in superstructure above plinth level and upto floor five level, including leveling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) at sindow sills, ceiling level and the like.				
	7.2.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	4	7489.95	29,959.80
		Total of sub-head (5.0)				85,047.00
6.0	8	Cladding Work				
		8				
6.01	8.2	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.				
6.01.1	8.2.2 8.2.2.1	Granite of any colour and shade Area of slab upto 0.50 sqm	Sam	29	4217.35	1,22,303.15
6.01.1	8.2.2.1 8.2.2.2	Area of slab upto 0.50 sqm Area of slab over 0.50 sqm	Sqm Sqm	29	4217.35 4007.65	8,69,660.05
6.02	8.4	Extra for fixing marble /granite stone, over and above corresponding basic item, in facia and drops of width upto 150 mm with epoxy resin based adhesive, including cleaning etc. complete.	Metre	218	434.25	94,666.50
6.03	8.5	Extra for providing opening of required size & shape for wash basin/ kitchen sink in kitchen platform, vanity counter and similar location in marble/ Granite/ stone work, including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete.	Each	20	734.55	14,691.00
6.04	8.31	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, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	Sqm	2851	1030.30	29,37,385.30
		Total of sub-head (6.0)				40,38,706.00
7.0	9	Wood Work & PVC Work				
7.01	9.12	Extra for providing frosted glass panes 4 mm thick instead of ordinary float glass panes 4 mm thick in doors, windows and clerestory window shutters. (Area of opening for glass panes excluding portion inside rebate shall be measured).	Sqm	100	214.05	21,405.00
7.02	9.21	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters:				
	9.21.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	Sqm	542	1886.70	10,22,591.40
7.03	9.23	Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of flush door shutters (over all area of door shutter to be measured).	Sqm	511	401.40	2,05,115.40
7.04	9.26	Extra for cutting rebate in flush door shutters (Total area of the shutter to be measured).	Sqm	7	93.65	655.55
7.05	9.47	Providing and fixing nickel plated M.S. pipe curtain rods with nickel plated brackets :		1005		
	9.47.2	25 mm dia (heavy type)	Metre	1088	162.35	1,76,636.80
7.06	9.48	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete				

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
	9.48.1	Fixed to steel windows by welding	kg	9206	165.30	15,21,751.80
7.07	9.24	Extra for providing vision panel not exceeding 0.1 sqm in all type of flush doors (cost of glass excluded) (overall area of door shutter to be measured):				
	9.24.1	Rectangular or square	Sqm	538	173.95	93,585.10
7.08	9.55	Deduction for not providing and fixing ISI marked M.S. pressed butt hinges bright finished with necessary screws etc. complete :				
	9.55.2	100x58x1.90 mm	Each	1956	-37.30	(72,958.80)
7.09	9.96	Providing and fixing aluminium sliding door bolts, ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete :				
	9.96.1 9.96.2	300x16 mm 250x16 mm	Each Each	4 452	257.15 231.70	1,028.60 1,04,728.40
7.10	9.68	Providing and fixing oxidised M.S. casement stays (straight peg type) with necessary screws etc. complete.				
	9.68.1	300 mm weighing not less than 200 gms	Each	2921	58.80	1,71,754.80
7.11	9.84	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete.	Each	67	851.60	57,057.20
7.12	9.85 (M)	Providing and fixing bright finished brass and/or customised M.S. casement window fastener with necessary screws etc. complete.	Each	2921	75.70	2,21,119.70
7.13	9.97	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :				
	9.97.1	300x10 mm	Each	548	116.80	64,006.40
	9.97.4	150x10 mm	Each	456	75.00	34,200.00
7.14	9.100	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :				
	9.100.1 9.100.2	125 mm 100 mm	Each Each	1124 4	59.65 52.85	67,046.60 211.40
7.15	9.101	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.	Each		32.63	211.40
	9.101.2	Twin rubber stopper	Each	335	62.05	20,786.75
<u> </u>						
		Total of sub-head (7.0)				37,10,722.10
8.0	10	Steel Work				
					<u> </u>	
8.01	10.3	Providing and fixing in position collapsible steel shutters with vertical channels $20x10x2$ mm and braced with flat iron diagonals $20x5$ mm size, with top and bottom rail of T-iron $40x40x6$ mm, with 40 mm dia steel pulleys, complete with bolts, nuts, locking arrangement, stoppers, handles, including applying a priming coat of approved steel primer.	Sqm	62	8670.50	5,37,571.00
8.02	10.6	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters.				

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
	10.6.1	80x1.25 mm M.S. laths with 1.25 mm thick top cover	Sqm	27	2944.10	79,490.70
8.03	10.7	Providing and fixing ball bearing for rolling shutters.	Each	3	419.85	1,259.55
8.04	10.8	Extra for providing mechanical device chain and crank operation				
	10.8.1	for operating rolling shutters Exceeding 10.00 sqm and upto 16.80 sqm in the area	Sqm	15	1106.55	16,598.25
8.05	10.11	Providing and fixing factory made ISI marked steel glazed doors,	1			.,
0.00		windows and ventilators, side /top /centre hung, with beading and all members such as F7D,F4B, K11 B and K12 B etc. complete of standard rolled steel sections, joints mitred and flash butt welded and sash bars tenoned and riveted, including providing and fixing of hinges, pivots, including priming coat of approved steel primer, but excluding the cost of other fittings, complete all as per approved design, (sectional weight of only steel members shall be measured for payment).				
	10.11.1	Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	kg	17406	166.50	28,98,087.35
	10.11 (Modified)	Deduct for omitting cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) in fixing standard steel glazed doors, windows and ventilators in walls. (Rate is below item no. 10.11.1)	kg	17406	-63.00	(10,96,578.00)
8.06	10.13	Providing and fixing T-iron frames for doors of mild steel Tee- sections, joints mitred and welded, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.				
	10.13.1	Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size).	kg	9991	106.45	10,63,541.95
8.07	10.15	Providing and fixing M.S. Tubular frames for doors, windows, ventilators and cupboard with rectangular/ L-Type sections, made of 1.60 mm thick M.S. Sheet, joints mitred, welded and grinded finish, with profiles of required size, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.				
	10.15.1	Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size).	kg	17201	137.30	23,61,697.30
8.08	10.16	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.				
	10.16.1	Hot finished welded type tubes	kg	12791	143.45	18,34,868.95
8.09	10.25	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.				
	10.25.1	In stringers, treads, landings etc. of stair cases, including use of chequered plate wherever required, all complete				
	10.25.2	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	kg	4013	131.00	5,25,703.00
8.10	10.26	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approved steel primer.				
	10.26.1	M.S. tube	kg	3893	145.65	5,67,015.45
8.11	10.28	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 bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-incharge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	kg	4663	575.45	26,83,323.35

S. No.	DSR	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
	2019					
8.12	10.29	Providing & fixing fly proof wire gauze to windows, clerestory windows & doors with M.S. Flat 15x3 mm and nuts & bolts complete.				
	10.29.2	Stainless steel (grade 304) wire gauze of 0.5 mm dia wire and 1.4 mm aperture on both sides	Sqm	725	929.55	6,73,923.75
8.13	10.30	Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows, all complete with :				
	10.30.1	4.0 mm thick glass panes	Sqm	1324	900.55	11,92,328.20
		Total of sub-head (8.0)				1,33,38,830.80
9.0	11	Flooring				
9.01	11.3	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 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.				
	11.3.1	40 mm thick with 20 mm nominal size stone aggregate	Sqm	84	498.35	41,861.40
9.02	11.5	62 mm thick cement concrete flooring with concrete hardener topping, under layer 50 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) and top layer 12mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate, 6mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per manufacture's specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.				
			Sqm	1316	854.30	11,24,258.80
9.03	11.8	Extra for making chequers of approved pattern on cement concrete floors, steps, landing, pavements etc.	Sqm	1216	63.20	76,851.20
9.04	11.13	Providing and fixing glass strips in joints of terrazo/ cement concrete floors.				
	11.13.1	40 mm wide and 4 mm thick	Metre	240	75.15	18,036.00
9.05	11.23	Marble stone flooring with 18 mm thick marble stone, as per sample of marble approved by Engineer-in-charge, over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with grey cement slurry, including rubbing and polishing complete with : Note : Qty. shall be executed in marble strips of width upto 50mm.				
	11.23.3	Agaria White	Sqm	338	2730.05	9,22,756.90
	11.23.5	Udaipur green marble	Sqm		1991.50	-
9.06	11.26	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :				
	11.26.1	25 mm thick.	Sqm	6329	1531.85	96,95,446.29
9.07	11.27	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.	Sqm	702	1810.05	12,70,655.10
9.08	11.31	Extra for pre finished nosing in treads of steps of Kota stone/ sand stone slab.	Metre	919	148.10	1,36,103.90
9.09	11.40	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 all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick Cement Mortar 1:4 (1 Cement : 4Coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including pointing the joints with white cement and matching pigments etc., complete.	Sqm	1011	1170.70	
9.10	11.21	Providing and fixing 10 mm thick acid and/or alkali resistant tiles of approved make and colour using acid and/or alkali resisting mortar bedding, and joints filled with acid and/or alkali resisting cement as per IS : 4457, complete as per the direction of Engineer- in- Charge.				

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
	11.21.1	In flooring on a bed of 10 mm thick mortar 1:4 (1 acid proof				
	11.21.1.1	cement : 4 coarse sand) Acid and alkali resistant tile	Sqm		1495.00	-
9.11	11.21.2	In dado/skirting on 12 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand)				
	11.21.2.1	Acid and alkali resistant tile	Sqm		1607.70	-
9.12	11.41	Providing and laying full body (Homogeneous) Vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including grouting the joints with white cement and matching pigments etc., complete.				
	11.41.2	Size of Tile 600x600 mm	Sqm	1653	1500.55	24,80,409.15
9.13	11.46	Providing and laying full body (Homogeneous) Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including grouting the joint with white cement & matching pigments etc. complete.				
	11.46.2	Size of Tile 600x600 mm	Sqm	208	1545.85	3,21,536.80
9.14	23.7	Supplying, filling, spreading & leveling coarse sand of size range 1.5 mm to 2 mm in recharge pit, in required thickness over gravel layer, for all leads & lifts, all complete as per direction of Engineer -incharge.	Cum	6	1326.55	7,959.30
9.15	16.89	Providing and laying matt finished vitrified tile of size 300x300x9.8mm having with water absorption less than 0.5% and conforming to IS: 15622 of approved make in all colours and shades in for outdoor floors such as footpath, court yard, multi modals location etc., laid on 20mm thick base of cement mortar 1:4 (1 cement : 4 coarse sand) in all shapes & patterns including grouting the joints with white cement mixed with matching pigments etc. complete as per direction of Engineerin-Charge.	Sqm	329	1264.80	4,16,119.20
9.16	16.90	Providing and laying tactile tile (for vision impaired persons as per standards) of size 300x300x9.8mm having with water absorption less than 0.5% and conforming to IS:15622 of approved make in all colours and shades in for outdoor floors such as footpath, court yard, multi modals location etc., laid on 20mm thick base of cement mortar 1:4 (1 cement : 4 coarse sand) in all shapes & patterns including grouting the joints with white cement mixed with matching pigments etc. complete as per direction of Engineer- in-Charge.	Sqm	29	1933.75	56,078.75
		Total of sub-head (9.0)				1,77,51,650.49
10.0	12	Roofing				
10.01	12.21	Providing gola 75x75 mm in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 stone aggregate 10 mm and down gauge), including finishing with cement mortar 1:3 (1 cement : 3 fine sand) as per standard design :				
	12.21.1	In 75x75 mm deep chase	Metre	1732	237.25	4,10,917.00
10.02	12.22	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 x1 m x 400 micron, finished with 12 mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete.	Each	231	244.05	56,375.55

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
10.03	12.47	Providing & fixing UV stabilised fiberglass reinforced plastic sheet roofing up to any pitch, including fixing with polymer coated 'J' or 'L' hooks, bolts & nuts 8mm dia. G.I plain/bitumen washers complete but excluding the cost of purlins, rafters, trusses etc. The sheets shall be manufactured out of 2400 TEX panel rovigs incorporating minimum 0.3% ultra-violet stabiliser in resin system under approximately 2400 psi and hot cured. They shall be of uniform pigmentation and thickness without air pockets and shall conform to IS 10192 and IS 12866.The sheets shall be opaque or translucent, clear or pigmented, textured or smooth as specified.				
	12.47.2	2 mm thick flat	Sqm	41	999.35	40,973.35
10.04	12.50	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15- 18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer- in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	Sqm	622	627.55	3,90,336.10
10.05	12.51	Providing and fixing precoated galvanised steel sheet roofing accessories 0.50 mm (+0.05 %) total coated thickness, Zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete :				
	12.51.2	Flashings/ Aprons.(Upto 600 mm)	Metre	86	416.30	35,801.80
	12.51.6	Gutter (600 mm over all girth)	Metre	36	1041.75	37,503.00
		Total of sub-head (10.0)				9,71,906.80
11.0	13	Finishing				
11.01	13.4 13.4.2	12 mm cement plaster of mix 1:6 (1 cement: 6 coarse sand)	Sqm	19374	263.55	51,06,090.60
11.02	13.5	15 mm cement plaster on rough side of single or half brick wall of mix:				
	13.5.2	1:6 (1 cement: 6 coarse sand)	Sqm	10265	303.90	31,19,533.50
11.03	13.16 13.16.1	6 mm cement plaster of mix 1:3 (1 cement : 3 fine sand)	Sqm	14352	227.35	32,62,927.20
11.04	13.18	Neat cement punning	Sqm		62.75	-
11.05	13.11	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement : 5 coarse sand) finished with a top layer 6 mm thick cement plaster 1:6 (1 cement : 6 fine sand)	Sqm	9531	399.30	38,05,728.30
11.06	13.21	Extra for providing and mixing water proofing material in cement plaster work in proportion recommended by the manufacturers.	per bag of 50kg cement used in the mix	860	59.75	51,385.00
11.07	13.37 13.37.1	White washing with lime to give an even shade : New work (three or more coats)	Sqm	460	17.25	7,935.00
11.08	13.42	Distempering with 1st quality acrylic distemper (ready mixed) having VOC content less than 50 gms/litre, of approved manufacturer, of required shade and colour complete, as per manufacturer's specification.				
	13.42.1	Two or more coats on new work	Sqm	43122	87.15	37,58,082.30

S. No.	DSR	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
	2019					
11.09	13.43	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface :				
	13.43.1	Water thinnable cement primer	Sqm	43122	60.00	25,87,320.00
11.10	13.47	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade:				
	13.47.1	New work (Two or more coats applied @ 1.43 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm)	Sqm	16600	161.15	26,75,090.00
11.11	13.50	Applying priming coat:				
11.11	13.50.3	With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron/ steel works	Sqm	641	50.70	32,498.70
11.12	13.52	Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete.				-
	13.25.2	On concrete work	Sqm	1857	189.40	3,51,715.80
11.13	13.61	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
	13.61.1	Two or more coats on new work	Sqm	4659	121.55	5,66,301.45
11.14	13.80	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.	Sqm	3694	115.15	4,25,364.10
		Total of sub-head (11.0)				2,57,49,971.95
12.0	21	Aluminium Work				
		ventilators and partitions with extruded built up standard tubular sections/appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/neoprene gasket etc. Aluminium sections shall be smooth, rust free,straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately):				
	21.1.1 21.1.1.2	For Fixed Portion Powder coated aluminium (minimum thickness of powder coating 50 micron)	kg	284	456.23	1,29,569.32
12.02	21.1.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)				
	21.1.2.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	kg	342	546.35	1,86,851.70
12.03	21.3	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):				
	21.3.2	With float glass panes of 5 mm thickness (weight not less than 12.50 kg/ sqm)	Sqm	26	1296.40	33,706.40
	21.3.3	With float glass panes of 8 mm thickness (weight not less than 20 kg/ sqm)	Sqm	16	1462.35	23,397.60
12.04	21.4	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge.				
	21.4.1	With stainless steel cover plate minimum 1.25 mm thickness	Each	14	2412.50	33,775.00
t	1	1	1	1	1	

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
	2017					
12.05	21.13	Providing and fixing Brass 100mm mortice latch and lock with 6 levers without pair of handles (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	Each	7	458.55	3,209.8:
12.06	21.16	Providing and fixing aluminium round shape handle of outer dia 100 mm with SS screws etc. complete as per direction of Engineer-incharge				
	21.16.2	Powder coated minimum thickness 50 micron aluminium	Each	28	83.60	2,340.8
		Total of sub-head (12.0)				4,12,850.67
13.0	22	Water Proofing				
13.01	22.3	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like consisting of:				
		(i) Ist course of applying cement slurry @ 4.4 kg/sqm mixed with water proofing compound conforming to IS 2645 in recommended proportions including rounding off junction of vertical and horizontal surface.				
		(ii) IInd course of 20 mm cement plaster 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface.				
		(iii) IIIrd course of applying blown or residual bitumen applied hot at 1.7 kg. per sqm of area.				
		(iv) IVth course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 kg/sqm).	Sqm	1429	705.70	10,08,445.30
13.02	22.4	Providing and Placing in position suitable PVC water stops conforming to IS:12200 for construction/ expansion joints between two RCC members and fixed to the reinforcement with binding wire before pouring concrete etc. complete :				
		Serrated with central bulb (225 mm wide, 8-11 mm thick)	Sqm	4	283.20	991.20

S. No.	DSR	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
5	2019		Cant	Quantity	tate (in Rs)	(in Ks)
13.03	22.7	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations:				
		a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment.				
		b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs.				
		c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineerin-charge.				
		d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineerin- charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep.				
		e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test."All above operations to be done in order and as directed and specified by the Engineer-in-Charge :				
	22.7.1	With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	Sqm	5621	1398.50	78,60,968.50
13.04	Derived 12.20 & 22.7	Deduct for providing and laying pressed clay tiles (as per approved pattern 20mm nominal thickness of approved size) on roofs jointed with cement mortar 1:4 (1 cement : 4 coarse sand) mixed with 2% integral water proofing compound, laid over a bed of 20 mm thick cement mortar 1:4 (1 cement : 4 coarse sand) and finished neat complete instead of part (d) of water proofing item at 22.7	Sqm	5621	-111.80	(6,28,427.80)
13.05	22.23	Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservior, sewage & water treatment plant, tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the engineer-in-charge. The product performance shall carry guarantee for 10 years against any leakage.				
	22.23.1	For vertical surface two coats @ 0.70 kg per sqm	Sqm	950	484.45	4,60,227.50
	22.23.2	For horizontal surface one coat @1.10 kg per sqm.	Sqm	349	373.40	1,30,316.60
		Total of sub-head (13.0)				88,32,521.30
14.0	16	Road Work				

S. No.	DSR	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
	2019					
14.01	16.1	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earth with all lead and lift.	Sqm	14165	156.75	22,20,363.75
14.02	16.6	Supplying, stacking and Spreading 6 mm thick red bajri, watering and rolling complete including preparation of the surface and rolling.	Sqm	1700	19.90	- 33,830.00
14.03	16.7	Brick edging in full brick width and half brick depth including excavation, refilling and disposal of surplus earth lead upto 50 metres.	Metre	1036	167.80	1,73,840.80
14.04	16.11	Dry stone pitching 22.5 cm thick including supply of stones and preparing surface complete	Sqm	96	730.20	- 70,099.20
14.05	16.11 (Modified)	Deduct for using available stone of size 15 cm x 22.5 cm for dry stone pitching. (Rate is below relevant item)	Sqm	96	-242.95	(23,323.20)
14.06	16.53	Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 3 m height of wall with existing angle iron 'Y' shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineerin-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately)	Metre	1187	290.80	3,45,179.60
14.07	16.19	Supplying at site Angle iron post & strut of required size including bottom to be split and bent at right angle in opposite direction for 10 cm length and drilling holes upto 10 mm dia. etc. complete.	kg	3607	92.40	3,33,286.80
14.08	16.62	Providing and applying 2.5 mm thick road marking strips (retro- reflective) of specified shade/ colour using hot thermoplastic material by fully/ semi automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour, T&P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and accordance with applicable specifications.	Sqm	114	607.30	69,232.20
14.09	16.66	Excavating holes upto 0.10 cum, including getting out the excavated soil, then returning the soil as deported in layers not exceeding 20 cm in depth, including consolidating and deposited layer by ramming watering etc., disposing of surplus excavated soil as directed with in a lead of 50 mm and lift upto 1.5 m.				
	16.66.1	All kind of soil	each	16	26.45	423.20
14.10	16.68	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M-30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with line sand etc. all complete as per the direction of Engineer-in-charge.	Sqm	164	859.35	1,40,933.40
14.11	16.69	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	Cum	51	8376.15	4,27,183.65

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
14.12	16.75	Providing and laying C.C. pavement of mix M-25 with ready mixed concrete from batching plant. The ready mixed concrete shall be laid and finished with screed board vibrator, vacuum dewatering process and finally finished by floating, brooming with wire brush etc. complete as per specifications and directions of Engineer-in-charge. (The panel shuttering work shall be paid for separately). (Note:- Cement content considered in this item is @ 330 kg/cum. Excess/less cement used as per design mix is payable/ recoverable separately).	Cum	227	8663.05	19,66,512.35
14.13	16.76	Deduct for using of M-20 grade concrete instead of M-25 grade concrete in C.C. pavement.	Cum	-227	188.30	(42,744.10)
14.14	16.3	Supplying and stacking at site.				
-	16.3.2	63 mm to 45 mm size stone aggregate	Cum	230	1535.65	3,53,199.50
14.15	16.3.3	53 mm to 22.4 mm size stone aggregate	Cum	230	1749.75	4,02,442.50
	16.3.9	Good earth	Cum	1218	483.90	- 5,89,390.20
14.16	16.2.10	M	6	240	907.90	
14.16	16.3.10	Moorum	Cum	240	807.80	1,93,872.00
14.17	16.4	Laying, spreading and compacting stone aggregate of specified sizes to WBM specifications in uniform thickness, hand picking, rolling with 3 wheeled road/vibratory roller 8-10 tonne capacity in stages to proper grade and camber, applying and brooming requisite type of screening / binding material to fill up interstices of coarse aggregate, watering and compacting to the required density.	Cum	565	767.25	4,33,496.25
		Total of sub-head (14.0)				76,87,218.10
15.00		Non-Schedule Items - Civil				
15.01	MR 1	Supply and Installation of single bucket dustbin made out of SS 202 grade, Capacity of bucket will be 70 ltrs. with weight carrying capacity of 40 kg. Minimum Sheet thickness will be used 0.8 mm. Design shall be approved from Engineer-In-Charge.	Each	5	5084.00	25,420.00
15.02	MR 2	Supplying, installation and fixing Galvanized iron High mast pole for National flags of height 6 meter. Pole shall be conical in shape of bottom & Top diameter- 20mm, Thickness - 1.0mm including holes and other accessories. Diameter of the base shall be 110mm and thickness of base plate shall be minimum 2mm. The rate shall be inclusive of National flag of required size as per IS code with hoisting arrangments and including mounted base, base plate and all other accessories.	Each	1	70242.00	70,242.00
15.03	MR 4	Providing signage viz display/name plate and like of required size made out of 20 guage thick stainless steel (304 grade) including engraved subject matter, message (Hindi/English and / or bilingual), symbols, borders and logo etc. The engraved letter, borders etc. to be furnished with paint etc. of reqyured colour scheme and the plate to be fixed to wooden/wall surface with 25mm long stainless steel spacer/stud all complete as per direction of Engineer in Charge.	Sq. inch	5750	9.00	51,750.00

