

NOTICE INVITING TENDER (NIT)

NIT No:

SMLT/T&C/CPPP/OMC-5719/NIT/5040

DATE: 14.10.2023

Sub:

Miscellaneous Civil Works for Repair & Maintenance of Residential and Non-Residential Building including external and internal services in Nalconagar Township & CISF Colony.

Designation - DGM(Mechanical)

Tender Inviting Authority

Tender & Contract Dept., Smelter Plant

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PART –A

General information

1. Company Information

- 1.1. National Aluminum Company Limited (NALCO), incorporated in 1981, is a premier Navaratna Public Sector Enterprise under administrative control of Ministry of Mines of Govt. of India in the field of Alumina/Aluminium having integrated multi-locational facility of Bauxite Mining, Alumina Refining, Aluminum Smelter, Power Generation and Port. NALCO has one of the major Aluminum production facilities consisting of Bauxite Mines, Alumina Refinery, Aluminium Smelter and Captive Power Plant, all located in the state of Odisha.
- 1.2. More details on NALCO can be viewed on company's website www.nalcoindia.com

2. E-Procurement

- 2.2 The bidder wishes to participate in the published tender should have his firm registered in the E-procure government portal. Accordingly, bidder should do the registration in the tender site <http://eprocure.gov.in> using the option available. Then the Digital Signature registration has to be done with the e-token, after logging into the site. The e-token may be obtained from one of the authorized Certifying Authorities of Govt. of India such as MTNL / SIFY / TCS / nCode/ eMudhra / NIC etc. After that, bidder will login to the site through using his user ID & Password chosen during registration. The e-token that is registered should be used by the bidder and should not be misused by others.
- 2.2 Reverse Auction:- In case of Reverse auction tendering, the Date, time and quantum of decremental value will be mentioned in the NIT. Hence bidder should take a note of it and see the details as per **Annexure-A8**.

3. Purpose of this NIT

- 3.1. Smelter Plant - NALCO invites digitally signed online bids under **OPEN (Reverse-Auction), Two Part** e-Tender system.
- 3.2. **The Salient features of the Tender are as detailed F-02 Form (Annexure-B1).**

4. Bidding Process

- 4.1 The entire set of Tender document needs to be uploaded and digitally signed in e-procurement site of CPP Portal (www.eprocure.gov.in) before the scheduled time of bid submission.
- 4.2 Bids will be received up to last date and time specified or extended bid due date, as the case may be through e-tendering at www.eprocure.gov.in.
- 4.3 NALCO shall not be responsible for any expenses incurred by bidders in connection with the preparation & submission of their bids, and other expenses incurred during bidding process.
- 4.4 The bidders are advised to submit the tender document online well in advance before the prescribed time to avoid any last-minute hitch / problem.
- 4.5 After the bid submission, the acknowledgement number generated by the e-tendering system should be printed by the bidder and kept as a record of evidence for online submission of bid for the tender.
- 4.6 Further, bid shall be evaluated based on documents furnished. So bidder must ensure that all relevant documents are furnished at the time of submission of offer.
- 4.7 This NIT is in three parts. The part -A is mainly General information and instructions to bidder, Part-B is about the contract details and Part-C consists of various forms, agreement formats, declarations etc. The bidder should go through full NIT before filling.
- 4.8 The bidder should go through '**Annexure-A1**' i.e. instructions to the bidders prior to bidding.

- 4.9 Bidders are required to submit the hard copy of the followings in a sealed envelope and should reach General Manager (T&C) Tender & Contract Department, Smelter Plant, NALCO, Angul-759145 (Odisha) by Speed Post/By Hand before the due date & time of bid opening.**
- 4.9.1 Earnest Money Deposit(EMD) (Refer Clause no. 4.0 of Annexure-A1 & Format for BG-EMD is available at **Annexure-C12**)
- 4.9.2 Tender Fee (In case of LTE/Single/Proprietary, Tender Fee is not applicable)
- NB:- Earnest Money Deposit(EMD) & Tender Fee is a prerequisite, otherwise the Tender will be normally rejected. Earnest Money Deposit(EMD) and Tender Fee may be submitted in the account details of respective Unit of NALCO as available at 4.0 of NIT. **However, the bidder may submit attested copy of certificate such as NSIC / MSME / other category for Earnest Money Deposit(EMD) and Tender Fee exemption.**
- 4.9.3 The signed & sealed copy of "The Integrity Pact (**Annexure-C21**)".
- 4.9.4 Affidavit in Original towards Litigation History (**Annexure-C22**) duly signed after the NIT publication date.
- 4.9.5 Bid submission conformation page from e-Procurement System Government of India
- 4.9.6 Internet Bank Mandate along with Cancelled Cheque (all in original) as per Annexure-C10.
- 4.9.7 The party, if registered with NSIC/MSME, then they should submit the documentary proof of the same mandatorily.**
- Copy of all these above documents are also required to be uploaded in CPP Portal along with Bid documents.**
- 4.10** Clarifications, if any, regarding this tender can be obtained from the undersigned **through mail or phone no. at Pg-8 of 120** before the TSD.
- 4.11 After downloading / getting the tender schedules, the bidder should go through them carefully and then submit the documents as asked. If there are any clarifications, this may refer online through the tender site, or through the contact details. Bidder should consider the corrigendum published before submitting the bids online. Bidders in their own interest should get ready in advance to submit the bid documents as indicated in the tender schedule. These documents should be in PDF / XLS / RAR / DWF formats. If there is more than one document, they can be clubbed together.
- 4.12 Bidder should clearly fill up the PQC Technical (Detailed work order and execution statistics) (**Annexure-C6**) and Details of present commitments of the tenderer (**Annexure-C8**) for his offer evaluation. Suppression of credential / facts may lead to penal action as per procedure.
- 4.13 It is mandatory for the bidder to fill up the **Annexure-C19** and **Annexure-C20** (regarding declaration of the relatives in Nalco) and **Annexure-C3** (Deviation statement to the tender terms and conditions) and **Annexure-C4** (Declaration by the bidder) while submitting the offer.
- 4.14 Bidder should check his mail and CPP portal for any information regarding tender from time to time.
- 4.15 In case any specific adverse report is found against any bidder during enquiry about the statement made / credential submitted along with the offer documents in respect of capabilities, spare capacities, performance, completion certificates and criminal background of the bidder, the offer submitted by such bidder shall be rejected and penal action as deemed fit may be initiated.
- 4.16 If the bidder submits the bid in manual form (if permitted categorically in the tender), he should have already registered in the tender site and he shall have to mention the registration ID in the bid submitted otherwise his tender will not be considered.
- 4.17 Nalco reserve the right to seek any document / information at later stage in respect of evaluation of bid which the bidder must submit failing which the bid may be rejected.

5 Bid Evaluation

- 5.1 Evaluation will be done strictly in line with the facilities available under government website www.eprocure.gov.in i.e. based on documents uploaded by the bidder as per PQC. In case of non-compliance to the PQC requirement, i.e. any shortfall documents arise out of submitted technical as well as commercial credential submitted within tender submission date, bidders will be given normally one chance under CPP portal to upload shortfall documents within a stipulated date. No new documents would be called up as part of PQC experience documents.
- 5.2 The technical acceptability will be strictly as per matching of PQC with submitted work credential by the bidder
- 5.3 In case any specific adverse report is received against any bidder and proved to be correct after enquiry about the statement made / credential submitted along with the offer documents in respect of capabilities, spare capacities, performance, completion certificates and criminal background of the bidder, the offer submitted by such bidder shall be rejected and penal action as deemed fit may be initiated.
- 5.4 **Concurrent commitment:** - The concurrent commitments of bidder on various jobs under execution by the bidder will be considered to assess the spare capacity available with the bidder. The bidder must confirm that they have disclosed all the works being executed by them in the offer. If the annualized concurrent commitments of the bidder plus annualized estimated value of the work (for single agency)/ annualized estimated maximum percentage of work in split case under consideration (for multiple agency) exceeds four times the average annual turnover of the bidder during the last three Financial Years, then the price bid of such a bidder shall not be recommended for opening as the bidder may not have adequate resources to execute the tendered work. **Suppression of fact /data regard to jobs under execution will be considered as gross violation and rejection of bid including penal action such as banning/ blacklisting, as deemed fit.**
- 5.5 **In-house information for assessment of capability of bidder and their performance on jobs completed / in progress at NALCO shall be considered for evaluation purpose. In case of poor performance, the offer from such bidders shall not be evaluated.**
- 5.6 Nalco reserve the right to seek any document information at later stage in respect of evaluation of bid which the bidder has to submit failing which the bid may be rejected.
- 5.7 **In case the Bidder submits the work experience as a sub-contractor (of the Main Contractor), approval from the Principal agency/Client, against application submitted by Main Contractor during the course of execution for the engagement as Sub-Contractor of the Main Contractor, needs to be submitted along with the Bid.**

6 Ordering

- 6.1 On selection of Vendor for award of work, necessary internal approval processes will be completed, and during the said process, the Vendor Master data will be cross checked with documents like PAN Registration Certificate, GST Registration Certificate, Signed & Cancelled Cheque (with Name, Account No and IFSC Code printed on the Cheque) duly authenticated by the Vendor and attached to ANNEXURE- C10.
- 6.2 In normal circumstances the party in whose favor the work is awarded shall be issued with LOI. The party shall have to enter into an agreement in writing on non-judicial stamp paper of appropriate value as laid down in the GCC. The agreement normally consists of LOI, BOQ at the accepted rate, complete bid document, Schedule of Agreed Variation (if any) etc. The documents such as, correspondences, minutes of meeting, (if held with the party) etc. shall also form part of the contract agreement if required. On execution of Agreement a Detailed Order will be issued.