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
15.04	MR 5	Providing and fixing Glass Reinforced Concrete Screens shall be made with frame of thickness 50mm and perforated designer screen element within thickness of 30mm as per approved design. The GRC screens shall be casted with a layering technique using power spray methodology and have minimum weight 3.5 kg per Sq.ft. The screens should be made from 53 grade white portland cement, fine graded quartz, silica sand and alkali resistant glass fibre. Super plasticizers and UV resistant synthetic inorganic pigments should be used for pigmentation. The material casting should take place in FRP moulds. The GRC screens' flexural strength Limit of Proportionality should be atleast 6 N/mm2 & Modulus of Rupture should be atleast 15 N/mm2 for tests done on 28 days cured samples. The fixing of panels should be 'Dry fixing' i.e., should be done with MS galvanized clamps, fixtures, screws and fasteners. All work, design, pattern and colour should be approved from Engineer-in-charge.	Sqm	256	4035.00	10,32,960.00
15.05	MR 6	Providing and fixing 35mm thick factory made Machine pressed pre-laminated flush door exterior grade with SS Butt Hinges along with teak wood lipping on edges. The lamination sheet used shall be decorative high pressure of plain/ wood grain in gloss/ matt/ suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS: 2046 Type S.	Sqm	528	3150.00	16,63,200.00
15.06	MR 7	Providing and laying cement concrete wall cladding (size and thickness to be specified by the manufacturer), water absorption 3% to 6% conforming to IS: 1237:2001, of approved brand & manufacturer, in brick colours and shade as approved by the architect, on walls laid with cement based high polymer modified quick set tileadhesive (water based) conforming to IS: 15477, in average 6 mm thickness, including grouting of joints of 3mm wide using epoxy grout mix of 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg), including filling / grouting and finishing complete as per direction of Engineer-in-charge.	Sqm	1915	1639.00	31,38,685.00
15.07	MR 8	Graffiti painting on wall as approved logo of Eklavya (EMRS) by high gloss acrylic colour before making logo, prepare the surface clean, fill POP in voids, apply 1mm white birla putty and primer including material, labour and T&P etc. all complete under instruction of engineer-in-charge.	Sqm	48	650.00	31,200.00
		Total of sub-head (15.0) (Non DSR)				60,13,457.00
		PLUMBING WORKS				
16.0		Sanitary Installation (As per D.S.R.)				
16.01	8.10	Providing & fixing stone slab table rubbed, edges rounded and polished of size 75 X 50 cm deep and 1.8 cm thick fixed in urinal patitions by cutting a chase of appropriate width with chase cutter and embedding the stone in chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregste 6mm nominal size) as per Engineer-in-charge and finished smooth				
	8.10.2	Granite Stone of approved shade	sqm	9	3216.90	28,952.10
16.02	17.10	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS: 13983 with Cl brackets and stainless steel waste with plug 40mm including painting of fittings and brackets, cutting and making good the walls wherever required.				-
	17.10.2 17.10.2.2	Sink without drain board 610X460 mm board depth 200mm	Each	62	2828 75	- 1 70 211 25
	17.10.2.2	610X460 mm bowl depth 200mm.	Each	63	2828.75	1,78,211.25
16.03	17.11	Providing and fixing white vitreous china laboratory sink with C.I. brackets, C.P. brass chain with rubber plug, 40 mm 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 :				
	17.11.2	Size 600x450x200 mm	Each	15	5460.45	81,906.75

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
16.04	17.2	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 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 :				
	17.2.1	W.C. pan with ISI marked white solid plastic seat and lid	Each	54	5260.95	2,84,091.30
16.05	17.16A	Providing and fixing 8 mm dia C.P./S.S. Jet with flexible tube upto 1 metre long with S.S. triangular plate to European type W.C. of quality and make as approved by Engineer - in-charge	Each	54	297.55	16,067.70
16.06	17.70	Providing and fixing PTMT Bottle Trap for Wash basin and sink.				
	17.70.1	Bottle trap 31mm single piece moulded with height of 270 mm, effective length of tail pipe 260 mm from the centre of the waste coupling, 77 mm breadth with 25 mm minimum water seal, weighing not less than 260 gms.	Each	63	335.25	21,120.75
16.07	17.5.1 (M)	Providing and fixing single white vitreous china flat back half stall urinal of size 580x380x350 mm with spreaders, unions, waste fitting and other couplings (all in C.P. brass) including making good the walls wherever required.	Each	36	3076.95	1,10,770.20
16.08	17.72	Providing & fixing PTMT towel ring trapezoidal shape 215 mm long 200 mm wide with minimum distance of 37 mm from wall face with concealed fittings arrangement of approved quality and colour weighing not less than 88 gms	Each	98	228.20	- 22,363.60
16.09	18.49	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931 :				
	18.49.1	15mm nominal bore	Each	40	418.95	16,758.00
16.10	18.50	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms.				
	18.50.1	15mm nominal bore	Each	198	618.80	1,22,522.40
16.11	18.54	Providing and fixing PTMT bib cock of approved quality and colour.				-
	18.54.3	15 mm nominal bore, 165 mm long, weighing not less than 110 gms	Each	102	176.75	18,028.50
	18.54.1	15mm nominal bore, 86 mm long, weighing not less than 88 gms	Each	139	116.55	16,200.45
16.12	18.55	Providing and fixing PTMT stop cock of approved quality and				-
	18.55.3	colour. Concealed stop cock, 15 mm nominal bore, 108 mm long, weighing not less than 108 gms (For Shower)	Each	76	606.25	46,075.00
16.13	18.52	Providing and fixing C.P. brass stop cock (concealed) of standard				
		design and of approved make conforming to IS:8931. 15 mm nominal bore (For Shower)	Each	129	606.25	78,206.25
16.14	18.53	Providing and fixing C.P. brass angle valve for basin mixer and				
	18.53.1	points of approved quality conforming to IS:8931 15 mm nominal bore (For Shower)	Each	242	532.00	1,28,744.00
16.15	18.63	Providing and fixing PTMT angle stop cock 15 mm nominal bore, weighing not less than 85 gms	Each	228	155.35	35,419.80
16.16	18.75	Providing and fixing PTMT extension nipple for water tank pipe, fittings of approved quality and colour. a) 25mm nominal bore, weighing not less than 62 gms	Each	92	155.35	14,292.20
16.17	17.7.4	White Vitreous China Flat back wash basin size 550x 400 mm with single 15 mm C.P. brass pillar tap	Each	62	2510.45	1,55,647.90
16.18	17.7B	Providing and fixing wash basin with C.I. brackets, 15 mm PTMT pillar cock, 32 mm PTMT waste coupling of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever required. White Vitreous China Flat back wash basin size 550x400 mm with single 15 mm PTMT pillar cock	Each	80	2398.70	1,91,896.00
	1			1	1	-

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
16.19	17.28	Providing & fixing PVC waste pipe for sink including PVC waste fitting Complete				-
	17.28.2	Flexible Pipe		202	101.10	-
	17.28.2.1	32mm Dia	Each	203	101.10	20,523.30
16.20	17.34	Providing and fixing toilet paper holder :	F 1		520.75	-
	17.34.1	C.P. brass	Each	55	538.75	29,631.25
16.21	18.21 18.21.2	Providing and fixing uplasticised PVC connection pipe with brass unions 45 cm length				-
	18.21.2.1	15 mm nominal bore	Each	400	83.00	33,200.00
16.22	17.1	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) IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required:				
	17.1.1	White Vitreous china Orissa pattern W.C. pan of size 580 x 440 mm with integral type foot rests	Each	112	5421.50	6,07,208.00
16.23	18.65	Providing and fixing PTMT soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with concealed fitting arrangements, weighing not less than 106 gms.	Each	176	130.50	22,968.00
16.24	17.73	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fittings arrangement of approved quality and colour.				-
16.25	17.71	Providing and fixing PTMT liquid soap container 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour, weighing not less than 105 gms.	Each	120	158.55	19,026.00
	17.73.1	600 mm long towel rail total length of 645 mm width 78mm and effective height 88 mm weight not less than 190 gms	Each	74	555.35	41,095.90
16.26	18.64	Providing and fixing PTMT swivelling shower, 15 mm nominal bore, weighing not less than 40 gms	Each	136	111.75	15,198.00
16.27	17.69	Providing and fixing PTMT Waste Coupling for wash basin and sink, of approved quality and colour.				
	17.69.1	Waste coupling 31 mm dia of 79 mm length and 62mm breadth weighing not less than 45 gms	Each		99.75	-
16.28	18.56	Providing and fixing PTMT pillar cock of approved quality and				
	18.56.1	colour. 15 mm nominal bore, 107 mm long, weighing not less than 110 gms	Each		192.65	-
		Sanitary Installations work (Non-Scheduled Items)				
16.29	MR 8	Providing and fixing U-shaped stainless steel grab bar (for differntly abled person) of size 600mm wall mounted, movable (horizontally and vertically) with necessary dash fastener etc. all complete. (Basic rate of material shall not be less than Rs.3900 each)	Each		5700.00	-
16.30	MR 9	Providing and fixing Oval Shape wash basin of size 560x450mm with C.I. brackets/rag bolt of required size, 15 mm PTMT pillar taps long neck with aerator, 32 mm PTMT waste coupling of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require complete as per direction of Engineer in Charge	Each	23	4865.00	1,11,895.00
16.31	MR 10	Providing and fixing 600 x 450 mm beveled edge mirror of superior glass (of approved quality) fixed with stainless steel studs, complete with cutting, making holes, studs, all fittings, screws, washers and making good the walls.	Each	169	849.59	1,43,580.71
16.32	MR 11	Providing & fixing stainless steel robe plate/pegs (hook) having three pegs (hook) in one strip (weight shall not be less than 120 grams) of superior quality with necessary scres etc. complete.	Each	203.00	281.00	57,043.00

S. No.	DSR	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
	2019					
						-
16.33	MR 12	Providing and fixing C.P. brass swan neck foam flow pillar cock of approved quality and conforming to IS standards. a) 15mm nominal bore	Each	23.00	639.50	14,708.50
16.34	MR 13	Providing and fiving C.D. bross long hady naggle his easy (two		-		-
10.34	MIK 13	Providing and fixing C.P. brass long body nozzle bib cock (two way) of approved quality conforming to IS standards and weighing not less than 810 gms.		-		-
		15 mm nominal bore	Each	28.00	643.55	18,019.40
				-		-
16.35	MR 14	Providing & fixing stainless steel butterfly robe pegs (hook) having three hooks of superior quality with necessary scres etc. complete.	Each	29.00	207.00	6,003.00
		Total of sub-head (16.0) (DSR)				23,56,124.60
		Total of sub-head (16.0) (Non DSR)				3,51,249.61
17.0		Internal Drainage Installations (As per D.S.R.)				
17.01	18.58	Providing and fixing PTMT grating of approved quality and colour				
17.01						
	18.58.1 18.58.11	Circular type 100 mm nominal dia	Each	269.00	37.90	10,195.10
	18.58.1.2	125 mm nominal dia with 25mm waste hole.	Each	73.00	51.25	3,741.25
17.02	10.41					
17.02	12.41	Providing & fixing on wall face unplasticised -Rigid PVC rain water pipes conforming to IS:13592 Type A included jointing with seal ring conforning to IS:5382 leaving 10 mm gap for thermal expansion. (i)Single socketed pipes.				
	12.41.2	110 mm diameter	Metre	719.00	305.05	2,19,330.95
17.03	12.42.	Providing, fixing on wall face unplasticised - PVC moulded fittings /accessories for unplasticised - Rigid PVC rain water pipes conforming to IS; 13592 Type A including jointing with seal ring conforming to IS; 5382 leaving 10 mm gap for thermal expansion.				
	12.42.1.2 12.42.5.2	Coupler -110 mm diameter Bend -87.5 deg -110 mm diameter	Each Each	30.00 112.00	117.80 129.85	3,534.00 14,543.20
	12.42.6.2	Shoe -110mm shoe	Each	30.00	113.80	3,414.00
17.04	12.43	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length, including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.				
	12.43.2	110mm	Each	225.00	288.80	64,980.00
17.05	MR 11	NON SCHEDULED ITEM Providing, fixing, jointing and testing in position of ISI marked UV stabilized uPVC pipes for soil, waste, and vent, Type-B as per IS : 13592 suitable for rubber ring joints, including all neccessary specials and fittings (confirming to IS:14735) i.e. bends, tees, junctions (with or without doors), reducers, WC connectors, couplers, expansion joints / bellows, cowels, clamps, rubber rings, clean outs etc. fixing at wall/ ceiling/ floor level supported by clamp & hangers etc. in concealed / inside duct / under floor & basement ceiling / external work etc. including chase cutting as required, excavation and back filling in all kind of soils, suspended from floor under false ceiling or embedding the pipes laid under floors / building in 75 mm. alround 1:2:4 cement concrete (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including cost of shuttering for proper completion of the work, breaking and making good the walls and floors etc. after pipes have been duly laid and tested. The rubber ring shall confirm to IS:5382. The Pipes will be supported with threaded G I rods & U clamps with nuts, washers etc on 50x50x5 mm slotted angle. The cost will include all support arrangements. The work includes commissioning of all pipes lines as per drawings and specifications and as directed by enge-in-charge at site.				
		110 mm dia (Wall Thickness - 3.2 to 3.8 mm)	Metre	2079.00	536.00	11,14,344.00
		75 mm dia (Wall Thickness - 3.2 to 3.8 mm)	Metre		416.00	-
	1					1

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S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
	2019					
17.06	MR 12	Providing and fixing UPVC, P or S trap of self cleaning design				
		with / without vent arm setting in cement concrete 1:2:4 mix				
		complete including cost of cutting & making good the wall and floors wherever required.				
		noois wherever required.				
		110 mm inlet & 110 mm outlet	Each	5.00	183.00	915.00
17.07	MD 12		F 1	201.00	224.50	07 220 50
17.07	MR 13	Providing and fixing uPVC inlet fitting (Hopper) maximum with 2 or 3 inlets of 40 to 63 mm OD size fabricated from 110 OD uPVC	Each	291.00	334.50	97,339.50
		pipe fixed to uPVC trap jointing with solvent cement joint and set				
		in a cement concrete 1:2:4 mix complete including cost of cutting				
		and making good the walls and floors wherever required.				
17.08	MR 14	Providing and fixing uPVC floor drain with uPVC reducing elbow				
		including all fitting and accessories fixed in cement mortar complete in all respect.				
		110 mm OD x 63 mm OD	Each		175.00	
			Lacii		175.00	
17.09	MR 15	Providing and fixing of uPVC Waste pipes 6 kg/cm2 (IS:				
		4985:2000) including with all fittings e.g. couplings, tees, bends,				
		reducers and screwed adoptors jointing with solvent cement as per Manufacturer's specifications complete including cutting holes				
		or chases in wall and making good the same wherever required.				
		(Waste pipe from fixtures).				
		40 mm OD	Metre	278.00	268.00	74,504.00
17.10	MR 16	Providing, fixing, testing and commissioning of uPVC cleanout plug conforming to IS:14735 – 1999 complete with all fitting,				
		accessories and civil works.				
		110 mm dia	Each	101.00	177.15	17,892.15
						-
		Total of sub-head (17.0) (DSR)				3,19,738.50
		Total of sub-head (17.0) (Non DSR)				13,04,994.65
18.0		Water Supply Installations (As per D.S.R.)				
		water supply insulations (its per District)				
18.01	18.7	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC)				
		pipes having thermal stability for hot and cold water supply				
		including all CPVC plain and brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing, this includes				
		jointing of pipes and fittings with one step CPVC solvent cement				
		and testing of joints complete as per direction of engineer in				
		charge.				
		Internal work -Exposed on Wall				
18.01.01	18.7.3	25 mm nominal dia pipes	Metre	36.00	369.20	13,291.20
18.01.02	18.7.4					
18.01.03		32 mm nominal dia pipes	Metre	848.00	480.55	4,07,506.40
18.01.04	18.7.5	40 mm nominal dia pipes	Metre Metre	244.00	480.55 648.60	4,07,506.40 1,58,258.40
10.01.05	18.7.6	40 mm nominal dia pipes 50 mm nominal dia pipes	Metre Metre Metre	244.00 119.00	480.55 648.60 903.50	4,07,506.40 1,58,258.40 1,07,516.50
18.01.05	18.7.6 18.9.7	40 mm nominal dia pipes 50 mm nominal dia pipes 62.50 mm nominal inner dia Pipes	Metre Metre	244.00	480.55 648.60	4,07,506.40 1,58,258.40
18.01.05 18.02	18.7.6	40 mm nominal dia pipes 50 mm nominal dia pipes	Metre Metre Metre	244.00 119.00	480.55 648.60 903.50	4,07,506.40 1,58,258.40 1,07,516.50
	18.7.6 18.9.7	40 mm nominal dia pipes 50 mm nominal dia pipes 62.50 mm nominal inner dia Pipes Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes having the thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including	Metre Metre Metre	244.00 119.00	480.55 648.60 903.50	4,07,506.40 1,58,258.40 1,07,516.50
	18.7.6 18.9.7	40 mm nominal dia pipes 50 mm nominal dia pipes 62.50 mm nominal inner dia Pipes Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes having the thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. this includes	Metre Metre Metre	244.00 119.00	480.55 648.60 903.50	4,07,506.40 1,58,258.40 1,07,516.50
	18.7.6 18.9.7	40 mm nominal dia pipes 50 mm nominal dia pipes 62.50 mm nominal inner dia Pipes Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes having the thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. this includes jointing of pipes and fittings with one step CPVC solvent cement	Metre Metre Metre	244.00 119.00	480.55 648.60 903.50	4,07,506.40 1,58,258.40 1,07,516.50
	18.7.6 18.9.7	40 mm nominal dia pipes 50 mm nominal dia pipes 62.50 mm nominal inner dia Pipes Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes having the thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. this includes jointing of pipes and fittings with one step CPVC solvent cement and the cost of cutting chases and making good the wall same including testing of joints complete as per the direction of	Metre Metre Metre	244.00 119.00	480.55 648.60 903.50	4,07,506.40 1,58,258.40 1,07,516.50
	18.7.6 18.9.7	40 mm nominal dia pipes 50 mm nominal dia pipes 62.50 mm nominal inner dia Pipes Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes having the thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. this includes jointing of pipes and fittings with one step CPVC solvent cement and the cost of cutting chases and making good the wall same	Metre Metre Metre	244.00 119.00	480.55 648.60 903.50	4,07,506.40 1,58,258.40 1,07,516.50
	18.7.6 18.9.7	40 mm nominal dia pipes 50 mm nominal dia pipes 62.50 mm nominal inner dia Pipes Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes having the thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. this includes jointing of pipes and fittings with one step CPVC solvent cement and the cost of cutting chases and making good the wall same including testing of joints complete as per the direction of	Metre Metre Metre	244.00 119.00	480.55 648.60 903.50	4,07,506.40 1,58,258.40 1,07,516.50
	18.7.6 18.9.7	40 mm nominal dia pipes 50 mm nominal dia pipes 62.50 mm nominal inner dia Pipes Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes having the thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. this includes jointing of pipes and fittings with one step CPVC solvent cement and the cost of cutting chases and making good the wall same including testing of joints complete as per the direction of engineer incharge	Metre Metre Metre	244.00 119.00	480.55 648.60 903.50	4,07,506.40 1,58,258.40 1,07,516.50
	18.7.6 18.9.7	40 mm nominal dia pipes 50 mm nominal dia pipes 62.50 mm nominal inner dia Pipes Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes having the thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. this includes jointing of pipes and fittings with one step CPVC solvent cement and the cost of cutting chases and making good the wall same including testing of joints complete as per the direction of	Metre Metre Metre	244.00 119.00	480.55 648.60 903.50	4,07,506.40 1,58,258.40 1,07,516.50
18.02	18.7.6 18.9.7 18.8 18.8	40 mm nominal dia pipes 50 mm nominal dia pipes 62.50 mm nominal inner dia Pipes Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes having the thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing, this includes jointing of pipes and fittings with one step CPVC solvent cement and the cost of cutting chases and making good the wall same including testing of joints complete as per the direction of engineer incharge Concealed work including cutting chases and making good the wall etc. 20 mm nominal dia pipes	Metre Metre Metre Metre	244.00 119.00 11.00 721.00	480.55 648.60 903.50 1552.30 478.15	4,07,506.40 1,58,258.40 1,07,516.50 17,075.30 3,44,746.15
18.02 18.02.1 18.02.1 18.02.2	18.7.6 18.9.7 18.8 18.8 18.8.2 18.8.2	40 mm nominal dia pipes 50 mm nominal dia pipes 62.50 mm nominal inner dia Pipes Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes having the thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. this includes jointing of pipes and fittings with one step CPVC solvent cement and the cost of cutting chases and making good the wall same including testing of joints complete as per the direction of engineer incharge Concealed work including cutting chases and making good the wall etc. 20 mm nominal dia pipes 25 mm nominal dia pipes	Metre Metre Metre Metre Metre Metre	244.00 119.00 11.00 721.00 482.00	480.55 648.60 903.50 1552.30 478.15 561.95	4,07,506.40 1,58,258.40 1,07,516.50 17,075.30 3,44,746.15 2,70,859.90
18.02	18.7.6 18.9.7 18.8 18.8	40 mm nominal dia pipes 50 mm nominal dia pipes 62.50 mm nominal inner dia Pipes Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes having the thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing, this includes jointing of pipes and fittings with one step CPVC solvent cement and the cost of cutting chases and making good the wall same including testing of joints complete as per the direction of engineer incharge Concealed work including cutting chases and making good the wall etc. 20 mm nominal dia pipes	Metre Metre Metre Metre	244.00 119.00 11.00 721.00	480.55 648.60 903.50 1552.30 478.15	4,07,506.40 1,58,258.40 1,07,516.50 17,075.30 3,44,746.15
18.02 18.02.1 18.02.1 18.02.2	18.7.6 18.9.7 18.8 18.8 18.8.2 18.8.2	40 mm nominal dia pipes 50 mm nominal dia pipes 62.50 mm nominal inner dia Pipes Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes having the thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. this includes jointing of pipes and fittings with one step CPVC solvent cement and the cost of cutting chases and making good the wall same including testing of joints complete as per the direction of engineer incharge Concealed work including cutting chases and making good the wall etc. 20 mm nominal dia pipes 25 mm nominal dia pipes	Metre Metre Metre Metre Metre Metre	244.00 119.00 11.00 721.00 482.00	480.55 648.60 903.50 1552.30 478.15 561.95	4,07,506.40 1,58,258.40 1,07,516.50 17,075.30 3,44,746.15 2,70,859.90
18.02 18.02.1 18.02.2 18.02.3	18.7.6 18.9.7 18.8 18.8 18.8.2 18.8.3 18.8.4	40 mm nominal dia pipes 50 mm nominal inner dia Pipes 62.50 mm nominal inner dia Pipes Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes having the thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing, this includes jointing of pipes and fittings with one step CPVC solvent cement and the cost of cutting chases and making good the wall same including testing of joints complete as per the direction of engineer incharge Concealed work including cutting chases and making good the wall etc. 20 mm nominal outer dia pipes 32 mm nominal outer dia pipes 32 mm nominal outer dia pipes providing and fixing G.I. pipes complete with GI fittings and clamps including cutting and making good the walls etc. (internal	Metre Metre Metre Metre Metre Metre	244.00 119.00 11.00 721.00 482.00	480.55 648.60 903.50 1552.30 478.15 561.95	4,07,506.40 1,58,258.40 1,07,516.50 17,075.30 3,44,746.15 2,70,859.90
18.02 18.02.1 18.02.2 18.02.3	18.7.6 18.9.7 18.8 18.8 18.8.2 18.8.3 18.8.4	40 mm nominal dia pipes 50 mm nominal inner dia Pipes 62.50 mm nominal inner dia Pipes Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes having the thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. this includes jointing of pipes and fittings with one step CPVC solvent cement and the cost of cutting chases and making good the wall same including testing of joints complete as per the direction of engineer incharge Concealed work including cutting chases and making good the wall etc. 20 mm nominal dia pipes 25 mm nominal outer dia pipes 32 mm nominal outer dia pipes 32 mm nominal outer dia pipes Providing and fixing G.I. pipes complete with GI fittings and	Metre Metre Metre Metre Metre Metre	244.00 119.00 11.00 721.00 482.00	480.55 648.60 903.50 1552.30 478.15 561.95	4,07,506.40 1,58,258.40 1,07,516.50 17,075.30 3,44,746.15 2,70,859.90
18.02 18.02.1 18.02.2 18.02.3 18.03	18.7.6 18.9.7 18.8 18.8 18.8.2 18.8.3 18.8.4 18.10	40 mm nominal dia pipes 50 mm nominal dia pipes 62.50 mm nominal inner dia Pipes Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes having the thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. this includes jointing of pipes and fittings with one step CPVC solvent cement and the cost of cutting chases and making good the wall same including testing of joints complete as per the direction of engineer incharge Concealed work including cutting chases and making good the wall etc. 20 mm nominal dia pipes 25 mm nominal outer dia pipes 32 mm nominal outer dia pipes Providing and fixing G.I. pipes complete with GI fittings and clamps including cutting and making good the walls etc. (internal work) Internal work - Exposed on wall	Metre Metre Metre Metre Metre Metre	244.00 119.00 11.00 721.00 482.00 96.00	480.55 648.60 903.50 1552.30 478.15 561.95 679.15	4,07,506.40 1,58,258.40 1,07,516.50 17,075.30 3,44,746.15 2,70,859.90 65,198.40
18.02 18.02.1 18.02.2 18.02.3 18.03 18.03.1	18.7.6 18.9.7 18.8 18.8 18.8.2 18.8.3 18.8.4 18.10 18.10.3	40 mm nominal dia pipes 50 mm nominal inner dia Pipes 62.50 mm nominal inner dia Pipes Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes having the thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. this includes jointing of pipes and fittings with one step CPVC solvent cement and the cost of cutting chases and making good the wall same including testing of joints complete as per the direction of engineer incharge Concealed work including cutting chases and making good the wall etc. 20 mm nominal outer dia pipes 32 mm nominal outer dia pipes 33 mm nominal outer dia pipes Providing and fixing G.I. pipes complete with GI fittings and clamps including cutting and making good the walls etc. (internal work) Internal work - Exposed on wall 25 mm dia, nominal bore	Metre Metre Metre Metre Metre Metre Metre Metre	244.00 119.00 11.00 721.00 482.00 96.00 24.00	480.55 648.60 903.50 1552.30 478.15 561.95 679.15 438.00	4,07,506.40 1,58,258.40 1,07,516.50 17,075.30 3,44,746.15 2,70,859.90 65,198.40 10,512.00
18.02 18.02.1 18.02.2 18.02.3 18.03 18.03.1 18.03.2	18.7.6 18.9.7 18.8 18.8 18.8.2 18.8.3 18.8.4 18.10 18.10.3 18.10.4	40 mm nominal dia pipes 50 mm nominal inner dia Pipes 62.50 mm nominal inner dia Pipes Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes having the thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing, this includes jointing of pipes and fittings with one step CPVC solvent cement and the cost of cutting chases and making good the wall same including testing of joints complete as per the direction of engineer incharge Concealed work including cutting chases and making good the wall etc. 20 mm nominal dia pipes 25 mm nominal outer dia pipes 25 mm nominal outer dia pipes 25 mm nominal outer dia pipes 22 mm nominal outer dia pipes 25 mm dia, nominal bore 32 mm dia, nominal bore	Metre Metre Metre Metre Metre Metre Metre Metre Metre Metre	244.00 119.00 11.00 721.00 482.00 96.00 24.00 24.00	480.55 648.60 903.50 1552.30 478.15 561.95 679.15 438.00 529.70	4,07,506.40 1,58,258.40 1,07,516.50 17,075.30 3,44,746.15 2,70,859.90 65,198.40 10,512.00 12,712.80
18.02 18.02.1 18.02.2 18.02.3 18.03 18.03 18.03.1 18.03.2 18.03.3	18.7.6 18.9.7 18.8 18.8 18.8.2 18.8.3 18.8.4 18.10 18.10.3 18.10.4 18.10.5	40 mm nominal dia pipes 50 mm nominal inner dia Pipes 62.50 mm nominal inner dia Pipes Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes having the thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. this includes jointing of pipes and fittings with one step CPVC solvent cement and the cost of cutting chases and making good the wall same including testing of joints complete as per the direction of engineer incharge Concealed work including cutting chases and making good the wall etc. 20 mm nominal dia pipes 25 mm nominal outer dia pipes 32 mm nominal outer dia pipes 95 mm nominal outer dia pipes 97 moviding and fixing G.I. pipes complete with GI fittings and clamps including cutting and making good the walls etc. (internal work) Internal work - Exposed on wall 25 mm dia, nominal bore 30 mm dia, nominal bore	Metre Metre Metre Metre Metre Metre Metre Metre Metre Metre Metre Metre	244.00 119.00 11.00 721.00 482.00 96.00 24.00 24.00 24.00 20.00	480.55 648.60 903.50 1552.30 478.15 561.95 679.15 438.00 529.70 639.60	4,07,506.40 1,58,258.40 1,07,516.50 17,075.30 3,44,746.15 2,70,859.90 65,198.40 10,512.00 12,712.80 12,792.00
18.02 18.02.1 18.02.2 18.02.3 18.03 18.03 18.03.1 18.03.2	18.7.6 18.9.7 18.8 18.8 18.8.2 18.8.3 18.8.4 18.10 18.10.3 18.10.4	40 mm nominal dia pipes 50 mm nominal inner dia Pipes 62.50 mm nominal inner dia Pipes Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes having the thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing, this includes jointing of pipes and fittings with one step CPVC solvent cement and the cost of cutting chases and making good the wall same including testing of joints complete as per the direction of engineer incharge Concealed work including cutting chases and making good the wall etc. 20 mm nominal dia pipes 25 mm nominal outer dia pipes 25 mm nominal outer dia pipes 25 mm nominal outer dia pipes 22 mm nominal outer dia pipes 25 mm dia, nominal bore 32 mm dia, nominal bore	Metre Metre Metre Metre Metre Metre Metre Metre Metre Metre	244.00 119.00 11.00 721.00 482.00 96.00 24.00 24.00	480.55 648.60 903.50 1552.30 478.15 561.95 679.15 438.00 529.70	4,07,506.40 1,58,258.40 1,07,516.50 17,075.30 3,44,746.15 2,70,859.90 65,198.40 10,512.00 12,712.80
18.02 18.02.1 18.02.2 18.02.3 18.03 18.03 18.03.1 18.03.2 18.03.3 18.03.3 18.03.4	18.7.6 18.9.7 18.8 18.8 18.8.2 18.8.3 18.8.4 18.10 18.10.3 18.10.4 18.10.5 18.10.6	40 mm nominal dia pipes 50 mm nominal inner dia Pipes 62.50 mm nominal inner dia Pipes Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes having the thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. this includes jointing of pipes and fittings with one step CPVC solvent cement and the cost of cutting chases and making good the wall same including testing of joints complete as per the direction of engineer incharge Concealed work including cutting chases and making good the wall etc. 20 mm nominal dia pipes 25 mm nominal outer dia pipes 32 mm nominal outer dia pipes 32 mm nominal outer dia pipes 25 mm dia, nominal bore 32 mm dia, nominal bore 40 mm dia, nominal bore 50 mm dia, nominal bore 50 mm dia, nominal bore	Metre Metre Metre Metre Metre Metre Metre Metre Metre Metre Metre Metre Metre	244.00 119.00 11.00 721.00 482.00 96.00 24.00 24.00 24.00 20.00 5.00	480.55 648.60 903.50 1552.30 478.15 561.95 679.15 438.00 529.70 639.60 786.75	4,07,506.40 1,58,258.40 1,07,516.50 17,075.30 3,44,746.15 2,70,859.90 65,198.40 10,512.00 12,712.80 12,792.00 3,933.75

S. No.	DSR	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
	2019			2,		
	18.38	Painting G.I. pipes and fittings with synthetic enamel white paint with two coats over a ready mixed priming coat, both of approved quality for new work :				-
18.03.7	18.10.3	25 mm diameter pipe	Metre	138.00	23.70	3,270.60
18.03.8	18.10.4	32 mm diameter pipe	Metre	115.00	28.40	3,266.00
18.03.9	18.10.5	40 mm diameter pipe	Metre			-
18.04	DSR Item	Painting with synthetic enamel paint of approved drand and				
10.04	13.61	manufacture to give an even shade				
	13.61.1	Two more coast on new work	sqm		121.55	-
18.05	18.17	Providing and fixing gun metal gate valve with CI wheel of				
18.05.1	18.17.1	approved quality (screwed ends) 25mm dia, nominal bore	Each	19.00	497.15	9,445.85
18.05.2	18.17.2	32 mm dia, nominal bore	Each	11.00	581.25	6,393.75
18.05.3	18.17.3	40 mm dia, nominal bore	Each		678.40	-
18.05.4	18.17.4	50 mm dia, nominal bore	Each		869.20	-
18.06	18.19	Providing and fixing gun metal non- return valve of approved quality (screwed end)				
18.06.1	18.19.1.2	25 nominal bore, Vertical	Each	19.00	504.45	9,584.55
18.06.2	18.19.2.2	32 nominal bore, Vertical	Each	11.00	708.65	7,795.15
18.06.3	18.19.3.1	40 nominal bore	Each		792.40	-
18.06.4	18.19.4.1	50 nominal bore	Each		1144.05	-
18.06.5	18.19.6.1	80 nominal bore	Each		2890.70	-
18.07	18.16	Providing and fixing brass stop cock of approved quality				
18.07.1	18.16.1	15mm nominal bore	Each		302.55	-
18.07.2	18.16.2	20mm nominal bore	Each		326.45	-
18.08	ELECT. DSR 2018 / 16.11	Supplying, fixing, testing and commissioning of following valves, gauges and strainers for condenser water circulation as per specifications.				
18.08.1	16.11.1	BUTTERFLY VALVE (MANUAL) with C I body SS Disc, Nitrile Rubber Seal & O- Ring PN 16 pressure rating for chilled water/hot eater circulation as specified				
18.08.1	16.11.1.6	65 nominal bore	Each		2837.00	-
18.08.2	16.11.1.5	80 nominal bore	Each		3015.00	-
18.08.3	16.11.1.4	100 nominal bore	Each		5442.00	-
18.09	18.18	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete				
	18.18.3	25 mm nominal bore	Each		394.00	-
18.10	18.62 (M)	Providing and fixing PTMT Ball cock of approved quality, colour and make complete with Epoxy coated aluminium rod with L.P./ H.P.H.D. plastic ball.				-
	18.62.3	25 mm nominal bore, 152mm long, weighing not less than 440 gms	Each	23.00	474.25	10,907.75
	18.62.4	32mm-40mm nominal bore, 206mm long, weighing not less than	Each	23.00	728.00	- 16,744.00
	18.02.4	690 gms	Lacii	25.00	728.00	10,744.00
		Water Supply Internal Work (Non Scheduled Items)				
18.11	MR 17	Providing and fixing C.P.V.C. ball valve in C.P.V.C. pipe including jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. (Astral/Prince/Prakash make or equivalent)				
10 11 1			E 1		226.50	
18.11.1	-	15 mm dia nominal bore	Each		226.50	-
18.11.2 18.11.3		20 mm dia nominal bore 25 mm dia nominal bore	Each Each	44.00	274.65 375.65	- 16,528.60
10.11.5			Luci	11.00	575.05	10,520.00
		Total of sub-head (18.0) (DSR)				14,95,390.45
		Total of sub-head (18.0) (Non DSR)				16,528.60
19.0		EVTEDNAL CEWEDACE SVOTEM			┤────┤	
19.0		EXTERNAL SEWERAGE SYSTEM				
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S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
19.01	2.10	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :				
	2.10.1 2.10.1.2	All kinds of soils Pipes, cables etc. exceeding 80 mm dia. but not	Metre	903.00	364.20	3,28,872.60
19.02	19.1	exceeding 300 mm dia Providing, laying and jointing glazed stoneware pipes class SP-1	Wette	903.00	504.20	3,28,872.00
15102	.,	with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete :				
	19.1.2	150 mm diameter	Metre	848.00	500.20	4,24,169.60
	19.1.4	250 mm diameter	Metre	55.00	1173.70	64,553.50
19.03	19.3	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) up to haunches of S.W. pipes including bed concrete as per standard design :				-
	19.3.2 19.3.4	150 mm dia S.W pipe	Metre Metre	678.00 27.00	629.30 861.15	4,26,665.40
19.04	19.3.4	250 mm dia S.W pipe Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete as per standard design :	Metre	27.00	801.13	- 23,251.05
	19.2.2 19.2.4	150 mm diameter S.W. pipe 250 mm diameter S.W. pipe	Metre Metre	169.00 27.50	999.15 1346.95	1,68,856.35 37,041.13
19.05	19.7	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominalsize), inside plastering 12 mm thick with cement mortar 1:3 (1 cement: 3 coarse sand) finished with floating coat of neat cement andmaking channels in cement concrete 1:2:4 (1 cement : 2 coarsesand : 4 graded stone aggregate 20 mm nominal size) finished witha floating coat of neat cement complete as per standard design :				-
	19.7.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) :				-
	19.7.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	81.00	10905.05	8,83,309.05
19.06	19.9	Constructing brick masonry circular type manhole 0.91 m internal dia at bottom and 0.56m dia at top in cement mortar 1:4 (1 cement : 4 coarse sand), inside cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size), and making necessary channel in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement, all complete as per standard design :				-
	19.9.1	0.91 m deep with S.F.R.C. cover and frame (heavy duty, HD-20 grade designation) 560 mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182 kg., fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including centering, shuttering all complete. (Excavation, foot rests and 12mm thick cement plaster at the external surface shall be paid for separately) :				-
	19.9.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	14.00	11038.10	1,54,533.40
				1	1	-

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
	19.8.1	Size 90 X 80 cm				
	19.8.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Metre	8.00	7503.00	60,024.00
19.08	19.10	Extra depth for circular type manhole 0.91m internal dia (at bottom) beyond 0.91 m to 1.67 m				-
	19.10.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Metre	5.00	6448.40	32,242.00
19.09	19.16	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910, on 12 mm dia steel bar conforming to IS : 1786, having minimum cross section as 23 mmx25 mm and over all minimum length 263 mm and width as 165 mm with minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design.	each	238.00	463.05	- 1,10,205.90
19.10	19.4	Providing and fixing square-mouth S.W. gully trap class SP- lcomplete with C.I. grating brick masonry chamber with water				-
		tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70kg as per standard design:				
	19.4.3.1	180x150 mm size P type With FPS bricks	each	35.00	2409.60	84,336.00
19.11	19.21.1	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement cincrete 1:2:4 mix (1cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size) cement plastered on both sides with cement mortar 1:3 (1cement : 3 coarse sand) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete for pipes 100 to 230mm dia.	each	2.00	623.50	1,247.00
19.12	19.32	Making soak pit 2.5 m diameter 3.0 metre deep with 45 x 45 cm dry brick honey comb shaft with bricks and S.W. drain pipe 100 mm diameter, 1.8 m long complete as per standard design.				
	19.32.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	13	25278.75	3,28,623.75
		Total of sub-head (19.0) (DSR)				31,27,930.73
20.0		External Storm Water Drainage System				
20.01	2.10	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50m:				
	2.10.1	All kinds of soil				
	2.10.1.2	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia	Metre	40.00	364.20	14,568.00
	2.10.1.3	Pipes, cables etc. exceeding 300 mm dia but not exceeding 600 mm	Metre	10.00	568.60	5,686.00
20.02	2.13	Excavating trenches of required width for pipes, cables, etc, including excavation for sockets, depth upto 1.5 m, including getting out the excavated materials, returning the soil as required in layers not exceeding 20 cm in depth, including consolidating each deposited layers by ramming, watering etc., stacking serviceable material for measurements and disposal of unserviceable material as directed, within a lead of 50 m :				
	2.13.1	Ordinary rock		<u> </u>		