7 **General Conditions of Contract (GCC) will be a part of the NIT.**

Designation - DGM (Mechanical)

Tender Inviting Authority

Tender & Contract Dept., Smelter Plant

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ANNEXURE-A1

INSTRUCTIONS TO BIDDERS

SMELTER / CPP of National Aluminium Company Ltd (NALCO) is situated on NH-55 at approximately 6 KM away from ANGUL (District head quarter) and 5 KM away from Banarpal in Angul district of state of Odisha, connecting between Cuttack and Sambalpur.

1.0 SCOPE OF WORK:

The scope of work shall be as detailed is enclosed at **Annexure-B2**. The work shall be carried out as per direction of Engineer-in-charge/Manager-in-charge subject to special condition of contract given in **Annexure-B3**.

2.0 PRE-QUALIFICATION CRITERIA (PQC)

2.1 Single part Tender will be evaluated on the basis of price bids only. Hence, bidder should not take any technical/commercial deviations, otherwise their offer will be liable for rejection. For other type of tenders, wherever techno-commercial evaluation is to be done first, the bidders are required to submit documentary evidences for technical experience and financial capabilities as part of Pre-Qualification Criteria (PQC).

2.2 It may be noted that the details of documents submitted in support of the PQC for Technical & Financial capabilities are to be specified in following formats. If no references are found in the stated Annexures and the bidder gets disqualified, non-cognizance of such documents by NALCO, even if attached somewhere else as part of bid documents, will not be seen as a deficiency in proper evaluation of such documents. Hence, bidders may ensure that such documents are invariably referred in the below-mentioned Annexures.

2.2.1 Technical/Experience Criteria: **Annexure-C6**

2.2.2 Financial Criteria : **Annexure-C7**

2.2.3 The bidder should possess independent EPF, ESI, PAN & PAN based GST registration certificates respectively from the concerned Regional Provident Fund Commissioner for PF, Independent Account Code from concerned Regional Director ESIC for ESI, Direct Tax Authorities for PAN and Indirect Tax Authorities for GST, as applicable.

2.2.4 Litigation history for criminal background: **Annexure-C22**

2.2.5 The concurrent commitments of bidder on various jobs under execution by the bidder will be taken into account to access the spare capacity available with the bidder. Bidders are required to fill **Annexure-C8** for calculation at our end. **Suppression of fact and figures will liable to cancellation of bid and penal action as per rule.**

3.0 LITIGATION HISTORY:

3.1 The bidder is required to give the names of other firms / agencies / partnership firm / wholly owned or partly owned subsidiary etc. where they are having financial / professional stakes and also give a certificate if any such firm / agency is participating in the subject tender.

3.2 Bidder may note that any pending criminal case involving moral turpitude, fraud, theft & unlawful activities or conviction by court of law or indictment/ adverse order by regulatory authority against the person, company, Directors of the Company or sister concern of the Company, partner of the firm etc. would constitute disqualification for participating for tender.

3.3 The bidder or its proprietor /partner(s)/director(s) of the firm should not have been convicted by court of law for an offence involving moral turpitude in relation to the business dealing during past seven years for acceptance of the offer.

3.4 Litigation history for criminal background is to be provided by the bidder. The bidder shall give an affidavit to this effect as per the format at **Annexure-C22**. The affidavit must be affirmed before the competent judiciary authority or duly notarized by Notary.

4.0 EARNEST MONEY DEPOSIT (EMD):

Earnest money may be deposited through any one of the two procedures noted below. (refer sl no:4.3 of F-02 form of contract details, **Annexure-B1**).

- 4.1 In shape of account payee Demand draft/ Banker's cheque/ Pay order, from any Nationalized or Scheduled Bank in favour of National Aluminium Company Ltd., payable to our bank as per the details below.
- 4.2 Through online bank transfer. The transaction confirmation document generated through online transaction, giving details of transaction is required to be provided as a separate document.-The credit of EMD in our Bank account would be confirmed before acceptance of bid. If the transaction is not reflected or reflected with wrong reference as on TOD or credited subsequently, then the bid shall be considered to be unaccompanied by any EMD and the bid will be liable for rejection.

Our bank details for online transfer of EMD

Sl.	Description	Smelter Plant	Captive Power Plant (CPP)
a)	Account Holder's Name	Nalco Smelter Plant	Nalco Captive Power Plant
b)	Bank Name	State Bank of India	State Bank Of India
c)	Branch Name	Kandsar	Kandsar
d)	Branch Place	Nalconagar	Nalconagar
e)	Branch City	Angul	Angul
f)	IFS Code	SBIN0008279	SBIN0008279
g)	Account Number	10657908114	10657908589

Bank transfer details of EMD to be provided.

- a) Amount transferred: **Rs.2,50,000/-**
- b) Unique Transaction Reference (UTR) No.:
- c) Bank details from which the transaction was made:
- d) Date of transaction:
- e) Tender details (Number & Name of work):

Note: While making the online payment, the Tender Number (OMC-5719) may be mentioned in the text field of the transaction.—

Incase EMD amount is Rs.1.25 lakhs or more, EMD in the form of Bank Guarantee in prescribed format from NALCO approved Bankers (**Annexure-C12**) shall also be accepted. The original BG is to be submitted along with bid as indicated in the NIT.

- 4.3 Bids without EMD will be rejected. However, the Public Sectors, Government agencies and the Firms registered with NSIC/MSME , and others such as Ancillary Industries etc. for which specific exemption has been granted by NALCO may be considered for exemption from EMD subject to submission of attested documentary evidence in support of the same in sealed envelope as stipulated in NIT.MSEs having UAM no shall also submit supporting documents such as UAM certificate, CA Certificate (certifying that the unit is a MSE having valid MSE certificate).
- 4.4 EMD of unsuccessful bidders will be refunded within 15 days of finalization of contract for single part bid tender and within 15 days of acceptance of techno-commercial offers by the Competent Authority in case of two-part bid tender.
- 4.5 The EMD shall be forfeited without any notice on any of the following situations.
 - 4.5.1 On withdrawal of offer after expiry of submission date & time of bid offered.
 - 4.5.2 If the bidder does not submit the agreement prior to effective date mentioned in the Service Purchase Order/LOA/LOI considering the criteria of Clause No. 15.0 of this **Annexure-A1**.
 - 4.5.3 If the work is not commenced from the effective date of Service Purchase Order, after award of the work.
 - 4.5.4 At any point of time if it is found that the party has submitted any false declaration in his offer.
 - 4.5.5 If the bidder modifies its bid after the opening of the bids without written instruction from NALCO.

5.0 BANK GUARANTEES: -

- 5.1 The vendor may submit Bank Guarantee against Earnest Money Deposit (EMDBG), Performance Guarantee Bond (PGB), Security deposit (SDBG), Free Issue Material (FIMBG), Advance BG (ADVBG) Performance Bank Guarantee (PBG), and Contract Cum Performance Guarantee (CPBG) where ever applicable.
- 5.2 The BG in prescribed format (Annexure-C11 to Annexure-C16) should be issued by approved Banks listed at Annexure-C17 having its branch at Angul/Bhubaneswar and the BG should be registered in Structured Financial Messaging System (SFMS) for BG Conformation and Lodging of claim. Place of Encashment may be limited to Angul/Bhubaneswar only.
- 5.3 The original EMD-BG should be sent by the Bank directly in the address of Tender Inviting Authority (TIA) and for other BGs to EIC/MIC mentioned in the Work Order through Registered/Speed Post with AD. It may be noted that the BG Format requires mentioning of the address, Phone, Fax no. and email ID of the issuing Bank. On receipt of Original BG, it will be forwarded to Finance by EIC/MIC through Inter Office Memo (IOM).
- 5.4 Each BG contains a start date, expiry date and claim date. The validity of BG (Start date to expiry date) should cover the Tender/Contractual execution period. A further claim period of 3 months is required to lodge a claim for extension/encashment of BG if necessary. Therefore, the claim date should be 3 months beyond the expiry date. If a consolidated BG is provided including claim period, 3 months will be considered as claim period and accordingly BG extension should be provided to cover Tender/Contract requirement.
- 5.5 BG extension whenever required should ideally be provided 15 days prior to Expiry date from the same Banker against the Original BG with reference to the Tender/Contract. However, in specific cases if a new BG from a different bank is provided against the Original BG the subsequent BG should also cover the obligations under original BG period. The subsequent banker has to give an undertaking in this regard in their BG forwarding letter in letter head.

6.0 ORDER OF PRECEDENCE OF CONTRACT DOCUMENTS:

- 6.1 The documents as stated below shall constitute the integral part of Contract Documents. In the event of any ambiguity or conflict between the Contracts documents as given below, the order of precedence shall be the order in which they are listed. All documents forming part of this tender are intended to be correlative, complimentary and mutually explanatory. The tender documents should be read by the bidder as a whole before bidding the tender.
 - 6.1.1 Conditions of Integrity Pact.
 - 6.1.2 Bill of Quantity.
 - 6.1.3 Scope of Work/Technical Specifications.
 - 6.1.4 Drawings if any.
 - 6.1.5 Special Conditions of Contract.
 - 6.1.6 Instruction to bidders/NIT.
 - 6.1.7 General Conditions of Contract (GCC).
 - 6.1.8 Relevant Indian Standards.
- 6.2 If any varying or conflicting situation arises in any of the document forming part of the Contract, NALCO's decision with regard to intention/interpretation of the document and the decision shall be final and binding on the parties.