2.15.12 Pipes, obles etc. esceeding 300 mm dia but not exceeding 300 mm Meter 5.00 101.15 4.01 2.15.1.3 Pipes, obles exceeding 100 nm dia but not exceeding 400 mm dia Metre 5.00 922.65 4.41 2003 10.0 Poyed, and larger non-power NP2 class tight duely RCC Power in the properiod of 12 (1 cmmt 2 for stand) including testing of pipes with oblet (not constrained in the properiod of 12 (1 cmmt 2 for stand) including testing of pipes in the other pipes with oblet (not constrained in the pipes in the other pipes with oblet (not constrained in the pipes in the other pipes with oblet (not constrained in the pipes in the other pipes with oblet (not constrained in the pipes in the other pipes with oblet (not constrained in the pipes in the other pipes with oblet (not constrained in the pipes in the other pipes with oblet (not constrained in the pipes in the pipes in the pipe in the other pipes with oblet (not constrained in the pipes in the pipes in the pipes in the pipes in the pipe in the pipe in the pipes in the pipe in the pipe in the pipes in the pipe in the pipes in the pipe in the pipes in the pipe in the pipe in the pipes in the pipes in the pipe in the pipes in the pipe in the pipes in the pipe in the pipes in the pipes in the pipes in the pipes in the pipe in the pipe in the pipes in the pipe in the pipes in the pipe in the pipes in the pipe in the pipes i	S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
Image: Control of the subscription of the state of the control of the control of the state of th		2019					
2003 19.6 Providing mil laying morpersoares MP2 class flat days MPC Image: Class of the second s		2.13.1.2		Metre	5.00	801.85	4,009.25
pipe with collar joined with aff mixture of comme notar in the properties of 12 creent 7; 2 motion including prised of 15 motion incl		2.13.1.3	Pipes, cables exceeding 300 mm dia but not exceeding 600 mm dia	Metre	5.00	922.65	4,613.25
196.3 196 mm dia RCC pige Mere 15.00 7.9445 11.13 196.4 300 mm dia RCC pige Mere 13.00 103.55 12.91 20.04 19.3 Providing and togic persons concerve 1.51.91 (1 resmits - 1 state of the sta	20.03	19.6	pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of				
19.4.4 100m and a RCC pigs Mere 15.00 463.55 13.92 20.04 19.3 Perviding and laying crucat concevts 15.10 (1 concent / 5 concept of 15.00 1392.70 20.85 20.04 19.3 Perviding and laying crucat concevts 15.10 (1 concent / 5 concept of 15.00 1392.70 20.85 20.04 19.3 Termiding and laying crucat concevts 15.10 (1 concent / 5 concept of 15.00 10.20 622.30 62.31 19.3.1 250 nm diameter SW, pige Mere 10.00 629.30 62.32 20.05 19.2 Providing and laying crucat concevet 15.10 (1 concent / 5 concept of 15.00 115.56 11.55.60		19.6.2	150 mm dia RCC pipe	Metre	15.00	462.60	6,939.00
19.6.5 456 mm dia RCC pige Mere 15.00 1392.70 20.88 20.04 19.3 Providing and laying coment concrete 15.10 (1 ensmit 3 coarse iand 1 (2) equidations designed 40 concrete as per standard distance 15.00 19.21.0 19.21.0 19.21.0 19.21.0 19.21.0 19.21.0 6.21.0 6.21.0 6.21.0 6.21.0 6.21.0 6.22.0 7.22.0		19.6.3	11				11,316.75
10.3 Providing and laying content concrete 15:10 (1 errorst: 5 coarse sand: : 10 graded store agregate. 40 mm normali sic) up to hanches 05 W, press including bed scorer: to ap or standard 10:21 10 mm diameter SW, press Merre 10.03 62.23 62.35 10:21 15 mm diameter SW, press Merre 10.03 62.36 62.35 10:22 15 mm diameter SW, press Merre 10.03 62.36 62.35 20:05 19.2 Providing and laying content concrets 15:10 (1 cernant: 1 5 coarse and : 10 graded store agregate 40 mm nominal size) all evond SW, press including bed concrets agregate 40 mm nominal size) all evond SW, press including bed concrets agregate 40 mm nominal size) all evond SW, press including bed concrets agregate 40 mm nominal size) all evond SW, press including bed concrets agregate 40 mm nominal size) all evond SW, press including bed concrets agregate 40 mm nominal size) all evond SW, press including bed concrets agregate 40 mm nominal size) all evond SW, press including bed concrets agregate 40 mm nominal size) all evond SW, press including bed concrets agregate 40 mm nominal size) all evond SW press including bed concrets agregate 40 mm nominal size) all evond SW, press including bed concrets agregate 40 mm nominal size) all evond SW press include SW press include agregate 40 mm nominal size) all evond SW press include SW press include agregate 40 mm nominal size) all evond SW press include SW press include agregate 40 mm nominal size) all evond SW press include SW press include agregate 40 mm nominal size all evond SW press include SW p							12,954.75
and set in graded wine aggregate 40 mm nominal stray up to basedbes of SN, pipes including bot concrete as per standard design: and the strain strain strain strain strain strain strain strain strain including strain strain strain strain strai		19.6.5	450 mm dia RCC pipe	Metre	15.00	1392.70	20,890.50
19:3.4 220 mm diameter S.W. pipe Metre 10.00 86.15 36.6 19:3.5 300 mm diameter S.W. pipe Metre 15.00 192.0 192.0 15.00 17.55 20.05 19.2 Providing and laying comment concrete 15:10 (1 cerement : 5 care 10.01 15.00 17.55 20.05 19.2 Providing and laying comment concrete 15:10 (1 cerement : 5 care 10.01 15.00 17.55 19.2.2 150 mm diameter S.W. pipe Metre 52.00 1999.15 51.92 19.2.4 220 mm diameter S.W. pipe Metre 5.00 1346.95 6.72 20.06 192.4 220 mm diameter S.W. pipe Metre 5.00 1346.95 6.72 20.06 192.4 220 mm diameter S.W. pipe Metre 5.00 1346.95 6.72 20.07 19.24 220 mm diameter S.W. pipe Metre 5.00 1228.90 6.14 20.07 19.19 Providing and fixing in position pre-cast R.C.C. marbole cover and inframe of recupierd black and provoid gaalfy Each 5.00 1228.90	20.04	19.3	sand : 10 graded stone aggregate 40 mm nominal size) up to haunches of S.W. pipes including bed concrete as per standard design :				
10.3.5 100 mm diameter SW, pipe Mere 15.00 901.65 14.00 analysed 450 mm diameter SW, pipe Mere 15.00 115.00 173.75 20.05 19.2. Providing and laying concent concrete 15.10 (1 cernent : 5 casare and : 10 graded store aggregate 40 mm nominal size) all-could Image: 10 graded store aggregate 40 mm control is 20 all-could Image: 10 graded store aggregate 40 mm control is 20 all-could Image: 10 graded store aggregate 40 mm control is 20 all-could Image: 10 graded store aggregate 40 mm control is 20 all-could Image: 10 graded store aggregate 40 mm control is 20 all-could Image: 10 graded store aggregate 40 mm control is 20 all-could Image: 10 graded store aggregate 40 mm control is 20 all-could store is 20 mm diameter 5W pipe Metre 52.00 Image: 10 graded store aggregate 40 mm control is 20 mm diameter 5W pipe Metre 52.00 Image: 10 graded store aggregate 40 mm control is 20 mm diameter 5W pipe Metre 5.00 Image: 10 graded store aggregate 40 mm control is 20 mm diameter 5W pipe Image: 10 graded store aggregate 40 grade store aggregate 40 mm control is 20 mm diameter 5W pipe Image: 20 graded store aggregate 40 grade store aggregate 40							6,293.00
analysed 460 nm diameter S.W pipe Mere 15.00 1155.00 1732 20.05 19.2 Providing and laying ensent concrete 15:10 (1 censul: 5 cause stand : 10 gained store aggregated 40 mm nominal site) all-tound S.W. pipes including bed concrete as per standard design : Metre 52.00 999.15 51.99 19.2.2 150 mm diameter S.W. pipe Metre 52.00 199.15 51.99 19.2.2 360 nm diameter S.W. pipe Metre 52.00 1146.05 6.77 20.06 19.27 Constructing brick masony road gaily chamber 50x45x60 cm with bricks in centent trottu 14 (1 centent : 4 course stand) mobiling 5005 cm pre-scat R.C.C. forizontal grains with frame complete as per standard design: 10.00 5209.10 52.09 20.07 19.19 Providing and fixing in position pre-scat R.C.C. manhole cover and frame or frequired shape and approved quality with self required shape and approved quality and requires there are shape and approved quality with self requires there are shape and approved quality with self requires there are shape and approved quality with self requires there are shape and approved quality or with self for an are shape and approved quality with self requires there are shape and approved quality with self requires there shape and approved quality mass are shape and ap							8,611.50
20.05 197.2 Providing and laying corrent corrects 15:10 (1 cornent : 5 coarse sud : 10 graded store agregate 40 mm nominal size) all-coard S.W., pipes including bed corrects as per standard design : Nome Providing test corrects are per standard design : 19.2.2 130 nm diameter S.W. pipe Metre 52.00 999 15 51.92 20.06 19.2.7 Constructing brick masory road gally chamber 50x453x00 en with bricks are per standard design : Metre 5.00 1346.95 6.72 20.06 19.27 Constructing brick masory road gally chamber 50x453x00 en with bricks are per standard design : Metre 5.00 1346.95 6.72 20.07 19.17 Utic common burnt clay F.P.S. (non modular) bricks of class designing 7.5 Each 10.00 5209.10 52.06 20.07 19.19 D >.2.5 Howiding and fixing in position pro-cast R.C.C. mathole saver and frame of required shape and approved quality Each 10.00 5209.10 52.06 20.08 9.50 Providing and fixing hard drawn steel wire fishic 75.25 mm meth of weight not less than 7.75 Kg per sqin to window frame: etc. including COLY nm bealing scool datas task wood and priming cast with approved steel primer all complete. Sqin 30.00 1448.35 43,45							14,904.75
and : 10 graded store aggregate 40 mm nominal size) alt-round SW, pipes including bed concrete as per standard design :		analysed	450 mm diameter S.w. pipe	Metre	15.00	1155.00	17,325.00
19.2.4 250 mm diameter S.W. pipe Mere 5.00 1346.98 6.72 20.06 19.27 Constructing bick masony road guily chamber 50x45500 cm, with fixes in concent more 1.4 (a carse and) including 500x4500 mm pre-cast R.C.C. horizontal garing with firme completes a per standard design : 1	20.05	19.2	sand : 10 graded stone aggregate 40 mm nominal size) all-round				
20.06 19.27 Constructing brick, masonry road gully chamber 50x45x60 em with bricks in cement motar 1-4 (1) cement : 4 caraes cand) including 50x430 mm pre-cast R.C. for horotall grining with frame complete as per standard design : Image: Constructing the standard design : 19.27.1 With common hum clasp F.S. (non modular) bricks of class designation 7.5 Each 10.00 5209.10 52.00 20.07 19.19 Providing and fixing in position pre-cast R.C. C. manhole cover inform of required shape and approved quality Image: Common hum clasp F.S. (non modular) bricks of class designation 7.5 Each 5.00 1228.90 6,14 20.08 9.50 Providing and fixing hared drawn steel wire fabric 75x25 mm mesh or weight not less than 7.75 Kg per square to window finame etc. including GX10 mm basing of second class tesk wood and priming coat with approved steel primer all complete. 30.00 1448.35 43.45 20.09 12.41 Providing & fixing on wall face unplasticised -Rigid PVC rain water pipes conforming to 15332 leaving 10 mm gap for thermal expansion. ()Single sockted pips. Metre 60.00 305.05 18.30 20.10 23.11 All types of Soil R. anchineeries required for the jo, all class graps for dimeres that, program and submitting stata char/ bore log, including in vertical position in below grand from different stata, program gan submitting structure stata, program gan structure structure		19.2.2		Metre	52.00	999.15	51,955.80
with bricks in cement mortur 1-4 (1 cement : 4 course sand) including 500450 nm pre-scatt R.C.C. braining with frame complete as per standard design : 10.00 5209.10 52.00 20.07 19.19 Providing and fixing in position pre-scatt R.C.C. nambole cover and frame of required shape and approved quality 10.00 5209.10 52.00 20.07 19.19 Providing and fixing in position pre-scatt R.C.C. nambole cover and frame of required shape and approved quality 10.10.0 1228.90 6.14 20.08 9.50 Providing and fixing hard drawn steel wire fabric 75x25 nm mesh of weight not less than 7.75 Kg per sqn to window frames etc. including G219 nm beating of scond tasks task wood and priming coat with approved steel primer all complete. 5gn 30.00 1448.35 43.45 20.09 12.41 Providing & fixing on wall face unplasticised -Rigid PVC rain water pipes conforming to IS-15382 Taying 10 mm gap for thermal expansion. (1)Single socketed pipes. Metre 60.00 305.05 18.30 20.10 23.1 Boring/drilling bore well of required dia for casing/ strainer pipe, by stable method prescribed in IS-2800/Part 1 1, including collecting sample from different strat. preparing and submitting strata chart/ bore log, including tire & running chargers of all equipment, took, plats & machineries required dia for casing/ strainer pipe, by stable method prescribed in IS-2800/Part 1 1, including collecting sengef. from different strat. preparing and submitting strata chart/ bore log, including tire & running chargers of all equipment, took, plats & machineries required for bio, bi, all ecomple		19.2.4	250 mm diameter S.W. pipe	Metre	5.00	1346.95	6,734.75
19.27.1 With commen burn clay F.P.S. (non modular) bricks of class designation 7.5 Each 10.00 5209.10 5209.10 20.07 19.19 Providing and fixing in position pre-cast R.C.C. manhole cover and firme of required shape and approved quality	20.06	19.27	with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with				
and frame of required shape and approved quality image: constraint of the state		19.27.1	With common burnt clay F.P.S. (non modular) bricks of	Each	10.00	5209.10	52,091.00
19.19.1.1 Rectangular shape 600x450mm internal dimensions Each 5.00 1228.90 6,14 20.08 9,50 Providing and fixing hard drawn steel wire fabric 75x25 mm mesh of weight not less than 7.75 Kg per sqn to window frames etc. including 62x19 mm beading of scool class teak wood and priming coat with approved steel primer all complete. Sqm 30.00 1448.35 43.45 20.09 12.41 Providing & fixing on wall face unplasticised -Rigid PVC rain with seal ring conforming to 18:13592 Type A included jointing with seal ring conforming to 18:13592 Type A included jointing with seal ring conforming to 18:13582 leaving 10 mm gap for thermal expansion. (i)Single socketed pipes. Metre 60.00 305.05 18,36 20.10 23.1 Boring/drilling bore well of required dia for casing/ strainer pipe, by suitable method prescribed in 18:2800(Part 1), including collecting sample from different strata , preparing and submitting strata chart/ bore log, including firk er running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer-in-charge, upto 90m depth below ground level. Metre 100.00 512.30 51.23 20.11 23.3 Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC. medium well casing (CM) pipe of required dia, conforming to 18: 12818, including required hire & labour charges, fitting & accessories, all complete, for all depths, as per direction of Engineer-in-charge. Metre 60.00 690.75 41,44 20.12 23.4 Supply	20.07	19.19					
20.09 12.41 Providing 62x19 mm beading of second class teak wood and priming coat with approved steel primer all complete.				Each	5.00	1228.90	6,144.50
water pipes conforming to IS:13592 Tyape A included jointing with seal ring conforming to IS:3592 leaving 10 mm gap for thermal expansion. (i)Single socketed pipes. 12.41.2 110 mm diameter Metre 60.00 305.05 18,30 20.10 23.1 Boring/drilling bore well of required dia for casing/strainer pipe. by suitable method prescribed in IS:2800(Part I), including collecting sample from different strata , preparing and submitting strata chart/ bore log, including hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer-in-charge, upto 90m depth below ground level. 20.11 All types of Soil 20.11 Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC. medium well casing (CM) pipe of required dia, conforming to IS: 12818, including required hire & labour charges, fittings & accessories, all complete, for all depths, as per direction of Engineer-in-charge. 20.12 23.4 Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC. medium well screen(RMS) pipes with rise, conforming to IS: 12818, including required hire & labour charges, fittings & accessories, all complete, for all depths, labour charges, fittings & accessories, all complete, for all depths, labour charges, fittings & accessories, all completed pipe. 20.12 23.4 Supplying, assembling, lower	20.08	9.50	of weight not less than 7.75 Kg per sqm to window frames etc. including 62x19 mm beading of second class teak wood and	Sqm	30.00	1448.35	43,450.50
20.10 23.1 Boring/drilling bore well of required dia for casing/ strainer pipe, by suitable method prescribed in IS:2800(Part 1), including collecting sample from different strata , preparing and submitting strata char/ bore log, including hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer-in-charge, upto 90m depth below ground level. 23.1.1 All types of Soil 20.11 23.1.1 20.12 23.3 Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC. medium well casing (CM) pipe of required dia, conforming to IS: 12818, including required hire & labour charges, fittings & accessories, all complete, for all depths, as per direction of Engineer-in-charge. 20.12 23.4 Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC. medium well casing (CM) pipe of required dia, conforming to IS: 12818, including required hire & labour charges, fittings & accessories, all complete, for all depths, as per direction of Engineer-in-charge. 20.12 23.4 Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC. medium well screen(RMS) pipes with ribs, conforming to IS: 12818, including required hire & labour charges, fittings & accessories, all complete, for all depths, labour charges, fittings & accessories, all complete, for all depths, labour charges, fittings & accessories, all complete, for all depths, labour charges, fittings & accessories, all complete, for all depths, labour charges, fittings & accessories, all complete, for all depths,	20.09	12.41	water pipes conforming to IS:13592 Tyape A included jointing with seal ring conforming to IS:5382 leaving 10 mm gap for				
by suitable method prescribed in IS:2800(Part I), including collecting sample from different strata , preparing and submitting strata chart/ bore log, including hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer-in-charge, upto 90m depth below ground level. 23.1.1 All types of Soil 23.1.1 300 mm dia Metre 100.00 512.30 512.30 20.11 23.3 Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC. medium well casing (CM) pipe of required dia, conforming to IS: 12818, including required hire & labour charges, fittings & accessories, all complete, for all depths, as per direction of Engineer-in-charge. 20.12 23.4 Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC. medium well screen(RMS) pipes with ribs, conforming to IS: 12818, including required hire & labour charges, fittings & accessories, all complete, for all depths, as per direction of Engineer-in-charge. 20.12 23.4 Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC. medium well screen(RMS) pipes with ribs, conforming to IS: 12818, including required hire & labour charges, fittings & accessories, all complete, for all depths, abour charges, fittings & accessories, all complete, for all depths, abour charges, fittings & accessories, all complete, for all depths,		12.41.2	110 mm diameter	Metre	60.00	305.05	18,303.00
23.1.1.1 300 mm dia Metre 100.00 512.30 51,23 20.11 23.3 Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC. medium well casing (CM) pipe of required dia, conforming to IS: 12818, including required hire & labour charges, fittings & accessories, all complete, for all depths, as per direction of Engineer-in-charge. Metre 60.00 690.75 41,44 20.12 23.4 Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC. medium well screen(RMS) pipes with ribs, conforming to IS: 12818, including required hire & labour charges, fittings & accessories, all complete, for all depths, alloung required hire & labour charges, fittings & accessories, all complete, for all depths, alloung required hire & labour charges, fittings & accessories, all complete, for all depths, alloung required hire & labour charges, fittings & accessories, all complete, for all depths, alloung required hire & labour charges, fittings & accessories, all complete, for all depths, alloung required hire & labour charges, fittings & accessories, all complete, for all depths, alloung required hire & labour charges, fittings & accessories, all complete, for all depths, alloung required hire & labour charges, fittings & accessories, all complete, for all depths, alloung required hire & labour charges, fittings & accessories, all complete, for all depths, alloung required hire & labour charges, fittings & accessories, all complete, for all depths, alloung required hire & labour charges, fittings & accessories, all complete, for all depths, alloung required hire & labour charges, fittings & accessories, all complete, for all depths, alloung required hire & labour charges, fittings & accessories, all complete, for all depths, alloung required hir	20.10	23.1	by suitable method prescribed in IS:2800(Part I), including collecting sample from different strata, preparing and submitting strata chart/ bore log, including hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer-in-charge, upto 90m depth				
20.11 23.3 Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC. medium well casing (CM) pipe of required dia, conforming to IS: 12818, including required hire & labour charges, fittings & accessories, all complete, for all depths, as per direction of Engineer-in-charge. 23.3.2 150mm nominal size dia Metre 60.00 690.75 41,44 20.12 23.4 Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC. medium well screen(RMS) pipes with ribs, conforming to IS: 12818, including required hire & labour charges, fittings & accessories, all complete, for all depths,							
bore well, unplasticized PVC. medium well casing (CM) pipe of required dia, conforming to IS: 12818, including required hire & labour charges, fittings & accessories, all complete, for all depths, as per direction of Engineer-in-charge. Image: Complete dia		23.1.1.1	300 mm dia	Metre	100.00	512.30	51,230.00
20.12 23.4 Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC. medium well screen(RMS) pipes with ribs, conforming to IS: 12818, including required hire & labour charges, fittings & accessories, all complete, for all depths, Image: Complete the state of t	20.11	23.3	bore well, unplasticized PVC. medium well casing (CM) pipe of required dia, conforming to IS: 12818, including required hire & labour charges, fittings & accessories, all complete, for all depths,				
bore well, unplasticized PVC. medium well screen(RMS) pipes with ribs, conforming to IS: 12818, including required hire & labour charges, fittings & accessories, all complete, for all depths,		23.3.2	150mm nominal size dia	Metre	60.00	690.75	41,445.00
	20.12	23.4	bore well, unplasticized PVC. medium well screen(RMS) pipes with ribs, conforming to IS: 12818, including required hire & labour charges, fittings & accessories, all complete, for all depths,				
23.4.2 150 mm nominal size dia Metre 180.00 746.15 1,34,30		23.4 2	150 mm nominal size dia	Metre	180.00	746.15	1,34,307.00

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
20.13	23.5	Supplying, filling, spreading & levelling stone boulders of size range 5cm to 20cm, in recharge pit, in the required thickness, for all leads & lifts, all complete as per direction of Engineer-in- charge.	cum	10.00	1326.55	13,265.50
20.14	23.6	Supplying, filling, spreading & levelling gravel of size range 5mm to 10mm, in recharge pit, over the existing layer of boulders, in required thickness, for all leads & lifts, all complete as per direction of Engineer-in-charge.	cum	10.00	1326.55	13,265.50
20.15	23.7	Supplying, filling, spreading & levelling coarse sand of size range 1.5mm to 2mm, in recharge pit, in required thickness over gravel layer, for all leads & lifts, all complete as per direction of Engineer-in-charge.	cum	10.00	1326.55	13,265.50
20.16	23.9	Providing and fixing factory made precast RCC perforated drain covers, having concrete of strength not less than M-25, of size 1000 x 450x50 mm, reinforced with 8 mm dia four nos longitudinal & 9 nos cross sectional T.M.T. hoop bars, including providing 50 mm dia perforations @ 100 to 125 mm c/c, including providing edge binding with M.S. flats of size 50 mm x 1.6 mm complete, all as per direction of Engineer-in- charge.	Each	400.00	1210.85	4,84,340.00
20.17	23.15	Providing and fixing Bail plug / Bottom plug of required dia to the bottom of pipe assembly of tube well as per IS:2800 (part I).				
	23.15.1	150 mm dia	each	4.00	227.45	909.80
20.18	Derived from DSR 2019	Constructing brick masonry open surface drain with bricks of class designation 75 in cement mortar 1:4 (1 cement : 4 fine sand) including 10 cm thick bed concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and 25 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominal size) for filling haunches including 12 mm cement plaster 1:4 (1 cement : 4 coarse sand) with a floating coat of neat cement inside the drain, its top and exposed side including disposal of surplus earth complete as per standard design:				
		a) 25 cm drain 30 cm average depth, With F.P.S. bricks	each	400.00	1545.90	6,18,360.00
20.19		Extra for additional depth for brick masonry open surface drain : a) 25 cm drain 30 cm depth, with common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Metre	20.00	392.95	7,859.00
		Total of sub-head (20.0) (DSR)				16,85,038.60
21		EXTERNAL WATER SUPPLY SYSTEM AND PUMPS DISTRIBUTION NETWORK FOR FRESH WATER SUPPLY				
21.01	18.12	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc.				
	18.12.3	external works 25mm nominal bore	Metre	105.00	364.55	38,277.75
	18.12.4	32mm nominal bore	Metre	60.00	424.70	25,482.00
	18.12.6 18.12.7 18.12.8	50mm nominal bore 65mm nominal bore 80mm nominal bore	Metre Metre Metre	340.00 230.00 50.00	565.25 716.00 866.40	1,92,185.00 1,64,680.00 43,320.00
				20.00	500.10	13,520.00
21.02	18.40	Painting GI pipes and fittings with two coats of anti corrosive bitumastic paint of approved quality				
	18.40.3 18.40.4	25 mm dia, nominal bore 32 mm dia, nominal bore	Metre Metre	105.00 60.00	14.15 17.05	1,485.75 1,023.00
	18.40.6	50 mm dia, nominal bore	Metre	340.00	23.25	7,905.00
	18.40.7 18.40.8	65 mm dia, nominal bore 80mm nominal bore	Metre Metre	230.00 50.00	28.95 33.60	6,658.50 1,680.00
21.03	18.40.8	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end):	Metre	30.00	55.00	1,680.00
	18.17.1	external works 25mm nominal bore	Each	29.00	497.15	14,417.35
	18.17.1	32 mm dia, nominal bore	Each	3.00	581.25	14,417.35
	18.17.4	50mm nominal bore	Each	10.00	869.20	8,692.00
	18.17.5	65mm nominal bore	Each	10.00	1488.10	14,881.00