7.0 MODE, SUBMISSION, RECEIPT AND OPENING OF TENDER:

- 7.1 Corrigendum and/or Clarification, if any issued for the NIT shall form part of the Tender Documents. Corrigendum and/or Clarifications will be hosted on the web-site www.eprocure.gov.in and no separate intimation will be given to the bidders or released in the press. Bidders are requested to visit the web-sites from time to time to note the Corrigendum and/or Clarifications before submission of their bid. NALCO shall not be responsible if any bidder omits to notice any Corrigendum and/or Clarifications and make necessary change if required in their submitted final bid.
- 7.2 Telex/ Telegraphic/ Fax/ E-mail bids shall not be accepted.
- 7.3 Before submission of the bid, the bidders are requested to read the bid document carefully to make themselves fully conversant with the GCC, Special Conditions of Contract and Conditions of bidding, Specific conditions, technical Specifications and bid drawings if any. The bidder should visit site and get familiarized with the site conditions so that, no ambiguity may arise in these respects, subsequent to submission of the bids.
- 7.4 Nalco's General Conditions of Contract (GCC) & Special Conditions of Contract (SCC) if any shall form part of this contract. The tenderer is advised to go through the same either in the office of the Tender Inviting Authority during office hours to seek clarification if any, or may refer to NALCO web site and get them-selves satisfied before quoting the rates. It will be taken for granted by NALCO that tenderer has seen and gone through the terms and conditions and shall abide by same.
- 7.5 The forwarding letter / covering letters & information is to be included in the offer. The instruction given in the checklist of single part / two-part bids must be strictly complied.
- 7.6 Tenders are to be uploaded in the e-procure web site (www.eprocure.gov.in) on or before time & date specified at Sl. No. 5.0 of F-02 form of Contract Details, **Annexure-B1**. The PART-I bids in case of two-part tendering and Single part bid in case of LTE shall be opened at the time & date specified at Sl. No. 6.0 of F-02 form of Contract Details, **Annexure-B1**.
- 7.7 The price bids of technically qualified bidders shall only be opened on a later date. The date & time of opening of price bid shall be intimated to the qualified bidders through www.eprocure.gov.in website.
- 7.8 Bidders are advised to submit complete set of Tender documents along with ANNEXURE-B4 & ANNEXURE-C3 etc. under CPP Portal in the Online Mode. Price Bid shall also be uploaded online only.
- 7.9 All the supporting documents to meet the PQC need to be uploaded with the offer after attesting them by a gazette officer or notary public and are required to sign each page by the bidder or by their authorized representative. The hard copy of these PQC compliant documents should reach the office of the Tender Inviting Authority before the due date & time of bid opening.
- 7.10 **As per Manual for Procurement of Works 2019 Ministry of Finance Department of Expenditure 5.4.5 Normally no post bid clarification at the initiative of bidder shall be entertained. The shortfall information /documents if any may be sought only in case of historical documents which pre- existed at the time of tender opening and which have not undergone change since then. So far as the submission of documents is concerned after submission of the tender, Nalco may ask and consider, only related shortfall documents. For example, if the bidder has submitted a contract without its completion / performance certificate / annual turnover, the certificate can be asked for and considered. However, no new contract will be asked further so as to qualify the bidder. No post-bid clarification at the initiative of the bidder shall be entertained. Hence bidders are required to take due care to upload all relevant work credentials available with them in order to avoid rejection.**

- 7.11 Deviations of any form are not acceptable in case deviation is unavoidable, bidders are instructed to give all deviations in the enclosed deviation statement sheet (**Annexure-C3**) only, along with the tender document. Please be informed that only deviation statement will be considered for further evaluation. Deviations at any other place will not be considered. Deviations in LTE single part will not be considered in any case and the bids will be rejected.
- 7.12 Deviation(s) listed at any other place of the tender shall not be considered at all and shall not be binding on NALCO. The tender shall be evaluated based on the deviation statement and no claim whatsoever shall be entertained irrespective of bidder has accepted this particular clause or not.
- 7.13 Financial implications of the agreed deviation as per assessment of NALCO will be loaded on the price quoted by the bidder. Deviation not accepted by NALCO will have to be withdrawn by the bidder otherwise such bids may be disqualified/rejected. In case of withdrawal of deviations to NIT specification, if any bidder insists for revision in price before opening of price bid and Nalco agrees for the same, the submission of price implication shall be in offline mode from the bidder in a sealed envelope by hand/password protected file through e-mail within a stipulated time.
- 7.14 NALCO reserves the right to defer the date of tender opening in case the response is considered inadequate or due to any other reasons. In such event, the bidders shall be intimated the next date of opening subsequently.
- 7.15 The bidder shall ensure submission of complete information / documents in the first instant itself. NALCO reserves the right to evaluate the offer based on the details furnished by the bidders on the scheduled date of tender submission without seeking any subsequent additional information.
- 7.16 All the pages of GCC duly signed & stamped by authorized signatory should be submitted along with the agreement / offer. In case of online offers, the copy of GCC is to be uploaded with the offer after digitally signed by the bidder.
- 7.17 Declaration regarding Relationship with Board of Directors and Employees of Nalco: The contractors must furnish certificate as mentioned in **Annexure-C19** & **Annexure-C20** enclosed, disclosing in detail about their relatives in Nalco. Suppression of this information in any form if detected at any stage will lead to disqualification and lead to rejection of the offer or termination of the contract as the case may be. The concerned party may also be banned from participation in future tenders.
- 7.18 Owner's Right to Accept or Reject a Bid: A bidder may seek clarification regarding the bidding document provisions, bidding process and / or rejection of his bid. NALCO/Consultant shall respond to such queries within a reasonable time.

8.0 EVALUATION OF BIDS:

- 8.1 The price bids of the techno-commercially qualified bids in case of two-part bid system & bids in case of single part bidding shall be evaluated as per the note of "Quantity & Rate Schedule" (**Annexure-B4**) in the excel format available in the e-procurement site.
- 8.2 In case there is a tie in L-1 position, the concerned bidders may be called to offer maximum possible discount on their quoted rates/revised rate in sealed envelope in order to decide the L-1 bidder among the considered bids.
- 8.3 In case "tie" of price bids, even after application of clause 8.2 above, the following criteria shall prevail in the given order.
 - 8.3.1 Bidder having highest average turnover during last three years shall be preferred. Average Annual Turnover shall be decided based on audited profit and loss account submitted by the bidder for the last three financial years.
 - 8.3.2 The contractor executing the same contract satisfactorily will be preferred.
 - 8.3.3 The contractor of the previous contract, who has executed the same work satisfactorily, will be preferred.
- 8.4 In case of tie for L2 or other positions and L1 price matching is to be made for splitting of the job as per NIT condition, then L2, L3 etc positions shall be determined by applying criteria at sl no. 8.3 above.

9.0 ACCEPTANCE OF TENDER:

- 9.1** NALCO reserves the right to reject or accept any or all the offers in full or part, split the work, reduce or increase the quantity, without assigning any reason thereof.
- 9.2** NALCO reserves the right to award the work in parts between two or more agencies if considered expedient. The quoted rates shall hold good for such an eventuality. Reference is also invited to clause No: 9 of General conditions of contract.
- 9.3** Validity of Offer: - The validity of the offers submitted by the bidders shall be as per F-02 Form i.e. Contract Details in **Annexure-B1**. In case the validity of offers expires during the processing of the case, all the bidders / techno-commercially accepted bidders shall be requested to extend the offer validity with same price and terms & condition of the tender. The offers of such bidders shall be rejected if they do not extend the validity unconditionally.
- 9.4** Bidders may note that, Brief Order / Letter of Intent / Fax of Intent / Service Purchase Order placed, is in acceptance of their offer by NALCO and shall be binding on them. However, the bidder has to return a copy of LOI / FOI / Service Purchase Order duly signed by them or their authorized representative as a token of receipt of the same within seven days of issue of the same for our records. In case of no communication of the same is received within the stipulated time from their end, it will be presumed that the party has received the Brief Order / Letter of Intent / Fax of Intent / Service Purchase Order.
- 9.5** Any communication such as Letter, BO, LOI, FOI, SPO etc. shall be communicated to the Bidder through Registered post/ Speed post/ Fax/ Hand delivery/ By mail registered with Nalco. Any communication through any one or more of above modes shall be valid and binding on the Bidder.

10.0 CONTRACT PERIOD:

- 10.1** Timely completion is the essence of the Contract. The contract period for this work shall be as mentioned in Sl no:3 of F-02 form (**Annexure-B1**) of contract details and shall be applicable from the effective date as mentioned in the service purchase order/LOI. Time period of completion” of individual items/activities may be decided jointly by Manager-In-Charge and contractor, which shall be adhered to by the contractor.

11.0 OCCUPATIONAL HEALTH & SAFETY MANAGEMENT SYSTEM:

- 11.1 Safety:** The contractor shall have to take necessary safety arrangements/ precautions for the workmen engaged by him and shall be responsible for any First Aid / Emergency treatment for his labours / workmen. In addition, the contractor shall have to abide by all fire & safety regulations of the owner. The contractor has to execute the works after taking necessary instruction & safety clearance from the safety officer.
- 11.2** All lifting/handling tools & tackles deployed by the contractor should have been load-tested as per the prevailing rules & regulations. Mobile equipments such as Truck, Tractors, Tippers, Dumpers etc. shall have valid fitness certificate with due insurance required as per the prevailing rules & regulations. Wherever transport of material is applicable, the contractor has to ensure that goods carried during transportation do not exceed the permitted laden weight as certified by registering authority for the respective vehicles.
- 11.3** Personal Protective Equipment (PPE): The contractor shall have to provide all the necessary PPE to the workmen engaged by them as per the requirement, area wise as mentioned in the PPE format. In case the contractor fails to provide PPEs as per requirement, at the time of starting the job, they will not be allowed to carry out the assigned job. PPEs can be got issued from NALCO on request with recovery of purchase cost, plus administrative charge @25% of Procurement cost as penalty plus GST on administrative charges as applicable. (**Annexure-A3**).
- 11.4** The contractor, before starting the work, shall collect a copy of the **safety manual** from Safety Department and shall abide by all instructions mentioned therein.
- 11.5** The contractor shall be responsible to promote awareness on the OSHAS requirements among the workmen engaged by them for the subject job and ensure adherence to sound OSHAS related practices as detailed in the "**Occupation Health & Safety Policy**" enclosed herewith. The contractor shall be responsible for abiding by all the applicable provisions of safety code of contractors which is available in the NALCO web site. The contractor shall contact Safety Dept. for getting necessary advice/compliances as required.
- 11.6 Medical Checkup of Workmen:** Contractors will have to submit medical certificate from a Govt. Hospital or registered medical practitioner in the prescribed format for the workmen engaged by him along with application for gate pass and for annual renewal. No gate pass will be issued/ renewed unless the medical certificate is enclosed along with the application.

12.0 ENVIRONMENTAL REQUIREMENTS:

- 12.1** The contractor shall be responsible to promote awareness on the Environmental requirements among the workmen engaged by them for the subject job and ensure adherence to sound environmental practices as detailed in the "**General Environmental Requirement & Environmental Policy**" enclosed at **Annexure-A7**.
- 12.2** The contractor shall remove all the waste/debris generated during the work on each occasion & dispose off to a place identified by Manager-in-charge. The thorough up-keeping of the work spot before the contractor leaves the work spot is essential. In case the contractor fails to comply with the above, the owner may get the up-keeping done & recover expenses incurred plus administrative charge @25% of the expenses incurred as penalty plus GST on administrative charges as applicable from the contractor.

13.0 ENERGY MANAGEMENT SYSTEM (ISO 50001):

- 13.1** The Energy Policy of NALCO is attached (**Annexure-A6**). The Service Provider needs to comply all the requirements of the Policy in consultation with the Manager-in-Charge of the contract.
- 13.2** Mandatory guidelines for saving any form of energy: Energy is lifeline of an Organization and SMELTER / CPP, NALCO is implementing Energy Management Systems (EnMS) – ISO 50001 in all activities. The contractual service providers are advised to train his workmen for practicing the following "Dos & Don'ts" while executing the assigned work at site.

WHAT TO DO?	WHAT NOT TO DO?
1. Use compressed air for instrument cleaning if advised by NALCO	1. Never open any compressed air for body / dress/ vehicle cleaning.
2. Close water line valves if they are in open condition	2. Never allow any water line in open condition.
3. Use water for instrument equipment cleaning if advised by NALCO	3. Never use any water line of the plant for cleaning of bicycles / vehicles.
4. Use LPG for cooking if at all required	4. Never use any electrical heater for cooking or room heating.
5. Switch off lights/ fans in day time when not required	5. Never waste electricity in any way.
6. Touch only that part of equipment for which you are authorized by the Engr. I/C	6. Never touch any isolators / switches of any equipment.
7. Handle coke, pitch, oil (FO, HSD, LDO) & LPG with due care as they are costly.	7. Never waste any quantity coke, pitch, oil (FO, HSD, LDO) & LPG a drop of any types of oil.

14.0 SECRECY TERMS: -

- 14.1** The contractor shall use all the documents, drawings, data & information of proprietary in nature, received from NALCO, solely for the purpose of performing and carrying out the obligations on their part under this contract. He shall not disclose the same to any other person except to the extent required in the performance of the work and shall maintain the utmost secrecy. Contractor and NALCO shall bind their employees, who are involved in engineering of the project by a suitable secrecy contract. The documents, drawings, data and information received from NALCO shall not be used by contractor for any other purpose and will also keep them confidential. All data, documents and information provided by Contractor during the course of execution of the work will be treated as confidential by NALCO and will not be released to any third party, without specific written permission of Contractor.
- 14.2 Breach of Secrecy:** In case of breach of secrecy by the Contractor, Nalco will have right to terminate contract, Security Deposit and claim damages from the party.

15.0 EXECUTION OF CONTRACT AGREEMENT:

- 15.1** The contractor shall have to execute an agreement on **Rs.50/-** non-judicial stamp paper to be purchased from any stamp vendor under the jurisdiction of the Orissa High Court, in the specific format (**Annexure-C23**). Issuing authority of work order shall sign the agreement on behalf of NALCO. The agreement shall not be required to be executed for work orders of value less than or equal to **Rs.1,00,000/-**.
- 15.2** The agreement should be submitted to T&C Department, within 10 days of issuance of LOA/LOI/SPO or before the effective date mentioned in the Service Purchase Order whichever is later.
- 15.3** Contract Agreement is mandatory before starting of work. EIC/MIC will ensure before Gate Pass is issued.
- 15.4** No bill shall be payable unless the agreement is signed, if signing of agreement is applicable

16.0 SUPERVISION:

- 16.1** The contractor shall have to work as per direction of the Manager-in-charge and shall report to him daily regarding day-to-day progress. The contractor shall give full access to the Manager-in-charge / authorized representative of NALCO to inspect day-to-day work executed by the contractor. Besides, the Contractor will take full responsibility to ensure proper workmanship, good quality of work and supervision during the contract period without any additional cost.
- 16.2** Under prevailing statute, the supervision should be carried out by a capable competent person.

17.0 PAYMENT OF WAGES TO ENGAGED LABOUR AT SITE:

- 17.1** Payment of wages to the labour employed by the contractor shall be as per the Central Government notification fixing minimum wages for different categories of labour in Central Public Enterprises from time to time plus an additional element as indicated below (as a part of wages). The contractor shall have to make labour payment accordingly, along with applicable statutory benefits. Therefore, the contractor must quote their rates considering the labour rates indicated at **Annexure-B5**.
- 17.2** The contractor has to ensure payment of minimum bonus @ 8.33% on the notified minimum wages for each category including the additional elements but excluding canteen subsidy (Considering minimum salary as Rs.7000/- per month) to all his workmen engaged in the contract annually.
- 17.3** As per statutory provisions, contractors will have to pay the monthly wages of contract labourers latest by 10th of subsequent month as well as deposit the statutory contributions within due date. In case of failure to do so, NALCO as principal employer will pay wages/release the payments to the concerned labourers at any time after the 10th of subsequent month without any further intimation.
- 17.4** If the date of payment is beyond 10th of subsequent month or there is direct payment, Nalco reserves the right to recover up to 25% as administrative charge on the amount of labor payment plus GST on administrative charges in the RA/Final Bill.
- 17.5** The contractor failing to make payment of labour wages as per applicable Law, may be debarred / banned for conducting future business with NALCO.

18.0 LABOUR LAWS:

- 18.1** The successful bidder shall abide by all applicable statutory provisions in respect of workmen deployed by him to the satisfaction of Central & State Government Authority. The contractor shall comply with the provisions of all statutes and amendments thereof at their cost for different legislations as under. The contractor shall have to abide by and comply with any Modification/ Change/ Amendment to the existing laws or introduction of any new law relating to the work and rules framed there under from time to time. The list is indicative and not exhaustive.

- 18.1.1 Building & other Construction Workers (RE & CS) Act 1996
- 18.1.2 Child Labor (Prohibition & Regulation) Act 1986,
- 18.1.3 Employees' Provident Fund and Miscellaneous Provisions Act, 1952.
- 18.1.4 Employees' State Insurance Act, 1948.
- 18.1.5 Factories Act, 1948
- 18.1.6 Industrial Dispute Act 1947,
- 18.1.7 The Inter-state Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1976
- 18.1.8 The Maternity Benefit Act 1961
- 18.1.9 Minimum wages Act 1948.
- 18.1.10 Payment of Wages Act 1936,
- 18.1.11 Payment of Bonus Act 1965,
- 18.1.12 Payment of Gratuity Act, 1972
- 18.1.13 Employees' Compensation Act 1923.
- 18.1.14 Contract Labour (R&A Act, 1970)