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
	18.17.6	80mm nominal bore	Each	2.00	2217.90	4,435.80
21.04		Providing and filling sand of grading zone V or coarser grade all- round the G.I. pipes in external work.				
	18.41.3	25mm dia pipe	Metre	105.00	148.40	15,582.00
	18.41.4	32mm dia pipe	Metre	60.00	152.25	9,135.00
	18.41.6	50mm dia pipe	Metre	340.00	159.95	54,383.00
	18.41.7 18.41.8	65mm dia pipe 80mm dia pipe	Metre Metre	230.00 50.00	252.45 260.15	58,063.50 13,007.50
	10.41.0	somm dia pipe	wiette	50.00	200.15	15,007.50
21.05	18.59	Providing and fixing C.I. double acting air valve of approved quality with bolts, nuts, rubber insertions etc. complete (The tail pieces, tapers etc if required will be paid separately):				
	18.59.1	50 mm dia	Each	1.00	5157.00	5,157.00
	18.59.2	80 mm dia	Each	1.00	6240.70	6,240.70
	18.59.3	100 mm dia	Each	1.00	8193.10	8,193.10
21.06	18.31.1	Providing & Fixing C.I.sluice valve(with cap) complete with bolts,nuts,rubber insertions etc.(the tail pieces if required will be paid separately)				
i)	18.31.1.1	100 mm dia.pipe Class I	Each	2.00	3977.60	7,955.20
ii)	18.32.1	Constructing masonry chamber 30x30x50 cm,inside with 75 class designation brick work in cement mortar 1:4 (1 cement:4 coarce sand) for stop cock complete with C.I. surface box 100x100x75mm (inside) with locking arrangement and RCC top slab 1:2:4 mix (1 cement : 2 corase sand: 4 graded stonr aggregate 20mm nominal size) necessary excavation foundation concret 1:5:10 (1 cement:5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortor 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design.	Each	47.00	1582.45	74,375.15
21.07	18.33	Constructing masonry Chamber 60x60x75 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100mm top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) , i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design :				
	18.33.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	Each	2.00	9288.40	18,576.80
21.08	18	Constructing masonry Chamber 90x90x100 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100 mm top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design : 18.34.1 With common burnt clay F.				
	18.34.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	Each	5.00	16134.15	80,670.75
21.09	18.13	Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete :	L.	2.00	100.05	
	18.13.2	50 to 80 mm nominal bore	Item	2.00	1432.75	2,865.50
21.10		BUTTERFLY VALVE (MANUAL) with C I body SS disc nitrile sheet & O - ring & PN 16 pressure rating as specified.				
	16.11.1.6	65 nominal bore	Each	2.00	2837.00	5,674.00
		80 nominal bore	Each	1.00	3015.00	3,015.00
	16.11.1.5					
21.11	ELECT. DSR 2018 / 16.11.2	NON - RETURN VALVE with dual plate of C I body SS plates vulcanized NBR seal flanged end & PN 16 pressure rating as specified.	D1-		7171.00	
21.11	ELECT. DSR	NON - RETURN VALVE with dual plate of C I body SS plates vulcanized NBR seal flanged end & PN 16 pressure rating as	Each Each		7171.00 4581.00	

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
21.12	ELECT. DSR 2018 / 14.13	Providing and fixing GI pipes medium class conforming to IS 1239 with GI fittings including cutting hole chase painted with primer, two coats of enamel paints etc				
	14.13.3 14.13.4	100 mm dia, NB 150 mm dia, NB	Metre Metre	5.00	1113.00 1687.00	5,565.00
		Total of sub-head (21.0) (DSR)				8,98,465.10
22.0		Bore Well Installations (As per D.S.R)				
22.01		Boring/drilling bore well of required dia for casing/ strainer pipe, by suitable method prescribed in IS: 2800 (part I), including collecting samples from different strata, preparing and submitting strata chart/ bore log, including hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer -in-charge, upto 90 metre depth below ground level.				
	23.1.1 23.1.1.1	All types of soil 300 mm dia	metre	100.00	512.30	51,230.00
	23.1.2 23.1.2.1	Rocky strata including Boulders 300 mm dia	metre	30.00	1223.20	36,696.00
	-			50.00	1225.20	50,090.00
22.02	23.3	Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC medium well casing (CM) pipe of required dia, conforming to IS: 12818, including required hire and labour charges, fittings & accessories etc. all complete, for all depths, as per direction of Engineer -in-charge.	Meter			
	23.3.3	200mm nominal dia	Meter	80.00	1066.05	85,284.00
22.03	23.4	Supplying, assembling, lowering and fixing in vertical position in bore well unplasticized PVC medium well screen (RMS) pipes with ribs, conforming to IS: 12818, including hire & labour charges, fittings & accessories etc. all complete, for all depths, as per direction of Engineer-in-charge.				
	23.4.3	200 mm nominal size dia	metre	40.00	1135.80	45,432.00
22.04	23.8	Gravel packing in tubewell construction in accordance with IS: 4097, including providing gravel fine/ medium/ coarse, in required grading & sizes as per actual requirement, all complete as per direction of Engineer-in-charge.	cum		1497.70	-
22.05	23.12	Development of tube well in accordance with IS : 2800 (part I) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully developed, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water samples & getting tested in approved laboratory, i/c disinfection of tubewell, all complete, including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-in-charge.	hour	72.00	857.60	61,747.20
22.06	23.13	Providing and fixing suitable size threaded mild steel cap or spot welded plate to the top of bore well housing/ casing pipe, removable as per requirement, all complete for borewell of:				
	23.13.3	200 mm nominal size dia	Each	2.00	280.95	561.90
22.07	23.14	Providing and fixing M.S. clamp of required dia to the top of casing/ housing pipe of tubewell as per IS: 2800 (part I), including necessary bolts & nuts of required size complete.				
	23.14.3	200 mm clamp	Each	4.00	1691.15	6,764.60
22.08	23.15	Providing and fixing Bail plug/ Bottom plug of required dia to the bottom of pipe assembly of tubewell as per IS:2800 (part I).				
	23.15.3	200 mm dia	Each	2.00	307.75	615.50
		Total of sub-head (22.0) (DSR)				2,88,331.20
		****Electrical	worl	KS****		
		FIRE FIGHTING WORKS				

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
23.0	DSR-18/19	PIPING & VALVES				
	Don 10/17					
23.01	7	Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589/IS 1239 including Welding, fittings like elbows, tees, flanges ,tapers, nuts bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with two or more coats of synthetic enamel paint of required shade complete as required :				
-	7.1	25 mm dia.	Metre	24.00	471.00	11,304.00
	7.5	65 mm dia.	Metre	84.00	1004.00	84,336.00
	7.6	80 mm dia.	Metre	300.00	1122.00	3,36,600.00
	7.7	100mm dia	Metre	35.00	1499.00	52,465.00
23.02	14	Providing, installation, testing and commissioning of non-return valve of following sizes confirming to IS:5312 complete with rubber gasket, GI bolts, nuts, washers etc.as required :				
	14.5	80mm dia	Nos	3.00	7539.00	22,617.00
23.03	18.17	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :				
	18.17.1	25 mm dia.	Nos	24.00	497.15	11,931.60
23.04	11	Supplying, fixing, testing and commissioning of butterfly valve of PN 1.6 rating with bronze/gunmetal seat duly ISI marked complete with nuts, bolts, washers, gaskets conforming to IS 13095 of following sizes as required :				
	11.5	100 mm dia.	Nos	6.00	6454.00	38,724.00
23.05		Providing and fixing 150 mm dial diameter size Pressure gauge (0-15 Kg/Cm2) complete with shut off valve duly calibrated before installation complete as required & as per enclosed specification.	Nos	3.00	682.00	2,046.00
23.06	15	Providing, installation, testing and commissioning of stainless steel Y-strainer fabricated out of 1.6 mm thick stainless steel, Grade 304, sheet with 3 mm dia holes with stainless steel flange.				
-	15.2	100mm dia	Each	3.00	6450.00	19,350.00
		Total of sub-head (23.0) (DSR)				5,77,327.60
		Total of sub-head (23.0) (NON DSR)				2,046.00
24.0		FIRE HYDRANT ACCESSORIES				
24.01	17	Supplying and fixing first-aid Hose Reel with MS construction spray painted in post office red, conforming to IS 884 complete with the following as required. 20 mm nominal internal dia water hose thermoplastic (Textile reinforced) type -2 as per IS: 12585 20 mm nominal internal dia gun metal globe valve & nozzle. Drum and brackets for fixing the equipmets on wall. Connections from riser with 25 mm dia stop gun metal valve & M.S. Pipe and socket.				
	17.1	30m	Nos	24.00	8413.00	2,01,912.00
		Total of sub-head (24.0) (DSR)				2,01,912.00
25.0	MR	FIRE EXTINGUISHERS & MISC. ITEMS Providing and fixing Carbon-di-oxide fire extinguishers consisting of welded M.S cylindrical body, squeeze lever discharge valve fitted with internal discharge tube, 30cms long high pressure discharge hose, discharge nozzle, suspension bracket, confirming to IS : 15683 finished externally with red enamel paint and fixed to wall with brackets with rawl plug/dash fasteners complete with internal charge. Capacity 4.5 kg. ISI Marked.(Contractor should submit test certificate form manufacturer along	Nos	2.00	6087.00	12,174.00
25.02	MR	with serial number of every extinguishers supplied.) Providing and fixing (ABC Dry Chemical Powder) type Fire Extinguisher of Capacity 6 kg Confirms to IS 15683, bearing ISI mark complete with brass forged squeeze grip type valve fitted with pressure gauge, pressurize with dry Nitrogen gas filled, with discharge nozzle with wall mounting bracket (rubber gripped) complete with internal charges. (Contractor should submit test certificate form manufacturer along with serial number of every	Nos	50.00	2274.00	1,13,700.00
		extinguishers supplied.)				

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
25.03	MR	Providing and fixing water Carbon-di-oxide (ISI marked) extinguishers including all accessories as per IS specification with wall bracket with rawl plug complete as reqd.(Contractor should submit test certificate form manufacturer along with serial number of every extinguishers supplied.)	Nos	2.00	3582.00	7,164.00
		Capacity 9 Litres				
		Total of sub-head (25.0) (Non DSR)				1,33,038.00
26.0		FIRE PUMPS & ACCESSORIES				
26.01	MR	Supplying, installation, testing and commissioning of electric driven terrace pump suitable for automatic operation and consisting of following, complete in all respects, as required: (Terrace Pump)				
		(a) Horizontal type, multistage, centrifugal, split casing pump of cast iron body & bronze impeller with stainless steel shaft, mechanical confirming to IS: 1520				
		b) Suitable HP squirell cage induction motor TEFC type suitable for operation on 415 volts, 3 phase, 50 Hz, AC supply with IP55 class of protection for enclosure, horiziontal foot mounted type with Class-'F' insulation, conforming to IS-325.				
		(c) M.S.fabricated common base plate, coupling, coupling guard, foundation bolts etc.as required.				
		(d) Suitable cement concrete foundation duly plastered and with anti vibration pads.				
		450 lpm at 35 m Head	Set	3.00	85291.00	2,55,873.00
26.02	MR	Providing and fixing rubber expansion joint (to provide relief from stresses at pipe flanges) as per specification of the manufacturers and direction of Engineer in chief PN-16 rating				
		(a) 100 mm dia	Nos	3.00	560.00	1,680.00
26.03	20	Supplying and fixing air vessel made of 250 mm dia, 8 mm thick MS sheet, 1200 mm in height with air release valve on top and flanged connection to riser, drain arrangement with 25 mm dia gun metal wheel valve with required accessories, pressure gauge and paintingwith synthetic enamel paint of approved shade as required.	Nos	3.00	18009.00	54,027.00
26.04	MR	"Providing, fixing, testing and commissioning of control panel for Terrace Booster pumps. Incoming: MCCB 35A 1 set of Phase indicating lamps, 1 set of 35A Al bus bars, 1No Ammeter, 1No Voltmeter with phase selector switch Feeder for Booster Pumps - 1 No. 1 No. 32A TP MCCB without releases. DOL starter with over load relay, single phase preventor and indicating lamps with ON/OFF push buttons. 1 No. Automanual selector switch. Suitable for booster pumps"	Nos	3.00	34429.00	1,03,287.00
						• • • • • • • • •
		Total of sub-head (26.0) (DSR) Total of sub-head (26.0) (Non DSR)				<u>3,09,900.00</u> 1,04,967.00
						1,0 1,9 0 1.00
		ELECTRICAL WORKS (Internal)				
27.0		Internal Wiring				
27.01	1.10	Point wiring in PVC conduit, with modular type switch :- Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.				
	1.10.1	Group A	Point	1337.00	717.00	9,58,629.00
	1.10.2 1.10.3	Group B Group C	Point Point	78.00 484.00	783.00 990.00	61,074.00 4,79,160.00
27.02	1.55	Wiring for group controlled (looped) light point/ fan point/ exhaust fan point/ call bell point (without independent switch etc) with 1.5 sq.mm FRLS PVC insulated copper conductor single core				
		cable in surface / recessed PVC conduit, and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc as required. (Note: To be provided in class rooms in school bldg./ common areas/ toilets/ corridors etc.)				
	<u>1.55.1</u> 1.55.2	cable in surface / recessed PVC conduit, and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc as required. (Note: To be provided in class	Point Point	221.00	463.00 508.00	1,02,323.00 3,048.00

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
	2017					
27.03	1.11	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.	Point	42.00	1057.00	44,394.00
		Power plug wiring in PVC conduit (2 x 4 Sq.Mm.) :-				
27.04	1.12	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	Metre	4465.00	200.00	8,93,000.00
		Circuit / Sub main wiring in PVC conduit :-				
27.05	1.14	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.				
	1.14.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire.	Metre	4469.00	146.00	6,52,474.00
	1.14.2 1.14.4	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire. 2 x 6 sq.mm. + 1 x 6 sq.mm. Earth wire	Metre	5065.00 815.00	167.00 249.00	8,45,855.00
	1.14.4	2×6 sq.mm. + 1 $\times 6$ sq.mm. Earth wire 2 $\times 10$ sq.mm. + 1 $\times 6$ sq.mm. Earth wire	Metre Metre	980.00	328.00	2,02,935.00 3,21,440.00
	1.14.10	4×10 sq.mm. $+ 2 \times 6$ sq.mm. Earth wire	Metre	1330.00	543.00	7,22,190.00
	1.14.11	4 x 16 sq.mm. + 2 x 6 sq.mm. Earth wire	Metre	25.00	752.00	18,800.00
		S/F light plug point Modular Type Accessories :-				
27.06	1.31	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required.	Each	902.00	401.00	3,61,702.00
		S/F power plug point modular Type Accessories :-				
27.07	1.32	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin $5/6 \& 15/16$ A modular socket outlet and $15/16$ A modular switch, connections etc. as required.	Each	377.00	495.00	1,86,615.00
27.08	2.18	Supplying and fixing 20 A, 240 V, SPN Industrial type socket outlet, with 2 pole and earth, metal enclosed plug top alongwith 20 A "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	Each	31.00	1232.00	38,192.00
27.09	1.38	Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as required.	Each	33	92.00	3,036.00
27.10	MR	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 2 nos. of 3 pin 5/6 A modular socket outlet and 2 nos. of 5/6 A modular switch, connections etc. as required.	Each	47	763.00	35,861.00
		Total of sub-based (27.0) (DSP)				60 36 047 00
		Total of sub-head (27.0) (DSR) Total of sub-head (27.0) (NON -DSR)				<u>60,36,947.00</u> 35,861.00
28.0		Distribution Boards & MCB'S				33,001.00
28.01	2.10	Supplying and fixing 5 A to 32 A rating , 240/415 V , 10 kA , "C" curve , miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as Required.	E 1	1126.00	100.00	2.24.024.00
	2.10.1 2.10.5	Single pole Triple pole and neutral	Each Each	1126.00 12.00	199.00 1092.00	2,24,074.00 13,104.00
		······				-
		Supplying and fixing single pole blanking plate in the existing	Each	168.00	8.00	1,344.00
28.02	2.11	MCB DB complete etc. as required.			1	
28.02	2.4	Supplying and Fixing Following way, Horizontal Type Three Pole and Neutral, Sheet Steel, MCB Distribution Board, 415 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator).				-
		Supplying and Fixing Following way, Horizontal Type Three Pole and Neutral, Sheet Steel, MCB Distribution Board, 415 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without	Each Each	13.00 25.00	3693.00 4601.00	- 48,009.00 1,15,025.00

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
28.04	2.3	Supplying and fixing following way, Single Pole and Neutral , sheet steel, MCB distribution board, 240 V, on surface' recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator).				-
	2.3.1	6 Way Double door.	Each	2.00	1661.00	3,322.00
	2.3.2	8 Way Double door. 12 Way Double door.	Each Each	3.00 28.00	1760.00 2053.00	5,280.00 57,484.00
	2.3.3	S/F DP MCB Isolator	Each	28.00	2053.00	57,484.00
28.05	2.12	Supplying and fixing following Rating, Double pole, 240 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as Required.				
	2.12.1	40 Amps	Each	2.00	339.00	678.00
	2.14.3	63 Amps	Each	31.00	385.00	11,935.00
		S/F 4P MCB Isolator				
28.06	2.13	Supplying and fixing following rating, four pole, 415 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as Required.				
	2.13.2	63 Amps	Each	17.00	839.00	14,263.00
	2.13.3	100 Amps	Each	21.00	1047.00	21,987.00
28.07	2.14	S/F DP (RCCB) Supplying and fixing following rating, double pole, (single phase and neutral), 240 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as Required.				
	2.14.2	40 Amps	Each	2.00	2095.00	4,190.00
28.08	2.14.3 2.15	63 Amps Supplying and fixing following rating, Four pole, (Threee phase and neutral), 415 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. asrequired.	Each	28.00	2640.00	73,920.00
	2.15.2	40 Amps	Each	1.00	2626.00	2,626.00
	2.15.3	63 Amps	Each	37.00	2777.00	1,02,749.00
28.09	2.5	Supplying and fixing of following ways surface/ recess mounting, vertical type, 415 V, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 A tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCBs (but without MCBs and incomer) as required . (Note : Vertical type MCB TPDB is normally used where 3 phase outlets are required.)				
	2.5.1	4 way (4 + 12), Double door	Each	3.00	5651.00	16,953.00
28.10	MR	Supplying and fixing following rating, Single/ double/ three pole, 230/ 415 volts, MCB "C" curve in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
		63 amps FP MCB	Each	13.00	1475.00	19,175.00
		Total of sub-head (28.0) (DSR) Total of sub-head (28.0) (Non-DSR)				7,16,943.00 19,175.00
29.0		Telephone, Television & Data System (Socket,Wiring & Conduting Only)				
29.01	1.27	S/F Modular Boxes, Base & Cover Plate :- Supplying and Fixing Following Size/ Modules, GI Box Alongwith Modular Base & Cover Plate for Modular Switches in Recess etc. as Required.				
	1.27.1	1 or 2 Module (75 mm x 75 mm)	Each	169.00	243.00	41,067.00
	1.27.2	3 Module (100mmX75mm)	Each	47.00	267.00	12,549.00
29.02	1.24	S/F Modular Type Switch / Socket :- Supplying and Fixing Following Modular Switch/ Socket on The Existing Modular plate & Switch Box including connections But Excluding Modular Plate etc. as required.				
29.02.01	1.24.6	Telephone Socket outlet.	Each	63.00	119.00	7,497.00
29.02.02	1.24.7	TV Antenna socket outlet.	Each	40.00	119.00	4,760.00
29.02.03 29.03	1.24.8 1.21	Bell push Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.	Each	8.00	126.00	1,008.00

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
29.03.01	1.21.1	20 mm.	Metre	3035.00	84.00	2,54,940.00
29.03.02	1.21.2	25 mm.	Metre	445.00	90.00	40,050.00
29.04	1.18	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, Unarmored Telephone cable in the existing surface/ recessed steel/ PVC conduit as required.				
	1.18.2	2 Pair	Metre	1420.00	20.00	28,400.00
29.05	1.19	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required.	Metre	700.00	33.00	23,100.00
29.06	1.53	Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.				
	1.53.1	1 run of cable	Metre	1925.00	49.00	94,325.00
29.07	1.38	Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as require	Each	4.00	92.00	368.00
29.08	MR 1	SITC Modular Type Computer jack RJ 45 ISI mark 1 Module on existing Mounting plate and box Complete.	Each	77.00	200.00	15,400.00
		Total of sub-head (29.0) (DSR)				5,08,064.00
		Total of sub-head (29.0) (DSR)				15,400.00
						10,10000
30.0		Internal Lighting Fixtures & Fans				
30.01	MR 2	Supply of 20 Watt LED light Wall Mounted BRACKET light fitting Sutaible for 220 volts Single Phase A C Supply complete with all accessories as required.	Each	1.00	800.00	800.00
30.02	MR 3	Supply of Surface Mounted Energy Efficient, LED Luminaires 12W LED DOWN LIGHT (Round) Sutaible for 220v Single Phase Supply complete with driver circuit including making connections etc.as required. (Technical Data - System power 12W, CRI \geq 80, Power Factor \geq 0.95, System Luminous Efficacy \geq 94).	Each	84.00	745.00	62,580.00
30.03	MR 4	Supply of Surface Mounted Energy Efficient, LED Luminaires 15W LED DOWN LIGHT (Round) Sutaible for 220v Single Phase Supply complete with driver circuit including making connections etc.as required. (Technical Data - System power 15W, CRI \geq 80, Power Factor \geq 0.95, System Luminous Efficacy \geq 94).	Each	35.00	800.00	28,000.00
30.04	MR 5	Supplying and fixing brass batten/ angle holder including 20 w LED Lamp, connection etc. as required.	Each	493.00	300.00	1,47,900.00
30.05	MR 5A	Supply, of Linear & Compact 10W Mirror Light with Decorative Grey Caps, Polycarbonate Body & Ribbed Opal Diffuser. (Technical Data - System power 10W, CRI ≥80, Power Factor ≥0.95, System Luminous Efficacy ≥100)	Each	1.00	275.00	275.00
30.06	MR 6	Supply of LED Luminaires BATTEN 40W LED Tube Light of Box Type prewired Indoor Luminaire with Energy Efficient Electronic Ballast, with End Caps Complete as Required. (Technical Data - System power 40W, CRI \geq 80, Power Factor \geq 0.95, System Luminous Efficacy \geq 95)	Each	310.00	905.00	2,80,550.00
30.07	MR 7	Supply of LED Luminaires BATTEN 20W LED Tube Light of Box Type Prewired Indoor Luminaire with Energy Efficient Electronic Ballast, with End Caps Complete as Required.(Technical Data - System power 20W, CRI \geq 80, Power Factor \geq 0.95, System Luminous Efficacy \geq 100)	Each	761.00	383.00	2,91,463.00
30.08	MR 8	Supplying and fixing of Bulk Head with 10 Watt LED lamp fitting Sutaible for 230 volts Single Phase A C Supply complete with all accessories as required.	Each	18.00	1203.00	21,654.00
		SUPPLY FANS & EXHAUST FANS			<u>├</u>	
30.09	MR 8A	Supply, of following size sweep, BEE 5 star rated, white colour ceiling fan with all accessories i.e. 3 nos. blades, 30 cm long down rod, 2 nos. canopies, shackle kit, safety rope, copper winding, safety pin,nut bolts, washers, , suitable for 230 V, 50 Hz, single phase AC Supply, earthing etc. complete as required.				