19.0 GATE PASS & SECURITY:

- 19.1 Normally before starting of work, EIC/MIC will ensure that Contract Agreement is signed otherwise, Gate Pass should not be allowed. Therefore, the contractor shall have to produce the Contract Agreement and arrange valid gate pass for the labour/ workers engaged by him in order to enter into the factory premises if the work is to be executed inside the plant. (Refer Form No: F-02 of Sl. No- 15 at **Annexure-B1**).
- 19.2 **Issue & Use of Electronic ID Card:** All the contract workers will be provided with electronic entry/exit pass by CISF before mobilization of site/commencement of work by the contractor. All contract workers shall use this ID/Punch cards for making entry into /exit from the plant. After expiry of the contract, ID/Punch card will be surrendered by the workers at the time of closure of contract through the contractor. In case of loss /missing of ID/Punch card, contractor has to deposit Rs. 200/- per card in the cash counter of NALCO for issue of fresh identity card. In case of discontinuation of job by the workers, the cards will be surrendered to the CISF under intimation to unit HRD.
- 19.3 Attendance of contractor's workers will be regulated through biometric punching systems. In case of discrepancy, decision of EIC/MIC will be Final & Binding on the contractor.
- 19.4 **Use of Online Contract Labour Management System (CLMS):**
An online Contract Labour Management System (CLMS) has been launched across NALCO w.e.f. 01.07.2017. As per the portal architecture, every contractor employing contract labour in NALCO shall have to use this online portal for various activities like safety clearance, issue of gate pass, application for license in Form II, issue of certificate from Principal Employer (NALCO) in Form III for obtaining license from the Central Labour Department, preparation of monthly wage sheets, issue of wage slips, employment cards, preparation and filing of returns, maintenance of statutory registers etc. The contractors have to use the CLMS for entering relevant data about themselves and the labour engaged by them for getting the benefits of the system. Since the package has been developed as per the mandate given by the Management and is being closely monitored by the Ministry of Mines as an item on the DASHBOARD, use of the system is mandatory for the contractor.
- 19.5 **TIME OF WORK: The factory timings are as follows:**
`A' shift-6.00 AM to 2.00 PM, `B' shift-2.00 PM to 10.00 PM, `C' shift-10.00 PM to 6.00 AM,
`G' shift-8.00 AM to 5.00 PM (with 1.00 Hr lunch break from 1PM to 2PM)

20.0 MATERIAL TOOLS & TACKLES:

20.1 The contractor shall have to make his own arrangement for supply and storage of his materials / consumables and general tools, tackles, welding sets, electrodes, chain pulley blocks, slings, gas welding/cutting sets, in connection with execution of work. No extra payment shall be applicable for such provisions. Wherever required consumables of approved quality like general purpose welding electrodes, cleaning agents, Oxygen gas, D.A. gas, etc to execute the contract shall be in Contractor's scope and contractor must arrange these materials at their own cost unless mentioned otherwise in the tender documents attached herewith. Apart from the above any job /tender specific requirement of materials is indicated in special condition of contract.

20.2 **FREE ISSUE MATERIALS / CONSUMABLES:**

Unless mentioned otherwise in the attached tender documents, Argon Gas & Co₂ gas will be supplied by Nalco as Free Issue Item if required for the work executed inside plant. The contractor will do transportation from issue point to work site.

Issue of cement and steel as Free Issue shall be governed by clauses 52 to 54 of GCC unless mentioned otherwise in scope of work / special conditions / BOQ or elsewhere in this tender document subject to the followings:

20.2.1 For issue of materials within plant boundary wall limit, the contractor shall submit only indemnity bond for the entire value of materials issued to them free of cost as per clause 53 (ix) of GCC.

20.2.2 For the materials which are issued for outside plant boundary such as Ash Pond area , Intake Pump House , Lean Slurry area , Bidyut Nagar Colony , township, CISF Barrack etc, the contractor shall furnish Bank Guarantee equivalent to 20% of the value of material and indemnity bond equivalent to 80% value of materials being issued to the contractor.(Ref Sl no. 8.1 & 8.2 of Form F-02 (**Annexure-B1**) of Contact Details)

20.2.3 For materials taken out side plant to the vendor's shop, Bank Guarantee equivalent 100% of the value of the materials will be submitted by the vendor before taking out the materials.

20.2.4 The Indemnity bond and the Bank Guarantee shall remain valid till the material account is totally settled. The BG and Indemnity Bond shall be submitted in the prescribed format enclosed (Refer **Annexure-C10 & Annexure-C15**).

20.2.5 The materials drawn if any by the party as "free issue materials" from NALCO should be reconciled. The reconciliation statement of free issue items / materials should be submitted to the EIC/MIC for certification to be submitted along with RA Bill. The final reconciliation statement should be submitted along with final bill for release of final payment.

21.0 ENERGY/WATER/GROUND/BUILDING PREMISES:

21.1 Provision of Power/Water/Land/Building to Contractor's Works.

21.1.1 Lump Sum Turn Key (LSTK) Contracts- Electricity charges shall be billed @ Rs.4.30 /KWH on meter reading. Water charges will be billed on monthly basis by Estate department, @ Rs. 150.00 per month or part thereof. Ground/Building Premises inside plant will be provided without any rent. However Building premises provided inside Township will be on chargeable basis as per Rent Circular.

21.1.2 Other than LSTK Contracts : If Electricity and Water is required for the work to be executed, it will be supplied by Nalco free of cost from any suitable point. The contractor shall have to make arrangements, at his own cost, for tapping and using the power/water so required as per advice EIC/MIC. Ground/Building Premises will be provided without any rent.

21.1.3 For availing Electrical energy, the contractor shall have to provide, at his own cost, a MCB (Miniature Circuit Breaker) at the point of power supply by Nalco. The MCB shall have to be of a suitable capacity as decided by Nalco's electrical authorities for the concerned area and shall have to be replaced, as and when warranted, on the grounds of changed power requirements or the MCB having been defective and/or damaged.

- 21.2 Power and Water Supply to Contractor's Establishment:** The following points shall be complied in addition to Nalco GCC Clause No. 2.3 for giving power supply to Contractors' Establishments:
- 21.2.1** Power and Water supply will be provided to the contractor to whom the permission has been granted by Estate Department to have establishment in the township/plant as per requirement. Ground/Building Premises inside plant will be provided without any rent. However Building premises provided inside Township will be on chargeable basis as per Rent Circular.
 - 21.2.2** Contractor have to make all arrangements to receive power from designated panels by laying necessary cables and installing suitable distribution board. They have to apply to Estate department through the Engineer-in-Charge. The application will be made in prescribed format and a completion certificate by licensed electrical contractor will be enclosed. The representative of DGM (Elect) will inspect the installation and after getting their clearance, power supply will be charged. The individual establishments are to be maintained and managed by contractors as per IE rules.
 - 21.2.3** At the time of charging of power supply, initial meter reading will be jointly noted by representatives of contractor, Estate Department and Electrical Department.
 - 21.2.4** Every month, energy meter reading will be jointly taken by representatives of Estate Department and Electrical Department. Electricity Bill will be raised by Estate Department @ Rs.4.30 per KWH basing on the meter reading as per the prevailing rate. However, the rate is subject to revision time to time.
 - 21.2.5** Water charges will be billed on monthly basis by Estate department, @ Rs. 150.00 per month or part thereof. However, the rate is subject to revision from time to time.
 - 21.2.6** The contractor has to deposit Water & Electrical Charges on monthly basis. While processing any Final Bill relating to any work, the contractor has to submit clearance certificate from Estate Department covering period under Final Bill.
 - 21.2.7** While processing final bill of the contractor they must enclose Disconnection Certificate from Estate Department for power/water supply connection or Certificate regarding Continuation of connection due to other valid contract with proper reference through concerned EIC & Estate Department.
 - 21.2.8** The final bill will not be processed without compliance of the above. (Supporting document to be attached)
 - 21.3** The contractor must dismantle the structure constructed by him for the purpose of office-cum-store on completion of the contract as per the provision of GCC clause no.2.4.2. If the same is not dismantled within two months of completion of contract, he will not be issued any tender paper or will not be allowed to participate in any tender. Besides with-holding of final bill, other penal action as per contract / Law as deemed fit may be initiated against the contractor.
 - 21.4** Following penal actions shall be initiated against the unauthorized occupant;
 - 21.4.1** Disconnection of power and water supply lines to be made,
 - 21.4.2** Penal rent @ Rs.10,000/- per month Plus GST as applicable or part thereof towards the ground rent and 20 (twenty) times penal rent towards electricity and water charges shall be recovered,
 - 21.4.3** Initiation of eviction proceedings in the Estate Court for outside Plant establishments

22.0 QUANTITY & RATE:

- 22.1** The quantity & rate schedule format is enclosed at **Annexure-B4**. Bidders are required to quote their rates in figures as well as words in the enclosed **Annexure-B4** only. In case of any discrepancy between rate in figures, words and amount quoted by the bidder, the relevant provision of GCC will apply to resolve the matter.
- 22.2** The tenderers must quote their most reasonable and workable rate. Overall total evaluated price for all items of schedule of quantities shall be the basis for determining the reasonableness of price and gradations of the tenders. In case the offered price of the tenderer(s) is found to be abnormally low (un-workable), based on the rate approved by NALCO, the tenderer(s) may be asked to justify their quoted rates within ten days of issuance of letter to that effect through email. The bidder must provide written clarification including detail price analysis of its bid price in relation to Scope, Scheduled, allocation of risks and responsibility, and any other requirement of the bid documents. However, if after evaluating the price analysis, NALCO determines that, the bidder has substantially failed to demonstrate its capability to delivered the contracts at the offered price, then NALCO may reject the bid / proposal. NALCO also reserved the right to award the job without seeking clarification or receiving clarification from the bidder about the price reasonability. EMD of such tenderer, who refuses to justify their quoted rate shall be forfeited.
- 22.3** Bidder shall quote in figures and in words for the rates tendered by him in the “Quantity & Rate Schedule” (**Annexure-B4**) forming part of the documents, in such a way that misinterpretation is not possible. The amount for each item shall be worked out and entered in the requisite column for all items.
- 22.4 Price bids must not contain any conditions stipulated by the bidders. Conditional price bids are liable for rejection.**
- 22.4.1** No discount over quoted rate / total amount should be mentioned separately in the offer.
- 22.4.2** No additional rate over quoted rate / total amount should be mentioned separately in the offer.
- 22.4.3** Bidders shall submit the details about engagement of Agents/ Middlemen/ Intermediary/ Consultants / Service Providers and payments proposed to them by the bidder and it should be a part of the present bid.
- 22.4.4** All corrections and alterations in the entries of tender document if any shall be signed in full by the bidder with date. No erasures and over writings are permissible.
- 22.4.5** Bidders are required to quote for all items of the “quantity and rate schedule” (**Annexure-B4**) otherwise the offer will be dealt as per rules of NALCO & may be rejected as an incomplete offer.
- 22.4.6** Bidders are required to quote their best prices considering the fact that price negotiation, if required, may be held with the lowest bidder only.
- 22.4.7** Bidders are required to quote their rates up to two decimal places only. Decimal digits beyond two will be rounded off to two decimals for evaluation/placement of order.
- 22.5** Quantity Variation:
- 22.5.1 Item rate contracts:** The Quantities mentioned in the schedule are approximate in nature and may vary by a wide margin within the contract value for which the contractor shall have no option but to execute the works, as per direction of the Manager-in-charge at the same rates, terms & conditions of the order. NALCO may negotiate the rate of items whose execution quantities is considered for increase during their execution, which will be agreed mutually. Payment shall be released to the contractor for the actual executed quantity only.
- 22.5.2 Lump sum/ Turnkey Contracts:** In case of Lump sum/ Turnkey (LSTK). Adjustment to the contract value due to such change in scope of work shall be governed by the provisions of GCC.
- 22.6 REVISED PRICE IMPLICATION:**
- 22.6.1** In case of necessity due to post tender changes in specifications / scope of work / terms & conditions of NIT etc. before price bid opening, corrigendum shall be issued regarding the changes to all concerned techno-commercially qualified bidders and they shall be permitted to submit the corresponding price implication if any in offline mode in sealed envelope by hand / password protected file through e-mail within a stipulated time.
- 22.6.2** The price implication submitted in offline mode by the bidders (Refer Clause 7.13 & 22.6.1) shall be opened and uploaded in GeM Portal before opening of original price bids. The evaluation will be done taking into account the original on-line price bid along with offline price implications.
- 22.6.3** In no case, bidder shall be allowed to submit revised price bid post bid submission date.

23.0 QUALITY OF WORK:

- 23.1** The contractor shall execute the job under adequate supervision of experienced and qualified personnel in accordance with the best engineering practices and the specification laid down in the enclosed Annexures. NALCO may inspect the work any time without notice to the contractor and may order re-execution of sub-standard work reserving the right to recover compensation in terms of GCC.
- 23.2** Inspection and test procedure given in the relevant clauses of the contract or BIS codes or other codes in practices as specified in the Scope of work / Special Conditions of Contract should be strictly followed.
- 23.3** Contractor shall use instruments calibrated in a Laboratory, accredited to NABL / Laboratory approved by the manufacturer for measurements/tests/inspection.

24.0 SECURITY DEPOSIT:

- 24.1** On receipt of the order, the successful bidder shall deposit with NALCO an amount, equivalent to 10% of the order value as Security Deposit within 20 days from the Effective Date, mentioned in the Service Purchase Order/LOA/LOI.
- 24.2** Alternatively, successful bidder can deposit Initial Security Deposit amounting to 2.5% of the contract value, within 20 days from the Effective date, mentioned in the Service Purchase Order /LOA/LOI. In this case, the balance amount of the security deposit shall be recovered through deductions from RA bills in installments through deduction @ 10% from gross RA bill of contract value till total SD is collected.
- 24.3** In case the successful bidder fails to submit the ISD /SD, within scheduled date, the ISD amount along with a simple interest @12% per annum plus GST on interest amount, applicable from the schedule date till the date of submission of ISD or full recovery of ISD amount, shall be made starting from 1st RA bill.
- 24.4** The contractor can submit the initial SD or total SD in the form of either bank draft or bank guarantee from any NALCO approved bank in the prescribed format (Annexure-C14)
- 24.5** The Earnest Money Deposited, except in the form of BG along with the tender, if any shall be adjusted towards security deposit / as per clause no 19.4 of GCC.
- 24.6** The security deposit will be released along with release of final bill if there is no DLP or on successful completion of the DLP, with certification of Manager-in charge / Engineer-in charge. The vendor has to claim such refund along with Final Bill or within 15 days from the closure of DLP as the case may be.

25.0 TAXES & DUTIES:**25.1 GOODS & SERVICES TAX (GST)**

- 25.1.1** The Rates indicated in **Annexure-B4** are inclusive of all but exclusive of GST.
- 25.1.2** The contractor must provide GST No including copy of Registration Certificate.
- 25.1.3** The Trade Name in GST Certificate should match to the name in vendor code and name in the Cheque. The Legal name in the GST Certificate should match to Legal Name in the PAN. In case of a Company or a Firm all the names should be same. But in case of Sole Proprietorship, the Legal Name and Trade Name may be different.
- 25.1.4** The contractor should submit the GST Invoice as per the format **Annexure-C9** providing HSN / SAC Code (first 6 digits) and GSTIN of both Vendor and Nalco in the form of Business to Business (B to B) transaction.
- 25.1.5** As per Rule-46 of GST Act, the Serial Number of Tax Invoice should be maximum up to 16 digits, and should be unique for a Financial Year.
- 25.1.6** As per Rule-47 of GST Act, time limit for issuing Tax Invoice is 30 days from the date of Supply of Service.
- 25.1.7** Payment of GST is subject to compliance as stated in Payment Terms.
- 25.1.8** The contractor shall be fully & solely responsible to the statutory authorities for compliance of all the provisions of GST and other statutory provisions applicable to this work as a service provider either already enacted or to be enacted from time to time during contractual period.
- 25.1.9** NALCO reserves the right to recover any penalty and Interest imposed on NALCO by the concerned statutory authorities due to non-fulfillment of GST compliance by the service provider.

25.2 Anti-Profitteering Clause (Sec 171 of CGST Act) Applicable for Indian Bidders)

- 25.2.1** If any new Tax/Taxes is introduced on sale of goods/service. Either in lieu of existing tax/taxes or as separate tax/taxes, then the overall incidence of tax/taxes on the Vendor on account of its inputs and outputs wherever less than the incidence of existing taxes, then the Vendor shall pass on to Owner, the benefits thereof by way of commensurate reduction in the basic price w.r.t. Input Tax benefit and reduction in Tax chargeable to Nalco w.r.t. Output Tax benefits in connection with goods and/or services provided.
- 25.2.2** If on the other hand, the incidence of tax/taxes is in excess of the incidence of existing tax/taxes, the Owner on submission of satisfactory proof, shall reimburse the Vendor the additional incidence of tax provided they are within the contractual completion date.
- 25.2.3** The Vendor has to provide a declaration along with the Tender that they will abide by the requirements under CI 171 of CGST Act, 2017.

25.3 INCOME TAX:

- 25.3.1** The contractor must provide PAN including copy of Registration Certificate.
- 25.3.2** Income Tax TDS, as applicable at the prevailing rate on the gross amount billed shall be deducted from the contractor's bills.
- 25.3.3** The contractor shall be fully & solely responsible to the statutory authorities for compliance of all provisions applicable to this work as a service provider under Income Tax Act, already enacted or to be enacted from time to time during contractual period.
- 25.3.4** NALCO reserves the right to recover any penalty and interest imposed on NALCO by the concerned statutory authorities due to non-fulfillment of all provisions applicable to this work as a service provider under Income Tax Act, already enacted or to be enacted from time to time during contractual period.

25.4 CESS UNDER RE&CS ACT

Cess will be deducted as per Workers' (RE&CS) Act 1996 and as stated under payment terms.

25.5 ROYALTY CLEARANCE.

As per Mines and Minerals Act of Govt. of Orissa the contractor is required to pay royalty for various types of construction materials (minor minerals) used in the work. The royalty charges shall have to be deposited in the office of Tahsildar from whose jurisdiction the minerals have been lifted and submitted along with Final Bill.

26.0 BILLING & INVOICING:

- 26.1** Measurement of the work done, during a period, against a Contract is very much essential for correct accounting. This is more so necessary at the end of each financial year. Therefore the contractors are expected to stick to the periodic billing schedule as per the Order. The billing system followed in Nalco is called Running Account Bills (RA Bills) to be generated in prescribed format through ERP system based on measurement of work done during a period with certification by Contractor and approval by EIC/MIC. RA Bills will be sequentially numbered and the last RA Bill will be called nth RA & Final Bill.
- 26.2** Period of raising RA Bill and GST Invoice will normally be 1 month unless otherwise specified in Special Condition of Contract (**Annexure-B3**). GST Invoice amount should always match to RA Bill / Final Bill amount.
- 26.3** Vendor/Party categorised/designated as "specified person" under Section 206AB of Income Tax Act, 1961, shall be liable for TDS at higher rate as provide under the said section, by NALCO. So, Vendors/Contractors are advised to submit self-certified copies of Income Tax return (ITR) for each of the Two Previous Years for which due date for filling of ITR has expired, along with the Invoice/Bill so as to facilitate NALCO, verify the applicability of Section 206AB.
- 26.4** The RA Bill (in duplicate) will be accompanied by
- 26.4.1** Joint Measurement Sheet signed by Contractor & EIC/MIC.
- 26.4.2** R.A. Bill Form signed by Contractor & EIC/MIC.
- 26.4.3** Human Resource Dept. (HRD) Clearance (if applicable)
- 26.4.4** Safety Certificate in 1st RA Bill issued by Safety Dept
- 26.4.5** Any other document required by EIC/MIC or as per directive from statutory authorities.
- 26.4.6** Deviation statement once the executed value reaches 80% of the Order value.