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
30.10	MR9	Supply of following sweep heavy duty metal body exhaust fan/wall fan/ fresh air (ventilating) plastic body fan with guard suitable operation on single phase 230 V, 50Hz. AC Supply, with lowers / shutters in the existing opening. (Crompton - Trans Air 300/200mm/Approved Equivalent in Usha/Havells/Bajaj)				
		 (a) 200 mm sweep 900 RPM (in plastic body)Ventilating fan fan (b) 300 mm sweep 900 RPM (in plastic body)Ventilating fan 	Nos Nos	30.00 26.00	1044.00 1,559.00	31,320.00 40,534.00
		(c) 300 mm sweep 900 RPM (In metal body) exhaust fan	Nos	49.00	2,903.00	1,42,247.00
		(d) 450 mm sweep 900 RPM (In metal body) exhaust fan e) 400 mm sweep oscillating type four speed wall mounting fan	Nos. Nos.	4.00 3.00	4,575.00	18,300.00 7,410.00
		e, ioo min on eep openaamig type toat operer man moanning taa	11001	5100	2,470.00	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
30.11	1.41	Erection Of Lighting Fixtures And Fans Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of all types, complete with all accessories and tube/lamp etc. directly on ceiling/ wall, including connections with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.	Each	1192.00	168.00	2,00,256.00
30.12	1.45	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, including providing and fixing phenolic laminated sheet cover on the Fan Box etc. as Required.	Each	538.00	203.00	1,09,214.00
30.13	1.50	Installation of Exhaust/wall fan in the existing opening, including making good the damage, Connection, Testing, Commissioning etc. as Required.				
	1.50.1	Upto 450 mm sweep	Each	112.00	363.00	40,656.00
		S/F modular type electronic fan regulator:				
30.14	1.25	Supplying and fixing Two Module Stepped Type Electronic Fan Regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	Each	538.00	342.00	1,83,996.00
		Fixing Louvers / Shutters for Exhaust Fan:				
30.15	1.51	Extra for Fixing the Louvers/ Shutters Complete with Frame for a Exhaust Fan of all sizes.	Each	53.00	168.00	8,904.00
30.16	1.47	Extra Down GI Pipe 15mm Dia: Supplying and Fixing Extra Down Rod of 10 cm Length G.I. pipe, 15 mm dia, heavy gauge including painting etc. as required. (Note : More than 5 cm length shall be rounded to the nearest 10 cm and 5 cm or less shall be ignored).	Each	538.00	33.00	17,754.00
		Total of sub-head (30.0) (Non DSR)				20,36,053.00
		Total of sub-head (30.0) (DSR)				5,60,780.00
		ELECTRICAL WORKS (External)				
		ELECTRICAL WORKS (External)				
31.0 31.01	MD 1	Transformer and HT Panel				
51.01	MR 1	11KV HT VCB PANEL - IN DOOR TYPE Supplying, installation, testing and commissioning of IN DOOR Type, floor mounting, 11KV HT panel unit made out of M.S sheet steel clad dust and vermin proof with necessary control fuses/MCBs, Termination arrangements for Incoming and Outgoing Cable of 3Cx120 Sq.mm AI.HT XLPE cable, and earthed cable, Terminal Blocks, Earthing, Powder coated painting, Sign writing and Base channels etc. with complete all accessories as required. as per Requirements comprising of the following.				
		INCOMING : i) 630Amps, 11kV, 3 phase 50Hz, 21KA / 3Sec, Draw-out type Vacuum Circuit Breaker. fitted with 230V AC spring charging motor, 110V DC tripping and closing coils, 8NO+8NC Aux. conductor mechanical on off indicator, spring charging / discharge Indication, automatic safety shutter and with anti- pumping feature with necessary required accessories.				-
		 ii) 3 phase 11 KV/110 Volts PT, class 1 accuracy and 100 VA burden with 1 No Voltmeter (0-15 kV), Digital type, selector switch for voltmeter and protection fuses for HT metering upto 12 kV on incomer. iii) Dual core dual ratio 3 CTs 400/200/5+5A of 15 VA burden 				

S. No.	DSR	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
	2019					
		iv) (0-400 A) Ammeter, digital type with selector switch for				
		Ammeter. v) Digital Multifunction Meter.				
		vi) Microprocessor based numerical relay for Over current and				
		Earth fault protection with directional control.				
		vii) Phase indicating lamps with HRC fuses. viii) Indicating lamps to indicate, RYB, ON, OFF, OPEN,				
		CLOSE, TRIP, SPRING CHARGED, TRIP CIRCUIT HEALTHY				
		ix) Test terminal block				
		x) Trip/Neutral/close switch xi) Copper bus bar for earthing (common)				
		xii) master trip relay & trip circuit healthy supervision relay.				
		BusBar: 630 Amps, 11kV, 50Hz, 3Phase, 25 KA / 3Sec. Copper busbars.				
		The11KV HT VCB PANEL shall be complete with as per SLD and specifications.	set	1.00	448633.00	4,48,633.00
31.02	MR 2	11KV TRANSFORMER (11 KV /0.433 KV) (250 KVA)				
		Supplying, installation, testing and commissioning of 250 kVA, (Energy efficiency Level -2) 11kV / 433 Volts, 3 phase, 50Hz,vector group Dyn11 (delta -star connected), Indoor 'ONAN' type, copper wound transformer with OFF load tap changing arrangement on HV side in steps of +/- 2.5%, +/- 5% & +/- 7.5%, on H.V. side with HT cable chamber suitable for Heat shrinkable joint with XLPE cable (cable entry from bottom) and LT connection chamber suitable for connecting Bus duct arrangement and equipped with other essential accessories including providing complete with all fittings, accessories etc. and lifting lugs i/c first filling of filtered dehydrated oil, supplying grouting suitable MS Channel on the plinth for placing the transformer etc., complete and confirming to IS 1180 (Part-1): 2014, level - 2 & section 3 of CPWD General specification for Electrical works (Part -IV Substation 2013 as amended up to date) and as per specifications.	set	1.00	731480.00	7,31,480.00
		(PLEASE NOTE THE TRASNFOREMR SHALL BE IN COMPLINACE WITH NEW REGUALTION IS 1180 or Equivalent IEC Standard FOR LOSSES AND EFFICIENCY and ammended upto date)				
		Total of sub-head (31.0) (Non DSR)				11,80,113.00
32.0 32.01	MR 3	PANELS				
52.01	WIK 5	EM. SUPPLY PANEL				
		INCOMING:				
		1 nos. 100A 415V, 4P MCCB of 25kA with thermal magnetic				
		release, overload, short circuit and Earth fault protection. 1 no. 100A 17KA rating Automatic Transfer Switch (ATS)must				
		comply with IEC60947-6-1 standards.				
		1 no. Digital type Multifunction Meters to show (V, A, kWh, KVAh, KW, KVA, KVAR, PF, Hz.) with cast resin CTs.				
	 	1 Set of phase indicating lamps with MCB protection.				
	+	OUTGOING			+	
		1 nos. 100A 415V, TP MCCB of 25 KA with O/L and S/C				
	ļ	protection.(For pump set)				
		6 nos. 63A 4P MCB (For Toilets, commaon areas of School bldg., Both hostels, Kitchen & dining)				
		2 nos. 63A, 4P MCB only Space.			+	
	1	1 nos. 40A 415V, 4P MCB of 10kA with 40A 4P Contactor &				
		timer switch . 2 nos. 25A 415V, 4P MCB (SPARE)	Each		167885.00	
		2 103. 23A 713 Y, 71 1910D (SI AKE)	LaCII	1.00	10/003.00	1,67,885.00
32.02	MR 4	Main LT PANEL				
		NOTE:- MCCB's wherever specified upto 250A shall be Thermal Magnetic & Above 250A will be Microprocessor based inbuilt protections.				
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S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
		Suppy , installation, testing, Design, manufacture, supply				
		inspection, handling, assembling, affecting proper connections,				
		testing and commissioning of 1.6/2mm CRCA sheet steel fabricated cubical type Main L.T. Panel floor mounting Extensible				
		Type, dust & vermin proof, front operated construction, enclosure class - IP 42, As per IEC 60439 after proper treatment with 9				
		tank process with top/bottom removable gland plates, as required, double compression type cable glands, earth bus, hinged and				
		lockable doors to achieve dust and vermin proof complete with				
		all inter connections small wiring by min. 1.5-2.5 sq. mm. FR copper wires, ckt labels etc. The panel feeders shall be suitable				
		for terminating suitable nos. 3.5 / 4 core armoured aluminium cable as required.				
		All MCCB's shall be Ics = 100% Icu, with rotary handle & pad				
		locking arrangement. All TP MCCB shall be with heavy duty solid isolable neutral link.				
		The breaking capacity specified for all MCCB's breakers is Ics value (service rating).				
		Each Incoming (ACB/MCCB) shall have ON/OFF/Trip/ LED				
		indication on panel Front door. The incoming MCCB shall be Microprocessor based with inbuilt				
		O/L & S/C release with E/F protection and all Outgoings MCCB's shall be thermal-magnetic based with inbuilt O/L & S/C release.				
		shah oo mermai magnete oasea wan mount orb ee sre release.				
		Incoming From TRANSFORMER 1 (250 KVA) - 1 NOS.				
		(Phase I) Incomer : 1 Nos 400A TP MCCB 36KA with Thermal				
		Magnetic Release				
		1 No. Digital Ammeter 1 No. Digital Voltmeter				
		1 set of 3 CT's of ratio 400/5A, Class 1.0 accuracy 15 VA burden for Metering.				
		1 set of 3 CT's of ratio 400/5A, Class 1.0 accuracy 15 VA burden for APFCR.				
		3 Nos. LED Type phase indicating lamps, each lamp shall be with				
		backup MCB 3 Nos. LED Type Indicating lamp for indicating the status of				
		feeder - ON / OFF / TRIP. Each lamp shall be with backup MCB.				
		6A SP 10KA MCB				
		Incoming From DG SET - 1 NOS. (Phase II) - Only Vacant				
		Space for future Feeder BUS COUPLER : 1 Nos - Only Vacant Space for future				
		Feeder . It should be positioned in such manner so that all emergency loads and normal loads are separated by separate				
		bus bar chamber in the panel. Interlocking : Electrical as well as Mechanical Interlocking				
		between incomers and bus coupler as per requirement				
		BUS BAR TPN Aluminium Bus Bars of Minimum 500 Amp with Heat				
		shrinkable coloured sleeves , Shrouds at Joints and including				
		DMC/SMC bus bars supports at required interval complete for cross section, side supports and their spacing etc.				
		OUT GOING				
		21 Nos. Outgoing Feeders :-				
		1 Nos. 250A, TP 25KA MCCB (CAPACITOR PANEL) 1 Nos. 250A, FP 25KA MCCB (TYPE II METER BOARD				
		PANEL)				
		1 Nos. 200A, FP 25KA MCCB (TYPE III METER BOARD PANEL - BLOCK 1)				
		1 Nos. 160A, FP 25KA MCCB (TYPE III METER BOARD PANEL - BLOCK 2)				
		1 No 160 AMP 4P 25KA MCCB (SCHOOL BUILDING PANEL)				
		1 No 125 AMP 4P 18KA MCCB (KITCHEN & DINING				
		BLOCK PANEL) 1 No 160 AMP 4P 25KA MCCB (FIRE FIGHTING)				
		1 No 100 AMP 4P 18KA MCCB (PLUMBING) 1 No 100 AMP 4P 18KA MCCB (EXTERNAL LIGHTING - 1)				
		1 No 100 AMP 4P 18KA MCCB (EXTERNAL LIGHTING - 2)				
		1 No 63 AMP 4P 10KA MCB (GUEST HOUSE DB) 1 Nos. 125A, FP 18KA MCCB (BOYS HOSTEL & WARDEN				
		BLOCK PANEL)				

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
		1 Nos. 125A, FP 18KA MCCB (GIRLS HOSTEL & WARDEN				
		BLOCK PANEL) 1 Nos. 100A, FP 18KA MCCB (PRINCIPAL QUARTER				
		PANEL)				
		1 Nos. 250, FP 25KA MCCB (spare) 1 Nos. 200, FP 25KA MCCB (spare)				
		2 Nos. 160, FP 25KA MCCB (spare) 3 No 63 AMP 4P 10KA MCB (Spare)				
		Spare space for MCCB - 02 Nos.				
		Complete Panel as Above and complete	set	1.00	457843.00	4,57,843.00
32.03	MR 5	AUTOMATIC POWER FACTOR CORRECTION PANEL (CAPACITOR PANEL) - 90 KVAR Supplying, Installation, Testing and Commissioning of cubicle				
		type capacitior panel suitable for 415 & 3 phase 50 HZ A.C. supply System fabricated in design from CRCA Sheet Steel of 2 mm thick for frame work and cover, 3 mm thick for gland plates i/c powder coating in approve shade having 200 AMP capacity TPN Aluminium bus bar DMC/SMC bus bar supprot entire pannel should have common Al. earth bar for size 50 mm x 5 mm i/c Providing & fixing following switch gear mounting there on fans,grills for propor ventillation complete with gaskets & inner connection i/c connection with existing CTS in the main CT Panel				
		complete as reqd. The panel board shall be of dust and verm proof with degree of protection IP 42)				
		a) 250 Amps TP MCCB with Thermal Magnetic Based release (Ics=100% Icu) - 1 No.				
-		b) 250A, 4 strip Tinned Aluminium busbar -1 Set				
		c) Micro processor based automatic Power factor control relay i/c power factor metre in 8 steps				
		d) Multi functional meters with suitable CTS and protection				
		MCBS 1 set. e) 3 Nos. Phase indicating light (lamp) with MCBs protection.				
-		OUTCOINCE				
		OUTGOINGS -				
		2 Set - 63A Amp TP MCB 10 KA and Capacitor duly switching contactor for 20 KVAR capacity auto mannual selector switch start/stop puch button on/off indicatting lamp with protection MCB & delay timer complete <i>i/c</i> 20 KVAR Normal Duty 440V capacitor bank with inter Connection				
		4 Set -32 Amp TP MCB 10 KA and Capacitor duly switching contactor for 10 KVAR capacity auto mannual selector switch start/stop puch button on/off indicatting lamp with protection MCB & delay timer complete i/c 10 KVAR Normal Duty 440V capacitor bank with inter Connection				
		2 Set - 16 Amp TP MCB 10 KA and Capacitor duly switching contactor for 5 KVAR capacity auto mannual selector switch start/stop puch button on/off indicatting lamp with protection MCB & delay timer complete <i>i/c</i> 5 KVAR Normal Duty 440V capacitor bank with inter Connection				
		Capacitor panel should switch OFF when DG starts. Control wiring should be done for it.				
		complete panel as above and complete	set	1.00	167703.00	1,67,703.00
32.04	MR 6	SCHOOL BUILDING MAIN DISTRIBUTION PANEL				
		Design, manufacture, supply, installation, testing and commissioning of cubicle type panel fabricated out of CRCA sheet steel, floor mounted totally enclosed switchbaord suitable for use of 415 volts, 3 phase, 50 HZ complete with aluminium bus bar and all accessories including supply and fixing of following incoming and outgoing switchgears, Panel Should Have Double Earthing Provision which connected to the nearest earth grid.				
		NOTE:- MCCB's wherever specified upto 250A shall be Thermal Magnetic & Above 250A will be Microprocessor based inbuilt protections.				
		INCOMER : 160 AMP FP MCCB				
		3 Nos. Phase Indication light (lamp) with MCBs protection. Multi functional meters (VAF) with suitable CTS and protection				
		MCBS 1 set. BUS BAR : 200 AMP, 500 Volts, 3 phase 50 HZ 4P high conductivity electrolytic Aluminium bus bar of suitable length, insulated by heat shrinkable sleeves. The current density of bus bar shall be minimum 0.6 sq mm / amp.				
		The Maximum allowable temperature for the Bus bar to be restricted to 90 deg C. The temperature rise should be restricted to 45 deg C above ambient temperature.				
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S. No.	DSR	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
5.110.	2019	Description	Om	Quantity	Rate (III Rs)	Amount (m Ks)
		1 No 63 AMP 4P MCB (UPS PANEL)				
		1 No 63 AMP 4P MCB (GROUND FLOOR LIGHT + POWER				
		DB 1)				
		1 No 63 AMP 4P MCB (GROUND FLOOR LIGHT + POWER DB 2)				
		1 No 63 AMP 4P MCB (GROUND FLOOR LIGHT + POWER				
-		DB 3) 1 No 63 AMP 4P MCB (GROUND FLOOR LIGHT + POWER				
		DB 4)				
		1 No 63 AMP 4P MCB (FIRST FLOOR LIGHT + POWER DB 1)				
		1 No 63 AMP 4P MCB (FIRST FLOOR LIGHT + POWER DB 2)				
		1 No 63 AMP 4P MCB (FIRST FLOOR LIGHT + POWER DB 3)				
		1 No 63 AMP 4P MCB (FIRST FLOOR LIGHT + POWER DB 4)				
		3 No 63 AMP 4P MCB (SPARE)				
		complete panel as above and complete	set	1.00	71921.00	71,921.00
		complete paner as above and complete	Bet	1.00	/1921.00	/1,/21.00
32.05	MR 7	UPS PANEL				
		Design, manufacture, supply, installation, testing and				
		commissioning of cubicle type panel fabricated out of CRCA				
		sheet steel, floor mounted totally enclosed switchbaord suitable for use of 415 volts, 3 phase, 50 HZ complete with aluminium				
		bus bar and all accessories including supply and fixing of				
		following incoming and outgoing switchgears, Panel Should Have				
		Double Earthing Provision which connected to the nearest earth grid.				
		INCOMER : 1 Nos 63 AMP FP MCB (Thru Bypass				
		Switch 10 kva UPS)				
		BUS BAR : 100 AMP, 500 Volts, 3 phase 50 HZ 4P high conductivity electrolytic Aluminium bus bar of suitable length,				
		insulated by heat shrinkable sleeves. The current density of bus				
		bar shall be minimum 06 sq mm / amp.				
		The Maximum allowable temperature for the Bus bar to be				
		restricted to 90 deg C. The temperature rise should be restricted to 45 deg C above ambient temperature.				
		OUT GOINGS :				
		1 No 63 AMP DP MCB (GROUND FLOOR UPS DB 1)				
		1 No 40 AMP DP MCB (GROUND FLOOR UPS DB 2) 1 No 40 AMP DP MCB (FIRST FLOOR UPS DB 1)				
		1 No 40 AMP DP MCB (FIRST FLOOR UPS DB 1) 1 No 40 AMP DP MCB (FIRST FLOOR UPS DB 2)				
		3 No 40 AMP DP MCB (SPARE)				
		complete panel as above and complete	set	1.00	51558.00	51,558.00
		complete panel as above and complete	set	1.00	51550.00	51,550.00
32.06	MR 8	BOYS HOSTEL MAIN DISTRIBUTION BOARD				
		Design, manufacture, supply, installation, testing and				
		commissioning of cubicle type panel fabricated out of CRCA sheet steel, floor mounted totally enclosed switchbaord suitable				
		for use of 415 volts, 3 phase, 50 HZ complete with aluminium				
		bus bar and all accessories including supply and fixing of				
		following incoming and outgoing switchgears, Panel Should Have Double Earthing Provision which connected to the nearest earth				
		grid.				
		NOTE:- MCCB's wherever specified upto 250A shall be Thermal				
		Magnetic & Above 250A will be Microprocessor based inbuilt protections.				
		INCOMER : 125 AMP FP MCCB			1	
		3 Nos. Phase Indication light (lamp) with MCBs protection. Multi functional meters (VAF) with suitable CTS and protection			<u>├</u> ────┤	
		MCBS 1 set.				
		BUS BAR : 160 AMP, 500 Volts, 3 phase 50 HZ 4P high			1	
		conductivity electrolytic Aluminium bus bar of suitable length, insulated by heat shrinkable sleeves. The current density of bus				
		bar shall be minimum 0.6 sq mm / amp.				
		The Maximum allowable temperature for the Bus bar to be restricted to 90 deg C. The temperature rise should be restricted to				
		restricted to 90 deg C. The temperature rise should be restricted to 45 deg C above ambient temperature.				
		OUT GOINGS :				
		1 No 63 AMP 4P MCB (GROUND FLOOR LIGHT + POWER DB 1)				
		1 No 63 AMP 4P MCB (GROUND FLOOR LIGHT + POWER			<u> </u>	
		DB 2)			ļ	
		1 No 63 AMP 4P MCB (GROUND FLOOR LIGHT + POWER DB 3)				
	L	22 V)	l	I	I	

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
		1 No 63 AMP 4P MCB (GROUND FLOOR LIGHT + POWER				
		DB 4)				
		1 No 63 AMP 4P MCB (FIRST FLOOR LIGHT + POWER DB 1)				
		1 No 63 AMP 4P MCB (FIRST FLOOR LIGHT + POWER DB 2)				
		1 No 63 AMP 4P MCB (FIRST FLOOR LIGHT + POWER DB 3)				
		1 No 63 AMP 4P MCB (FIRST FLOOR LIGHT + POWER DB 4)				
		1 No 63 AMP 4P MCB (WARDEN BLOCK 1 DB)				
		3 No 63 AMP 4P MCB (SPARE)				
		complete panel as above and complete	set	2.00	70015.00	1,40,030.00
32.07	MR 9	GIRLS HOSTEL MAIN DISTRIBUTION BOARD				
		Design, manufacture, supply, installation, testing and commissioning of cubicle type panel fabricated out of CRCA sheet steel, floor mounted totally enclosed switchbaord suitable for use of 415 volts, 3 phase, 50 HZ complete with aluminium bus bar and all accessories including supply and fixing of following incoming and outgoing switchgears, Panel Should Have Double Earthing Provision which connected to the nearest earth grid.				
		NOTE:- MCCB's wherever specified upto 250A shall be Thermal Magnetic & Above 250A will be Microprocessor based inbuilt protections.				
		INCOMER : 125 AMP FP MCCB				
		3 Nos. Phase Indication light (lamp) with MCBs protection. Multi functional meters (VAF) with suitable CTS and protection				
		MCBS 1 set.				
		BUS BAR : 160 AMP, 500 Volts, 3 phase 50 HZ 4P high conductivity electrolytic Aluminium bus bar of suitable length, insulated by heat shrinkable sleeves. The current density of bus bar shall be minimum 0.6 sq mm / amp.				
		The Maximum allowable temperature for the Bus bar to be restricted to 90 deg C. The temperature rise should be restricted to 45 deg C above ambient temperature.				
		OUT GOINGS : 1 No 63 AMP 4P MCB (GROUND FLOOR LIGHT + POWER				
		DB 1) 1 No 63 AMP 4P MCB (GROUND FLOOR LIGHT + POWER DB 2)				
		1 No 63 AMP 4P MCB (GROUND FLOOR LIGHT + POWER DB 3)				
		1 No 63 AMP 4P MCB (GROUND FLOOR LIGHT + POWER DB 4)				
		1 No 63 AMP 4P MCB (FIRST FLOOR LIGHT + POWER DB 1)				
		1 No 63 AMP 4P MCB (FIRST FLOOR LIGHT + POWER DB 2)				
		1 No 63 AMP 4P MCB (FIRST FLOOR LIGHT + POWER DB 3)				
		1 No 63 AMP 4P MCB (FIRST FLOOR LIGHT + POWER DB 4)				
		1 No 63 AMP 4P MCB (WARDEN BLOCK 2 DB)				
		3 No 63 AMP 4P MCB (SPARE) complete panel as above and complete	set	2.00	70015.00	1,40,030.00
32.08	MR 10	TYPE -II & III STAFF QTRS. DISTRIBUTION BOARD		2.00		.,10,050.00
		Design, manufacture, supply, installation, testing and commissioning of cubicle type panel fabricated out of CRCA sheet steel, floor mounted totally enclosed switchbaord suitable for use of 415 volts, 3 phase, 50 HZ complete with aluminium bus bar and all accessories including supply and fixing of following incoming and outgoing switchgears, Panel Should Have Double Earthing Provision which connected to the nearest earth grid.				
		NOTE:- MCCB's wherever specified upto 250A shall be Thermal Magnetic & Above 250A will be Microprocessor based inbuilt protections.				
		INCOMER : 125 AMP FP MCCB				
		3 Nos. Phase Indication light (lamp) with MCBs protection. Multi functional meters (VAF) with suitable CTS and protection MCBS 1 set.				