- 26.5** Similarly, in addition to above the Final Bill (in quadruplicate) will be accompanied by
- 26.5.1** Material Reconciliation Statement for Free Issue Material, (if applicable)
 - 26.5.2** Stores Issue Voucher, Stores Return Voucher, Material Transfer Voucher if any.
 - 26.5.3** No claim certificate duly signed by the contractor. (**Annexure-C28**)
 - 26.5.4** No due certificate from suggested by MIC. (**Annexure-C28**)
 - 26.5.5** Work Completion certificate from EIC/MIC. (**Annexure-C29**)
 - 26.5.6** Deviation Statement
 - 26.5.7** Handing over / taking over certificate (wherever applicable)
 - 26.5.8** Satisfactory commissioning protocol (wherever applicable)
 - 26.5.9** Royalty clearance certificate (wherever applicable)
 - 26.5.10** Electrical License (if required)
 - 26.5.11** Dismantling of Temp Structure, Disconnection of Water/Elect. & Clearance of Charges.
Note: - Certificates not applicable to a particular work will be certified by the MIC.
 - 26.5.12** Anti-Profiteering Declaration Format.
 - 26.5.13** As per Rule-47 of GST Act, time limit for issuing Tax Invoice is 30 days from the date of Supply of Service. Therefore RA/Final Bill must be submitted within 15 days from the end of the billing period. Any delay more than 30 days from Completion of Work will be considered as a failure in contractual terms and the contract may be closed ex-parte on the basis of certification of measurement and amount payable/recoverable considering all recoveries into account by the EIC/MIC. Decision of EIC/MIC shall be final & binding on the contractor. Besides above, the contractor may be treated as dormant or non-responsive and may affect assignment of further business to the vendor.

27.0 PAYMENT TERMS:

- 27.1** The contractor will complete the measurement of work done for the billing period in consultation with EIC/MIC. They will process the RA Bill along with necessary documents as defined under "Billing & Invoicing" for release of payment. It will be processed for release of payment after deductions in compliance to different statutes and retentions as recommended by EIC/MIC. Amount payable will be subjected to further adjustments against outstanding receivables against the vendor if any. The net amount will be paid online through RTGS/NEFT/IMPS/Internet Banking or any other online facility provided by our banker. Charges if any levied by respective banks, is to be borne by respective parties.
- 27.2** If the contract value is Rs.20,000/- or less, full and final bill will be admitted.
- 27.3** Payment against RA Bill will be considered only when the remaining period of the contract is not less than Billing Period defined in the contract or the remaining value of contract is not less than average periodic value executed up to previous RA Bill. In case the remaining period of contract is less than the billing period or the remaining value of contract is not less than average periodic value executed up to previous RA Bill, specific declarations that "Final Bill will be submitted in time" will be sought from the contractor with certification by EIC/MIC before processing of RA Bill.
- 27.4** On award of the contract to the successful bidder, it becomes mandatory by the bidder to enclose a deviation statement with RA bill once the executed value of the work has reached 80% of the awarded value.
- 27.5** In case of Lump sum / Turnkey contract, the payment shall be released according to approved Billing schedule and Payment Terms specified in special conditions of contract.
- 27.6** Payment of GST is subject to reflection of the party's invoice in GSTR 2A/Anx-2 (GST new return) of NALCO. If the vendor fails to comply for two consecutive periods against one order, no further payment will be released till compliance is made by 'FILLING' up to last period. If a vendor submits proof of filing GSTR1 duly authenticated by Vendor on the Main page containing Nalco's GSTIN with 'FILLED' status and detail list of invoices generated from their GST login, for Invoices already paid by Nalco, then basic amount of subsequent Invoices may be released. However, GST withheld will be released after checking of GSTR2A.
- 27.7** GST TDS as applicable at the prevailing rate on the gross amount billed shall be deducted from the contractor's bill.

- 27.8** Cess will be deducted from Gross bill value as per Building and Other Construction Workers' (RE&CS) Act 1996 for Township construction contracts. (construction, alteration, repairs, maintenance, demolition in relation to buildings, streets, roads, drainage, electrification, distribution of power, water works, communication works etc.)
- 27.9** Payment against Final Bill will not be released if royalty clearance certificate as stated under Royalty Clearance is not submitted by the vendor.
- 27.10 Mobilisation Advance: Not applicable for this contract.**
- 27.10.1** The Rate of Interest applicable on Mobilisation Advance shall be made variable instead of fixed for entire tenure of contract, as prevailing at present.
- 27.10.2** The Rate of Interest applicable on balance amount of Mobilisation Advance, applicable for the financial year shall be fixed to MCLR (1-year-tenor) or SBI declared in the month of April of that financial year plus 1%.

28.0 PRICE VARIATION FOR LABOUR:

- 28.1 Price variation for Labor (Wherever applicable):** On subsequent revision of applicable minimum wages to be notified by NALCO from time to time the differential wage and associated components will be reimbursed based on actual payment to workmen, excluding OT amount and Administrative Charges on production of documentary proof to HR Dept regarding payment through bank.

29.0 PRICE VARIATION FOR FUEL

Price variation on Fuel is normally not allowed. If price variation on Fuel is applicable it will be regulated as per the Special Conditions of Contract (**Annexure-B3**).

30.0 DEFECT LIABILITY PERIOD (DLP):

- 30.1** The DLP shall be governed by the detailed terms and conditions stipulated in clause 65 and 68 of GCC. The defect liability period shall be reckoned from the date of completion of the contract period for supply and workmanship unless mentioned otherwise in Scope of Work / Special Condition of Contract. Duration of DLP is mentioned at Sl. No. 9 of F-02 form of contract details, **Annexure-B1**.

30.2 DLP for SPECIALISED WORKS:

- 30.2.1** Water proofing (Below or above ground) and Roof treatment works -10 YEARS
- 30.2.2** Post construction Anti-termite treatment - 5 YEARS
- 30.2.3** Weather proof Paint works - 4 YEARS

- 30.3** In some cases appropriate DLP can be considered depending upon the nature of the job.

31.0 CONTRACTOR'S OBLIGATIONS AND PENALTY FOR NON-COMPLIANCE: The contractor shall abide by the following obligations during execution of contract against deployment of contract labours.

- 31.1** If found suitable, Preference for engagement of labourers under NALCO's contractors establishment may be given to the land affected persons.
- 31.2** The Contractor shall not engage any contract labour having unsound mind, criminal record, and poor health or having record not suitable from security point of view to NALCO.
- 31.3** The contractor has to ensure that no contract labour should enter the plant/work premises without valid photo pass.
- 31.4** The contractor shall ensure that no contract labour should leave the work place/plant before time without authorization/gate pass/ permission of the representative of contractor, to check frequent entry/exit, which may also cause security/administrative inconvenience.
- 31.5** The disputes of the Contractor's labourers are to be settled by individual contractor. In no case NALCO, as the Principal Employer will enter into the matter except witnessing the proceedings, if required by the Statutory Authorities.
- 31.6** The contractor shall have valid labour license during the execution of the contract, wherever applicable. The contractor shall not engage child labourers, in compliance to statutory requirement.
- 31.7** PF & ESI A/c Codes: The contractor must possess independent Account Codes from the concerned Regional Provident Fund Commissioner for PF and also independent Account Code from the concerned Regional Director, ESIC for ESI, as applicable.

32.0 RECOVERY TOWARDS COMPENSATION FOR DELAY:

- 32.1 Repetitive O&M Contracts** – Recovery towards compensation for delay shall not be applicable for this type of contract, unless otherwise mentioned separately in Special Conditions of Contract (**Annexure-B3**).
- 32.2 Other Contracts-** Recovery towards compensation for delay shall be applicable for this type of contract. In case the contractor fails to complete the work within the stipulated period, the contractor shall be liable for a penalty @ 1% (one) of the contract value per week of delay subject to a maximum of 10% (Ten) of the value of the contract, unless otherwise mentioned separately in the Special conditions of contract. (**Annexure-B3**). GST as applicable shall also be recovered.