S. No.	DSR	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
	2019					
		BUS BAR : 160 AMP, 500 Volts, 3 phase 50 HZ 4P high				
		conductivity electrolytic Aluminium bus bar of suitable length,				
		insulated by heat shrinkable sleeves. The current density of bus bar shall be minimum 0.6 sq mm / amp The				
		Maximum allowable temperature for the Bus bar to be restricted to				
		90 deg C. The temperature rise should be restricted to 45 deg C above ambient temperature.				
		OUT GOINGS :				
		12 Nos 63 AMP 4P MCB (For each Qtr.DBs and Spare)	set	3.00	46763.00	1,40,289.00
		complete panel as above and complete				
32.09	MR 11	EXTERNAL LIGHT FEEDER PILLAR 1				
		Design, Manufacture, Supply, Installation, Testing and				
		Commissioning of Panel Fabricated out of 16 SWG CRCA sheet steel, IP 54, wall / floor mounting type with rain canopy				
		The sheet steel shall undergo minimum 7 tank treatment followed				
		by finishing powder coating of min 60 micron thickness. the board includes 415 /240 V electrolitic Aluminium Bus Bar, removable				
		gland plates, cable glands, including connection with outgoing				
		feeders complete in all respect, Panel Should Have Double				
		Earthing Provision Which Connected to the Nearest Earth Grid.				
		INCOMER:				
		1 no. 100A, 25KA 4P MCCB with Thermal Magnetic based				
		releases, ON indication, + 3 Nos 63A DP MCB For each Phase.with 3 Nos Astronomical Weekly programmable time				
		switch (SST- 1min) ON Phase for automaitc switching of				
		landscape light fixtures at sun set and sun rise or twilight (auto on/ auto off and auto mode) with manual override faiclity with 12/24				
		hour display format with suitable battery and indication for relay				
		status i/c programming at site.				
		BUS BAR				
		TPN Aluminium bus bar with heat Shrink Sleeve rated for 125A.				
		OUTGOING				
		18 nos 16A DP MCB 1 nos 40A DP MCB (ESS DB)				
		1 nos 40A DP MCB (LSS DB) 1 nos 40A DP MCB (UGT DB)				
		1 nos 40A 4P MCB (BORE WELL WORKING)				
		1 nos 40A 4P MCB (BORE WELL STAND BY) 1 nos 40A 4P MCB (SPARE)				
		Other items such as				
		1 Set of control wiring				
		1 Set of designation plates		2.00	97147.00	1 74 204 00
		All Items complete as above	set	2.00	87147.00	1,74,294.00
		Total of sub-head (32.0) (Non DSR)				15,11,553.00
33.0		LT Cable And Accessories				
22.01						
33.01		Supply Of L.T. Cable: Supplying of Following Sizes of 1.1 kV Grade Multicore				
		Aluminium Conductor XLPE Power Cable Insulated armoured				
		cable conforming to IS:7098 (Part - I) or as per Relevant IS Code complete with all Amendments etc and should be NABL certified				
		as required.				
	MR 12	3.5 C X 150 Sq.mm Al. XLPE arm.	Metre	55.00	775.00	42,625.00
	MR 13	3.5 C X 120 Sq.mm Al. XLPE arm.	Metre	55.00	666.00	36,630.00
	MR 14 MR 15	3.5 C X 95 Sq.mm Al. XLPE arm. 3.5 C X 70 Sq.mm Al. XLPE arm.	Metre Metre	857.00 1419.00	535.00 425.00	4,58,495.00 6,03,075.00
	MR 15 MR 16	3.5 C X 50 Sq.mm Al. XLPE arm.	Metre	319.00	317.00	1,01,123.00
	MR 17	3.5 C X 35 Sq.mm Al. XLPE arm.	Metre	387.00	245.00	94,815.00
	MR 18	3.5 C X 25 Sq.mm Al. XLPE arm.	Metre	422.00	198.00	83,556.00
	DSR 7	LT Cable Laying				
33.02	DSR 7.1	Laying of One Number PVC Insulated And PVC Sheathed / XLPE Power Cable of 1.1 kV Grade of Following Size Direct in Ground				
		Including Excavation, Sand Cushioning, Protective Covering and				
		Refilling the Trench etc. as required.				
	DSR 7.1.1 DSR 7.1.2	Upto 35 sq. mm Above 35 sq. mm and upto 95 sq. mm	Metre Metre	125.00 1379.00	323.00 338.00	40,375.00 4,66,102.00
	DSR 7.1.2 DSR 7.1.3	Above 55 sq. mm and upto 55 sq. mm Above 95 sq. mm and upto 185 sq. mm	Metre	66.00	352.00	23,232.00
33.03	DSR 7.2	Laying of one number additional PVC insulated and PVC				
33.03	D5K /.2	sheathed / XLPE power cable of 1.1 KV grade of following size				
		direct in ground in the same trench in one tier horizontal formation				
	1	including excavation, sand cushioning, protective covering and				
1		refilling the trench etc as required.				
	DSR 7.2.2	Above 35 sq. mm and upto 95 sq. mm	Metre	811.00	236.00	1,91,396.00

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
33.04	DSR 7.3	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation and refilling the trench etc as required. but excluding sand cushioning and protective covering.				
	DSR 7.3.1	Upto 35 sq. mm	Metre	259.00	167.00	43,253.00
	DSR7.3.2	Above 35 sq. mm and upto 95 sq. mm	Metre			
33.05	DSR 7.5	Laying of one number PVC insulated & PVC sheathed/ XLPE Power cable of 1.1 KV grade of following size in the existing RCC/HUME/METAL pipe as required.				
	DSR 7.3.1	Upto 35 sq. mm	Metre	15.00	31.00	465.00
	DSR 7.5.2 DSR 7.5.3	Above 35 sq. mm and upto 95 sq. mm Above 95 sq. mm and upto 185 sq. mm	Metre Metre	355.00 22.00	47.00 64.00	16,685.00 1,408.00
	But noto		mene	22.00	0 1100	1,100100
33.06	DSR 7.7	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface as required.				
	DSR 7.7.1	Upto 35 sq. mm (clamped with 1mm thick saddle)	Metre	410.00	39.00	15,990.00
	DSR 7.7.3	Above 35 sq. mm and upto 95 sq. mm (clamped with 25x3mm MS	Metre	50.00	104.00	5,200.00
	DSR 7.7.3	flat clamp) Above 95 sq. mm and upto 185 sq. mm (clamped with 25/40x3mm MS flat clamp)	Metre	22.00	122.00	2,684.00
22.07	DSR 9	LT CABLE JOINTING & END TERMINATION				
33.07	DSR 9.1	Supplying and Making End Termination With Brass Compression Gland and Aluminium lugs for Following Size of PVC Insulated and PVC Sheathed / XLPE Aluminium Conductor Cable of 1.1 kV Grade as Required.				
	DSR 9.1.20	3½ X 25 sq. mm (28mm)	Each	18.00	250.00	4,500.00
		3½ X 35 sq. mm (32mm)	Each	6.00	300.00	1,800.00
		3½ X 50 sq. mm (35mm)	Each	2.00	329.00	658.00
		3½ X 70 sq. mm (38mm)	Each	14.00	368.00	5,152.00
		3½ X 95 sq. mm (45mm) 3½ X 120 sq. mm (45mm)	Each Each	6.00	473.00 489.00	2,838.00 978.00
		3½ X 150 sq. mm (50mm)	Each	6.00	555.00	3,330.00
		Total of sub-head (33.0) (Non DSR)		0.00		14,20,319.00
	1	Total of sub-head (33.0) (DSR)				8,26,046.00
						0,20,010.00
34.0		HT Cable And Accessories				
34.01	MR 19	Supply of H.T. Cable Supply & Testing of following 11 KV(UE) grade multicore Aluminium conductor XLPE insulated cable, insulation screening with extruded semi conducting compound in combination with copper tape armoured cores laid up, inner sheath of PVC tape,				
		capter appendix and the strain and the strain of the tape, galvanised steel flat strip armoured and overall PVC sheathed cable conforming to IS: 7098 (Part - II) and complete with all latest amendments etc. complete as required.				
		galvanised steel flat strip armoured and overall PVC sheathed cable conforming to IS: 7098 (Part - II) and complete with all	Metre	50.00	1114.00	55,700.00
34.02	DSR 8 DSR 8.1	galvanised steel flat strip armoured and overall PVC sheathed cable conforming to IS: 7098 (Part - II) and complete with all latest amendments etc. complete as required.	Metre	50.00	1114.00	55,700.00
34.02		galvanised steel flat strip armoured and overall PVC sheathed cable conforming to IS: 7098 (Part - II) and complete with all latest amendments etc. complete as required. 3 C x 120 Sq. mm 11 KV (UE) H.T. Cable Laying-DSR Item	Metre	50.00	1114.00	55,700.00
34.02	DSR 8.1	galvanised steel flat strip armoured and overall PVC sheathed cable conforming to IS: 7098 (Part - II) and complete with all latest amendments etc. complete as required. 3 C x 120 Sq. mm 11 KV (UE) H.T. Cable Laying-DSR Item H V CABLE LAYING Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 11 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and	Metre	50.00	438.00	55,700.00
34.02	DSR 8.1 DSR 8.1.1	galvanised steel flat strip armoured and overall PVC sheathed cable conforming to IS: 7098 (Part - II) and complete with all latest amendments etc. complete as required. 3 C x 120 Sq. mm 11 KV (UE) H.T. Cable Laying-DSR Item H V CABLE LAYING Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 11 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Upto 120 sq. mm H.T Termination: DSR Item Supply and making Indoor cable end jointing with cast resin compund, including lugs and other jointing materials for following size of 3 core, XLPE aluminium conductor cable of 11KV (UE)				
	DSR 8.1 DSR 8.1.1 DSR 8.1.2 DSR 10.1	galvanised steel flat strip armoured and overall PVC sheathed cable conforming to 1S: 7098 (Part - II) and complete with all latest amendments etc. complete as required. 3 C x 120 Sq. mm 11 KV (UE) H.T. Cable Laying-DSR Item H V CABLE LAYING Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 11 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Upto 120 sq. mm H.T Termination: DSR Item Supply and making Indoor cable end jointing with cast resin compund, including lugs and other jointing materials for following				
	DSR 8.1. DSR 8.1.1 DSR 8.1.2 DSR 10.1 DSR 10.1	galvanised steel flat strip armoured and overall PVC sheathed cable conforming to IS: 7098 (Part - II) and complete with all latest amendments etc. complete as required. 3 C x 120 Sq. mm 11 KV (UE) H.T. Cable Laying-DSR Item H V CABLE LAYING Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 11 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Upto 120 sq. mm H.T Termination: DSR Item Supply and making Indoor cable end jointing with cast resin compund, including lugs and other jointing materials for following size of 3 core, XLPE aluminium conductor cable of 11KV (UE) grade as required.	Metre	50.00	438.00	21,900.00
34.03	DSR 8.1 DSR 8.1.1 DSR 8.1.2 DSR 10.1 DSR 10.1 10.1.1	galvanised steel flat strip armoured and overall PVC sheathed cable conforming to IS: 7098 (Part - II) and complete with all latest amendments etc. complete as required. 3 C x 120 Sq. mm 11 KV (UE) H.T. Cable Laying-DSR Item H V CABLE LAYING Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 11 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Upto 120 sq. mm H.T Termination: DSR Item Supply and making Indoor cable end jointing with cast resin compund, including lugs and other jointing materials for following size of 3 core, XLPE aluminium conductor cable of 11KV (UE) Supply and making Outdoor cable end jointing with cast resin compund, including lugs and other jointing materials for following size of 3 core, XLPE aluminium conductor cable of 11KV (UE)	Metre	50.00	438.00	21,900.00
34.03	DSR 8.1 DSR 8.1.1 DSR 8.1.2 DSR 10.1 DSR 10.1 10.1.1 DSR 10.2	galvanised steel flat strip armoured and overall PVC sheathed cable conforming to IS: 7098 (Part - II) and complete with all latest amendments etc. complete as required.	Metre	50.00	438.00	21,900.00 7,194.00 5,143.00
34.03	DSR 8.1 DSR 8.1.1 DSR 8.1.2 DSR 10.1 DSR 10.1 10.1.1 DSR 10.2	galvanised steel flat strip armoured and overall PVC sheathed cable conforming to 1S: 7098 (Part - II) and complete with all latest amendments etc. complete as required. 3 C x 120 Sq. mm 11 KV (UE) H.T. Cable Laying-DSR Item H V CABLE LAYING Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 11 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Upto 120 sq. mm H.T Termination: DSR Item Supply and making Indoor cable end jointing with cast resin compund, including lugs and other jointing materials for following size of 3 core, XLPE aluminium conductor cable of 11KV (UE) grade as required. 3 C x 120 Sq.mm (11KV UE) Supply and making Outdoor cable end jointing with cast resin compund, including lugs and other jointing materials for following size of 3 core, XLPE aluminium conductor cable of 11KV (UE) grade as required. 3 C x 120 Sq.mm (11KV UE) Total of sub-head (34.0) (Non DSR)	Metre	50.00	438.00	21,900.00 7,194.00 5,143.00 55,700.00
34.03	DSR 8.1 DSR 8.1.1 DSR 8.1.2 DSR 10.1 DSR 10.1 10.1.1 DSR 10.2	galvanised steel flat strip armoured and overall PVC sheathed cable conforming to IS: 7098 (Part - II) and complete with all latest amendments etc. complete as required.	Metre	50.00	438.00	21,900.00 7,194.00 5,143.00
34.03	DSR 8.1 DSR 8.1.1 DSR 8.1.2 DSR 10.1 DSR 10.1 10.1.1 DSR 10.2	galvanised steel flat strip armoured and overall PVC sheathed cable conforming to 1S: 7098 (Part - II) and complete with all latest amendments etc. complete as required. 3 C x 120 Sq. mm 11 KV (UE) H.T. Cable Laying-DSR Item H V CABLE LAYING Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 11 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Upto 120 sq. mm H.T Termination: DSR Item Supply and making Indoor cable end jointing with cast resin compund, including lugs and other jointing materials for following size of 3 core, XLPE aluminium conductor cable of 11KV (UE) grade as required. 3 C x 120 Sq.mm (11KV UE) Supply and making Outdoor cable end jointing with cast resin compund, including lugs and other jointing materials for following size of 3 core, XLPE aluminium conductor cable of 11KV (UE) grade as required. 3 C x 120 Sq.mm (11KV UE) Total of sub-head (34.0) (Non DSR)	Metre	50.00	438.00	21,900.00 7,194.00 5,143.00 55,700.00

S. No.	DSR	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
	2019					
35.01	2.21	Providing and fixing M.V. danger notice plate of 200 mm X 150 mm, made of mild steel, at least 2 mm thick, and vitreous enameled white on both sides, and with inscription in single red colour on front side as required.	Nos.	12.00	226.00	2,712.00
35.02	2.22	Providing and fixing H.T. danger notice plate of 250 mm X 200 mm, made of mild steel, at least 2 mm thick, and vitreous enameled white on both sides, and with inscription in single Red colour on front side as required.	Nos.	2.00	244.00	488.00
35.03	7.90	Supplying and making cable route marker with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) of size 60 cm X 60 cm at the bottom and 50 cm X 50 cm at the top with a thickness of 10cm including inscription duly engraved as required.	Each	5.00	530.00	2,650.00
35.04	7.10	Supplying and fixing cable route marker with 10 cm X 10 cm X 5 mm thick G.I. plate with inscription there on, bolted /welded to 35 mm X 35 mm X 6 mm angle iron, 60 cm long and fixing the same in ground as required.	Each	5.00	383.00	1,915.00
		Miscellaneous Items - MR Items				
35.05	MR 20	SITC of shock treatment chart (prescribed under I.E.rules) duly framed with glass and supported from back with hard board with supply of all material labour T & P etc for proper completion of work. (Approx front area = 1.20 sq M)	Nos.	2.00	455.00	910.00
35.06	MR 21	SITC of First aid box as approved by Indian red cross conforming to IS : 2217.	Nos.	2.00	334.00	668.00
35.07	MR 22	SITC of Fire Bucket stand made of M S angle suitable for and with 4 Nos Fire Buckets of 9.5 Ltrs capacity filled with	Set	2.00	3277.00	6,554.00
35.08	MR 23	SITC of of rubber gloves of 11 KV grade as per IS : 4770.	Set	2.00	428.00	856.00
35.09	MR 24	Supplying and fixing of high voltage insulation mat of class B having 11 KV dielectric strength, 1000mm width and thickness of 2.5mm ISI approved as required including cutting to required lengths.	Metre	1.00	3650.00	3,650.00
35.10	MR 25	Supplying and fixing of high voltage insulation mat of class B having 1.1 KV dielectric strength, 1000mm width and thickness of 2.0 mm ISI approved as required including cutting to required lengths.	Metre	3.00	2475.00	7,425.00
		Total of sub-head (35.0) (DSR)				7,765.00
		Total of sub-head (35.0) (Non DSR)				20,063.00
36.0	DSR 5	Earthing				
36.01	5.4	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 meter long etc. with charcoal/ coke and salt as required. (For BODY EARTHING of each Electrical Panels & Generator Neutral & Body Earthing)	Set	32.00	6216.00	1,98,912.00
36.02	5.6	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 meter long etc. with charcoal/ coke and salt as required. (For Transformer BODY & NEUTRAL EARTHING)	Set	4.00	11794.00	47,176.00
36.03	5.2	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required	SET	4.00	5308.00	21,232.00
36.03	5.15	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	Metre	310.00	206.00	63,860.00
36.04	5.18	Providing and fixing 6 SWG dia G.I. wire on surface or in recess	Metre	200.00	37.00	7,400.00
		for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required.				
36.05	5.14	submain wiring/ cable as required. Providing and fixing 25 mm X 5 mm copper strip on surface or in recess for connections etc. as required.	Metre	40.00	1009.00	40,360.00
36.05 36.06	5.14	submain wiring/ cable as required. Providing and fixing 25 mm X 5 mm copper strip on surface or in	Metre Metre	40.00	1009.00	40,360.00 3,760.00
		 submain wiring/ cable as required. Providing and fixing 25 mm X 5 mm copper strip on surface or in recess for connections etc. as required. Providing and laying earth connection from earth electrode with 6 SWG dia G.I. Wire in 15 mm dia G.I. pipe from earth electrode including connection with G.I. thimble excavation and re-filling as 				
36.06	5.12	submain wiring/ cable as required. Providing and fixing 25 mm X 5 mm copper strip on surface or in recess for connections etc. as required. Providing and laying earth connection from earth electrode with 6 SWG dia G.I. Wire in 15 mm dia G.I. pipe from earth electrode including connection with G.I. thimble excavation and re-filling as required. Total of sub-head (36.0) (DSR)				3,760.00
		submain wiring/ cable as required. Providing and fixing 25 mm X 5 mm copper strip on surface or in recess for connections etc. as required. Providing and laying earth connection from earth electrode with 6 SWG dia G.I. Wire in 15 mm dia G.I. pipe from earth electrode including connection with G.I. thimble excavation and re-filling as required.				3,760.00

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
37.02	11.6	Supplying and embedding following dia G.I. pipe (medium class) in pole collar/ foundation (during casting) for cable entry including bending the pipe to the required shape, Hole Seeling to be done complete as required.				
	11.6.1	32 mm dia	Metre	495.00	324.00	1,60,380.00
		Total of sub-head (37.0) (DSR)				4,38,884.00
28.0						
38.0	MR 26	External Lighting System Supply, Installation, Testing & Commissioning of Integrated Post Top Lantern With 45W LED Lamp including suitable size dia G.I.Pipe Pole i/c connection with 3 x 2.5 sq.mm single core PVC insulated copper conductor cable from junction box to fixture as required.	Nos.	2.00	4520.00	9,040.00
38.02	MR 27	Supply, Installation, Testing & Commissioning of 60 W LED with complete with pot optic reflector i/c connection with 3x2.5sq.mm single core PVC insulated copper conductor cable from junction box to fixture as required	Nos.	39.00	3309.00	1,29,051.00
38.03	MR 28	Building Outer Light (60W LED) :- Supply, fitting, fixing and testing of building outer lighting luminaire aerodynamically shaped single piece pressure die-cast Aluminum luminaire with high power LEDs as light source and electronic driver (IP66), along with 60W LED Lamp as Energy saving as per drawing prescribed reflector and heat resistant toughened flat glass cover, with 5fl long 40mm dia G.I. pipe with 3 Nos. of iron clamps , anchor nut bolts with double washers as per direction of E/I or consultant as per drawing prescribed reflector and heat resistant toughened flat glass cover. (Make:- Philips/Trilux/Hevells-Endura Pearl Neo/Wipro.	Each	27.00	5030.00	1,35,810.00
38.04	MR 29	Supply, Installation, Testing and Commissioning of 200x160x98 (KVPC) Polycarbonate thermoplastics enclosure - junction box with LP - 65 Protection with Terminals & cable hinged cover of approved design complete having gasket of internally embedded & made of polyeutherene & should be weather proof, rust proof, dust proof, water proof - box shall be tested as per IEC - 60670- 2/60670-22. the box shall have self threaded holes & provision for mounting din rail. with 2 Nos cable gland including supplying & fixing crimping 2 nos lugs & 1 nos 32A connector 6 way for looping the incoming & outgoing cables and also connection of the street light one 6A SP MCB Including Connection of 2x6 sqmm Cable etc as Required.	Nos.	91.00	1120.00	1,01,920.00
38.05	MR 30	Supply of Single bracket type GI sewaged tubular pole of 6 Metre Pole (Above Ground) with Top-70 mm, bottom-135 mm, Base Plate 220x220x12 mm, PCD-225 mm, Foundation Bolts- M20X700 - 4 Nos., Single arm Bracket - 1 mtr long, with 48.3 mm OD pipe suitable for LED fitting. The pole shall be provided with suitable base plate arrangement for fixing on pedestal and looping box complete with MCB, brass connectors etc complete as required. The street lighting pole shall be in accordance with IS 2713. (For Road street light)	Nos.	60.00	10399.00	6,23,940.00
38.06	MR 31	Supply of Double bracket type GI sewaged tubular pole of 6 Metre Pole (Above Ground) with Top-70 mm, bottom-135 mm, Base Plate 220x220x12 mm, PCD-225 mm, Foundation Bolts- M20X700 - 4 Nos., Double arm Bracket - 1 mtr long, with 48.3 mm OD pipe suitable for LED fitting. The pole shall be provided with suitable base plate arrangement for fixing on pedestal and looping box complete with MCB, brass connectors etc complete as required. The street lighting pole shall be in accordance with IS 2713. (For Road street light)	Nos.	2.00	10929.00	21,858.00

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
38.07	MR 32	(A) SITC of Hybrid All In One Integrated Solar LED Street Light fitting rated for 40W output with integrated solar laminate of 80 Wp (or more) based on Mono crystalline cell technology, along with battery of rating 12.8V 30Ah (or more) based on Lithium Ferro Phosphate Chemistry (LiFePO4), with a light output of greater than 6000 Lumens (>6000), LEDs with a light output of greater than 6000 Lumens (>6000), LEDs with a life greater than >50000Hrs and Lumen efficacy greater than 150Lm/W , with an autonomy of 2 days (24 hrs.)or more with dimming, INBUILT PROTECTIONS FOR LONGER RELIABILITY - Over Charge Protection, Deep Discharge Protection, Battery Reverse Polarity Protection, Load Short Circuit Protection for Panel and Over Temperature Protection. Surge Protection for Hybrid Models. The housing of the street light should be made of Extruded Aluminium / Die Cast Aluminium, equipped with battery charge controller of efficiency greater than 92%, hybrid controller efficiency of greater than 85% and motion detection sensor with atleast 12mtr range. The light fitting shall be complete with all accessories in all respect as per manufacturer design. The light should also be tested for its performance (LM 79), Ingress protection(IP 65 or more), Impact resistance (IK08 or more) from 3rd party NABL Labs / TUV / UL / MNRE Authorised labs. (Note:- Inhouse labs approved by NABL will not be acceptable, only 3rd part labs shall be considered . The lighting supplier should be able to provide immediate service support with a service centre on district level and must have a dedicated toll free number to register complaints. The warranty on the complete solar light shall be of 5 years.)	Nos.	25.00	42800.00	10,70,000.00
		 (B) The following certificates/documents are mandatory at the time of supply and after execution as and where applicable :- 1. EN50530 – MPPT Efficiency 2. IEC61547 3. IEC61000-3-2 – EMC 4. IEC 60598 – Part 1 – General requirement 5. IEC 62109 6. LM 79 REPORT 7. IK 08 8. IP 65 The Executant must submit the TDS, LM 79 report , IK 08 & IP 65 The Executant must submit the TDS, LM 79 report , IK 08 & IP 65 The Executant must submit the TDS, LM 79 report of chip manufacturer in the department for obtaining the approval from the authority prior to start of work/ procurement of Solar street lights. Reports of inhouse lighting company Lab having NABL accrediation will not be acceptable. Test reports like EN50530 – MPPT Efficiency , IEC61547 ,IEC61000-3-2 – EMC , IEC 60598 – Part 1 – General requirement , IEC 62109 obtained from Third party NABL Lab's TUV/UL/MNRE Lab's test report are required to be submitted by 				
		the executant along with manufacturer's warranty certificate in the name of concerned department for providing 5 years complete system warranty & providing immediate after sales service within the warranty period against manufacturing defects, LM 79 report,IP 65 report, IK 08 report against the supply of Hybrid AIO Solar lights for it's acceptance by the department				
38.07	MR 33	Supplying of Following sizes 1100 volt grade XLPE insulated PVC sheathed aluminium conductor armoured cables as per specification in existing laid in ground including cost of digging upto required depth, 150 mm sand all around the cable, brick protection and back filling, clamped to wall with suitable clamps including saddles fixing bolts, Connection Testing and commissioning as Required.				
		2x6 sqmm	Metre	4140.00	85.00	3,51,900.00
		Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 kV grade of size up to 35 sq. mm				
38.08	7.3.1	(a) direct in ground including excavation and refilling the trench etc. as required, but excluding sand cushioning and protective covering.	Metre	2860.00	167.00	4,77,620.00
	7.7.1	(b) On Surface	Metre	870.00	39.00	33,930.00
38.09	7.5.1	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 kV grade of following size in the existing RCC/ HUME/ METAL pipe as required.				
		Upto 35 sq. mm	Metre	410.00	31.00	12,710.00

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
38.10		Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc. in the existing trench, complete as required.				
	14.15.1	63 mm dia (OD-63 mm & ID-51 mm nominal)	Metre	150.00	109.00	16,350.00
		Total of sub-head (38.0) (DSR) Total of sub-head (38.0) (Non DSR)				5,40,610.00 24,43,519.00
39.0 39.01	MR 33	Uninterrupted Power Supply (UPS) - 10 kVA Supply of 10 kVA Online UPS, IGBT UPS (Transformer-less Design).				
		Supply of SMF Batteries (12Volt VRLA, 26 Ah, 40 Numbers or as per standard Nos to provide 30 Minutes Backup in total for 10 kVA UPS at 0.8PF and ECV=1.7V.				
		Fully rated Inbuilt static switch at the inverter output and 100% rated Inbuilt static switch at the static bypass line integrated in UPS module.				
		Supply of Local Accessories (like Cabling Between UPS and the Battery onsidering Cable Routing ,Battery Interlinks ,Battery Rack etc).				
		Backfeed protection at Mains & Bypass (Inbuilt / External). Installation and Commissioning of 10 kVA UPS, Battery and Accessories.	set	1.00	218204.00	2,18,204.00
39.02	MR 34	Supply, installation, testing and commissioning 63A FP MCB of 10kA breaking Capacity in metal sheet enclosure with ON/OFF, TYB Indication lamps for Incoming of UPS Complete in All Respect as Required.	set	2.00	3459.00	6,918.00
		Total of sub-head (39.0) (Non DSR)				2,25,122.00
40.0	MD 25					
40.0	MR 35	Lightening Arrester System For Transformer Supply, Installation, Testing & Commissioning of Lightening Arrester HT-12 kV expulsion type complete with all Fitting transission class discharge capacity 10 kA complete all as as specified	Each	3.00	4007.00	12,021.00
		Total of sub-head (40.0) (Non DSR)				12,021.00
41.0		Pumps (Non Scheduled Items)				
41.01	MR 36	Borewell Submersible Pump Supplying & Installation of suitable borewell submersible pump set coupled with 6" motor and complete with lowering in existing borewell with the help of chain pulley block including supplying and fixing motor starter suitable for the selected pump complete as required.(Note : The suction/delievery pipe lines are not included in this item) Flow Rate : 350 to 400 LPM min. Head : 60 M	Set	2.00	55420.00	1,10,840.00
		Min. Motor HP : 7.5 H.P.				
41.02	MR 37	Supplying and Fixing of PVC covered 6 mm dia flexible steel rope for handling/protecting the submersible Pump set including U-lock arrangement etc. complete as required.	Metre	300.00	55.00	16,500.00
41.03	MR 38	Supplying and Fixing of suitable size of MS clamp set suitable for holding submersible pump & 40 mm dia pipe assembly lowered in bore well including suitable drilled hole and nut bolts etc. complete as required.	Each	4.00	735.00	2,940.00
41.04	MR 39	Supplying and Fixing of following size of PVC insulated PVC sheathed Copper conductor flat submersible cable including fixing the cable with nylon tie along with GI pipes in existing borewell, connection with submersible pump cable with the help of water proof jointing kit provided with the pump, complete as required.				
		(a) 3 x 2.5 sqmm	Metre	290.00	115.00	33,350.00
		S/Fixing of 8 " dia MS cover with locking arrangement i/c drilling hole and s/f nut bolts etc. complete as reqd.	Each	2.00	1040.00	2,080.00

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
		S.I.T.C. of 7.5/5.5 (H.P./Kw) Openwell Submersible				
		Monobloc Pump Set comprising of Electrical Driven inline pumping with all accessories as per manufacturer's design.				
		such as C.I. Base, S.S /bronze impeller, shaft, mechanical seal, S.S. Shaft directly coupled to motor suitable for				
		operation on 400/440 volts, 3 phase 50c/s A.C.Supply				
		complete in the existing G.I.Pipelines fittingsi/c s/fixing motor starter suitable for this pump set i/c connections				
		testing, commissing etc as reqd. (Note : The				
		suction/delievery pipe lines are not included in this item) Flow Rate : 4.5 to 5.0 LPS				
		Min. Head : 50 M				
		Min. Motor HP : 7.5 H.P. (Each)				
		Total of sub-head (41.0) (Non DSR)				2,68,190.00
42		CCTV SYSTEM				
42.01	1.53	Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.				
	1.53.1	1 run of cable	Mtr.	1630.00	49.00	79,870.00
42.02	1.21	Supply and fixing of following sizes of medium class PVC				
		conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required :				
	1.21.2	25 mm	Mtr.	840.00	90.00	75,600.00
42.03	MR 41	1/2.8" Progressive Scan CMOS, PAL:1920 * 1080, 0.1 Lux/ F1.2 (0Lux, IR ON), 10~15 Meters (With Min. 24 units IR LED), 2 MP Fixed IR DOME CAMERA With Options Of 2.8mm, 4mm, 6mm Lens, IP66, POE with installation. (<i>For Substation-2, Kitchen and Dining-6</i>)	Each	10.00	6488.00	64,880.00
42.04	MR 42	1/2.8" Progressive Scan CMOS, PAL:1920 * 1080, 0.1 Lux/ F1.2 (0Lux, IR ON), 10~15 Meters (With Min. 24 units IR LED), 2 MP Fixed IR Bullet CAMERA With Options Of 2.8mm, 4mm, 6mm Lens, IP66, POE with installation. (For Main Gate-2, School-7, Boys Hostel-5, Girls Hostel- 5, Kitchen & Dining-5)	Each	26.00	6488.00	1,68,688.00
42.05	MR 43	Supplying, installation, fixing, testing and commissioning of 16 ch Linux, H. 264 / H.265 NVR with Minimum 1080p / UXGA / 720p / VGA / 4CIF / DCIF / 2CIF / CIF / QCIF rec. resolutions, 4 HDD slot supports upto 4 TB Each, RS 485 x 1 & USB2.0 x1, HDMI ,Local And Remote Access Over Internet In complete in all respect with installation (Make: - CP PLUS , Dahua ,Hikvision or equivalent) (For School, Main Gate, Substation-1, Kitchen & Dining- 1, Bosy hostel-1, Girls hostel-1)	Each	4.00	28413.00	1,13,652.00
42.06	MR 44	4 TB Surveillance Sata HDD (WD Purple , Seagate	Each	4.00	10526.00	42,104.00
		Surveillance or Equivalant)		100		
42.07	MR 45	16 Port POE Switch (Cisco, Netgear, Dlink or Equivalant)	Each	4.00	17716.00	70,864.00
42.08	MR 46	Supply, installation, testing and commissioning of Independent 1 kVA UPS system with 230V single phase input and 230V Single phase output with all required accessories & battery bank for 30 mins back up with covered SMF battery and battery rack for all new required loads covered as required, including connections as per specifications etc. complete as required. (for Server and CCTV - Boyshostel-1, Girls hostel-1, Kitchen & Dining-1).	Each	3.00	28899.00	86,697.00
42.09	MR 47	S.I.T.C.32" Color flat panel LED Monitor,Full HD Professional Series 1920 x 1080 resolution, inputs. 100- 230VAC/50 Hz.	Each	2.00	21743.00	43,486.00
		Total of sub-head (42.0) (DSR)				1,55,470.00
		Total of sub-head (42.0) (Non DSR)				5,90,371.00
43		LIGHTNING CONDUCTOR				

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
43.01	6.2	Providing and fixing of lightning conductor finial, made of 25mm dia 300mm long, G.I tube, having single prong at top with 85mm dia 6mm thick G.I base plate including holes etc. complete as required.	Each	52.00	448.00	23,296.00
43.02	6.7	Providing and fixing G.I tape 20 mm x 3 mm thick on parapet or surface of wall for lightning conductor complete as required. (for horizontal run)	Mtrs.	1570.00	104.00	1,63,280.00
43.03	6.8	Providing and fixing G.I tape 20 mm x 3 mm thick on parapet or surface of wall for lightning conductor complete as required. (for vertical run)	Mtrs.	435.00	163.00	70,905.00
43.04	6.4	Jointing copper / G.I. tape (with another copper/ G I tape, base of the finial or any other metallic object) by riveting / nut bolting/ sweating and soldering etc as required.	Each	111.00	93.00	10,323.00
43.05	6.12	Providing and fixing testing joint, made of 20 mm X 3 mm thick G.I. strip, 125 mm long, with 4 nos. of G.I. bolts, nuts, chuck nuts and spring washers etc. complete as required.	Each	22.00	102.00	2,244.00
43.06	5.4	Earthing with G.I. earth plate 600mm x 600mm x 6mm thick including accessories, and providing masonary enclosure with cover plate having locking arrangement and watering pipe of 2.7Mtr long etc. with charcoal/ coke and salt as required.	Set.	22.00	6216.00	1,36,752.00
		Total of sub-head (43.0) (DSR)				4,06,800.00

44.00 USE, Set and associated works Image: Comparison of Common and Common and Store Type" 44.01 M8 Providing, Institute, Toting, and Common and Store Type" Image: Comparison of Comparison and Store Type" 10 M8 Providing, Institute, Toting, and Common and Store Type" Image: Comparison of Comparison and Common and Store Type" 11 Comparison of Comparison and Common and Store Type" Image: Comparison of Comparison and Common and Store Type" 12 Comparison of Comparison and Common and Store Type" Image: Comparison of Comparison and Store Type" 13 Comparison of Comparison and Common and Store Type" Image: Comparison of Comparison and Store Type" 14 Comparison of Comparison and Store Type" Image: Comparison of Comparison and Store Type" 14 Comparison of Comparison and Store Type" Image: Comparison of Comparison and Store Type" 15 Store Type" Image: Comparison of Comparison and Store Comparison of Comparison and Store Comparison of Comparison and Store Comparison and St	S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
44.01 M8.8 Norsking, Installing, Testing and Commissioning of Silkar Type Deed Construing set drogs which hears (Final Power Ruling of Ref 19) which for Silkar Silkar (Final Power Ruling of Ref 19) which for Silkar Silkar (Final Power Ruling of Ref 19) which for Silkar Silkar (Final Power Ruling of Ref 19) which for a drogs drog the final Silkar (Final Power et al vomeling of the fellowing) Image: Silkar (Final Power Ruling of Ref 19) With a silkar (Final Power Ruling of Ref 19) With a silkar (Final Power Ruling of Ref 19) W	44.00		D.G.Set and associated works				
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Synchronous alternator rated at 62.3 KVA, 415 volts at 1500 RPM, 3 phase 50 Hz, AC coppy with 68 laging power factor at 40 Degree C, 59% RI & at 1000 Meter MSL. The alternator shall be having SPIPP enclosure, bunkless, constitutions day, self-excited and self-regulated through AVR conforming to 18: 4722BS 26213 satiable for tropical conditions and with class. F/H insulation (d) Base Frame & Foundation: (e) Bast frame of MS channels with message reinforcement which shall be insulated on satiable concern on which shall be insulated on satiable concern on which message reinforcement which shall be insulated on satiable concern concrete foundation and vibration isolation arrangement as per recommendations of manufacturer. (e) Field Task: (f) Even Task: Daily service fiel task of 120 liters capacity fibricated out of 3 mm thick MS, sheet complete with all standard accessories and the particle provide with MS class C as a converter. (f) Even Task: (f) Even Task: Dily service fiel task of 120 liters capacity fibricated out of 3 mm thick MS, sheet complete with all standard accessories and the particle convertor. (f) Evhanat System: (f) Evhanat System: Diry chasks minifold with hospital exhants silencer and catalytic convertor. (f) Stating System: (g) Stating System: (g) Stating System: (g) Stating System: (h) are intake for coping of the engine & alternator, extraction, discharging bit air in the complete with an angement for finds. Set. 1.00 594200.00 5,9420		(c)					
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fiel piping between fuel tank and diesel engine with MS class 'C' pipes of suitable dia. Complete with valves, level indications & accessories as required as per specifications. (f) Exhaust System: Dry exhaust mainfold with hospital exhaust silencer and catalytic convertor. (g) Starting System: 12.V/24V DC starting system comprising of starter motors: voltage regulator and arrangement for initial excitation complete with suitable nos. of batteries (25 plates, 180 Amp. Hour capacity lead acid type) as required as per specifications. Accoustic and weather proof enclosure with arrangement for firsh or in to the atmosphere as per specifications. Set. 1.00 594200.00 5,94,200.00 44.02 MR 50 AMF system for 62.5 KVA DG Set Part of DG. Part and a course of an energy analyse to indicate currents, phase and line voltage, frequency, power factor, KWH, KVARH & provision for overload, short circuit, restricted carth fault, under frequency, control cabling from AMF panel to diesel engine and leswhere if required, all complete and inter locking including the following. Part and frequency, control cabling from AMF panel to diesel engine and leswhere if required, all complete and inter locking including the following. Panel to diesel engine and inter locking including the following. (a) (1) No. 1254 15V, 4P MCCB of 35kA. Panel to diesel engine and leswhere if required, all complete and inter locking including the following. Panel to diesel engine and inter locking including the following. (b) Auto/Manual/Test/Of Selecon switch							
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Dry exhaust mainfold with hospital exhaust silencer and catalytic convertor. Image: Convertor. (g) Starting System: Image: Convertor. 12V/24V DC starting system comprising of starter motors: voltage regulator and arrangement for initial excitation complete with suitable nos. of batteries (25 plates, 180 Amp. Hour capacity lead acid type) as required as per specifications. Accoustic and weather proof enclosure with arrangement for fresh (h) air intake for cooling of the engine & alternator, extraction, discharging hot air in to the atmosphere as per specifications. Set. 1.00 594200.00 5,94,200.00 44.02 MR 50 AMF system for 62.5 KVA DG Set Part of DG. Image: Converting a protection and energy analyser to indicate currents, phase and line voltages, frequency, power factor, KWH, KVARH & provision for overload, short circuit, restricted earth fault, under frequency, control cabling from AMF panel to diesel engine and elsewhere if required, all complete and inter locking including the following: Image: Converting Approximation and energy analyser to indicate currents, phase where if required, all complete and inter locking including the following: Image: Converting Approximation and energy analyser to indicate currents, phase where if required, all complete and inter locking including the following: (a) (i) 1 No. 125 415V, 4P MCCB of 35kA. Image: Converting Convertion Conve			* * *				
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(2) 2 Nos over voltage relay, 2 Nos reverse power relay and 2 Nos							
under voltage relay.		(c)	under voltage relay.				
(d) 3 Sets of current transformers 15 P 10 accuracy for protection and		(d)					
(b) 15 VA class-I for metering Energy analyser unit to indicate current voltage frequency power	├ ──- 	. ,					
(C) factor and KWH			factor and KWH				
(f) Indicating lamps for load on mains and load on set		(f)	Indicating lamps for load on mains and load on set				

S. No.	DSR 2019	Description	Unit	Quantity	Rate (In Rs)	Amount (In Rs)
	(g)	Fuse for instruments				
		Battery charger, complete with transformer/ rectifier, D.C. voltmeter and ammeter, selector switch for trickle, off and boost and current adjustment.				
	(i)	Main supply failure monitor				
	(j)	Supply failure timer				
	(k)	Restoration timer				
	(1)	Control unit with three impulse automatic engine start/stop and failure to start lockout.				
	(m)	Impulse counter with locking and reset facility.				
	(n)	ON/OFF/Control circuit switch with indicator				
	(0)	Audio/Video annunciation for				
		(i) High water temperature				
		(ii) Low lubricating oil pressure				
		(iii) Engine over speed				
		(iv) Engine fails to start				
		(v) Full load/maximum load warning	Set.	1.00	129500.00	1,29,500.00
44.03	MR 51	Supplying and fixing exhaust gas piping of 75mm dia. welded black MS, B Class pipe conforming to IS:3589 cut to required lengths and installed with necessary bends, supports and clamps, anti-vibration mountings, insulation of exhaust system with mineral wool/Rockwool, 50 mm thick wiremesh & aluminum cladding etc., as required as per specifications.	meter	4.00	1280.00	5,120.00
		Total of sub-head (44.0) (Non DSR)				7,28,820.00