33.0 BLACKLISTING/BANNING/SUSPENSION/DELISTING OF BUSINESS/HOLIDAY LIST

- 33.1 Blacklisting :** Blacklisting of any agency/ firm/ contractor working with the Company may be resorted to in following cases:
- 33.1.1** If the Proprietor or Partner or Director of the Firm is convicted by a Court of Law, following prosecution under the normal process of Law for an offence involving moral turpitude in relations to business dealings;
 - 33.1.2** If security considerations including the question of loyalty to the State warrant as per recommendations of Ministry of Home Affairs.
 - 33.1.3** If there is justification for believing that the Proprietor or Partner or Director (or Employee) of the Firm has been guilty of malpractices such as bribery, corruption, cheating, fraud, substitution of bid or theft or any other illegal activities while carrying out the work etc.
 - 33.1.4** If the Firm refuses/fails to return the Company's dues without adequate cause;
 - 33.1.5** If the Firm is blacklisted by any Department of the Central Government/ State Government.
 - 33.1.6** If the Firm is a confirmed evader of Central / State taxes/duties for which NALCO has received notice from the concerned department of Central / State Govt.
 - 33.1.7** Misbehavior/ threatening of departmental supervisory staff during work execution.
 - 33.1.8** Constant non-achievement of milestones on insufficient and imaginary grounds and non-adherence to quality specifications despite being pointed out.
 - 33.1.9** Persistent & intentional violation of important conditions of contract.
 - 33.1.10** Submission of false/ fabricated/ forged documents for consideration of a bid.
 - 33.1.11** If declared bankrupt or insolvent.
- 33.2 Banning:** In case where the conduct of the firm is not serious enough to merit blacklisting but removing the name from the registered vendors of NALCO is justified in the interest of the company, the firm/company shall be banned from doing business with NALCO for a period up to 3 years but not less than one year. The reasons for banning are listed below. This list is illustrative only and not exhaustive.
- 33.2.1** Any failure to execute the contract satisfactorily.
 - 33.2.2** Offence except criminal, such as moral turpitude, fraud, theft, unlawful activities within the premises of the company (Plant or Township) by the contractor or their workmen.
 - 33.2.3** Defaults such as failing in disbursements of wages of the workmen/contract labourers in time at least twice in a contract period.
 - 33.2.4** Submission of false declaration / documents in the offer.
 - 33.2.5** Misconduct / misbehavior of the contractor or any of the workers engaged by them.
 - 33.2.6** Non-compliance of environment, safety and health requirements including use of proper PPEs.

33.3 Suspension of Business: Temporary Suspension of business may be ordered without any notice, where full enquiry into the allegation is pending and may entail the blacklisting of the firm/ party/ contractor, if the allegation is proved.

33.4 Delisting from Vendor List against all Contracts:

33.4.1 Party's performance is being evaluated half yearly through online assessment system by the respective Managers-in-Charges for the works being executed at site / at party's premises.

33.4.2 Half-yearly assessment ratings are reviewed and the contractors are reminded for improvement in next assessment period if their performance rating is poor.

33.4.3 If two consecutive Six-monthly assessments of a contract are Very poor in a single evaluation / Safety & Environmental requirements compliance is not O.K. / SA 8000:2008 Compliance is not OK, then the concerned Vendor will be delisted for one year for that particular job subject to approval by Competent Authority of NALCO and the vendor will be intimated through a letter.

33.4.4 The delisted Vendor may be re-enlisted upon the request of the Vendor on completion of the de-listment period and subsequent approval by Competent Authority of NALCO.

33.4.5 If any vendor is Black-listed / Banned by any units of NALCO, the Vendor will also be delisted.

33.4.6 In case the performance of the vendor is found to be unsatisfactory by the Manager-in-charge, the vendor may not be considered in future tender for similar jobs.

33.5 Holiday List: In case the bidder does not participate in three consecutive bids, the bidder will be put under holiday list for a period of one year.

33.6 NALCO will issue show-cause notice giving 15 days' time to the contractor to respond the same in cases of debaring/ blacklisting/ banning/ suspension of business with the party.

33.7 **If any varying of conflicting situation arises in any of the document forming part of the Contract, NALCO's decision with regard to intention/interpretation of the document and the decision shall be final and binding on the parties.**

34.0 TERMINATION OF CONTRACT:

34.1 If the performance is found unsatisfactory during the period of contract, the contract will be terminated with short notice of 15 days and the same shall be carried out by any other agency at the risk & cost of the contractor. Other penal actions such as forfeiture of Security Deposit and debaring the contractor for participating in future tenders of NALCO may also be taken as per clause no. given in this **Annexure-A1**.

34.2 If the Government of India or any Statutory Authority/empowered to do so, decides/directs to terminate the Contract, the contract shall be terminated without any notice and for that contractor shall not be entitled to any claim such as extra claim, loss, loss of profit etc. against NALCO. The settlement of the dues of contractor shall be done on the basis of execution of actual work in accordance with the terms & conditions of contract.

34.3 Short Closure of Contract: NALCO reserves the right to short close the contract by serving 15 days' notice to the contractor, when either of the contract value is executed or the assigned BOQ quantity is exhausted. The decision of NALCO in this regard shall be final & binding on the contractor.

35.0 ARBITRATION:

The clause No.87 of General Conditions of contract shall be applicable incase of any dispute or difference whatsoever, which may arise at any point of time. Subject to all other provisions contained in clause 87 of GCC, the provisions of the Arbitration and Conciliation Act, 1996 or any statutory modification or re-enactment thereof and the rule made there under, and for the time being in force shall apply to the arbitration proceeding under this clause.

36.0 CONTRACT CLOSURE:

36.1 Completion of work assigned through the contract within contractual period is both a contractual obligation and legal obligation on both the parties to the contract i.e. Contractor and Nalco. Closure of contract is achieved in stages through contractual terms or through mutual agreement/settlement. Submission of Final Bill is the 1st stage of closure. Successful completion of Defect Liability Period and Performance Guarantee Period is the 2nd Stage of closure. Settlement of all outstanding payables and receivables is the 3rd stage of closure.

36.2 It will be the responsibility of the Contractor in all three stages to lodge necessary claims with EIC/MIC and settle it as follows.

36.2.1 1st stage - Submission of Final Bill, and Performance Guarantee Bond (PGB) maximum within 3 months from the end date of contract period.

36.2.2 2nd stage - Submission of Claim letter for release of SD/PBG maximum within 15 days from the date of closure of Guarantee/DLP.

36.2.3 3rd stage - Settlement of all outstanding relating to the Contract, before release of Contract Completion Certificate (**Annexure-C29**) by EIC/MIC with concurrence of Finance regarding Contract Execution Value.

37.0 Energy Management System (ISO 50,001) Requirement:

38.0 Mandatory guidelines for saving any form of energy:-

Energy is lifeline of an Organization and SMELTER / CPP , NALCO is implementing Energy Management Systems (EnMS) – ISO 50001 in all activities. The contractual service providers are advised to train his workmen for practicing the following "Dos & Don'ts" while executing the assigned work at site.

WHAT TO DO?	WHAT NOT TO DO?
1. Use compressed air for instrument cleaning if advised by NALCO	1. Never open any compressed air for body / dress/ vehicle cleaning.
2. Close water line valves if they are in open condition	2. Never allow any water line in open condition.
3. Use water for instrument equipment cleaning if advised by NALCO	3. Never use any water line of the plant for cleaning of bicycles / vehicles.
4. Use LPG for cooking if at all required	4. Never use any electrical heater for cooking or room heating.
5. Switch off lights/ fans in day time when not required	5. Never waste electricity in any way.
6. Touch only that part of equipment for which you are authorized by the Engr. I/C	6. Never touch any isolators / switches of any equipment.
7. Handle coke, pitch, oil (FO, HSD, LDO) & LPG with due care as they are costly.	7. Never waste any quantity coke, pitch, oil (FO, HSD, LDO) & LPG a drop of any types of oil .

39.0 The Energy Policy of NALCO is attached. The Service Provider needs to comply all the requirements of the Policy in consultation with the Manager-in-Charge of the contract.

40.0 Owner's Right to Accept or Reject a Bid: A bidder may seek clarification regarding the bidding document provisions, bidding process and / or rejection of his bid. NALCO/Consultant shall respond to such queries within a reasonable time.

ANNEXURE-A2

SAFETY GUIDELINES**Special Terms and Conditions of the Contract against Electrical Safety**

- 1- The Contractor shall ensure proper safety of all the workmen, materials, and equipments belonging to him or to NALCO or to others, working at the site. The Contractor shall also be responsible for provision of all safety notices and safety equipment required both by the relevant legislations and the Engineer as he may deem necessary.
- 2- All equipments used by Contractor shall meet Indian/ International Standards and where such standards do not exist, the Contractor shall ensure these to be absolutely safe. All equipments shall be strictly operated and maintained by the Contractor in accordance with manufacturer's operation Manual and safety instructions and as per Guidelines / Rules of NALCO in this regard.
- 3- Periodical Examinations and all tests for all lifting/hosting equipment & tackles used by the contractor shall be carried out in accordance with the relevant provisions of Factories Act 1948, Indian Electricity Act 1910 and associated Laws/Rules in force from time to time. A register of such examinations and tests shall be properly maintained by the contractor and will be promptly produced as and when desired by Engineer or by the person authorized by him.
- 4- The Contractor shall provide suitable safety equipment of prescribed standard to all employees and workman according to the need, as may be directed by Engineer who will also have right to examine these safety equipments to determine their suitability, reliability, acceptability and adaptability. The Contractor shall provide safe working conditions to all workmen and employees at the Site including safe means of access, railings, ladders, scaffoldings etc. The scaffoldings shall be erected under the control and Supervision of an experienced and competent person. For erection, good and standard quality of material only shall be used by the Contractor.
- 5- The Contractor shall not interfere or disturb electric fuses, wiring and other electrical equipment belonging to the Owner or other contractors under any circumstances, whatsoever, unless expressly, permitted in writing by NALCO to handle such fuses, wiring or electrical equipment.
- 6- Before the Contractor connects any electrical appliances to any plug or socket belonging to the other Contractor or Owner, he shall :
 - a) Satisfy the Engineer that the appliances are in good working condition.
 - b) Inform the Engineer of the maximum current rating, voltage and phases of the appliances.
 - c) Obtain permission of the Engineer detailing the sockets to which the appliances may be connected.
- 7- No work shall be carried out on any live equipment unless otherwise the equipment is declared safe by the Engineer and a permit to work shall be issued by the Engineer. The Contractor before any repair work is carried out on electric lines/equipments whether live or dead shall provide suitable type and sufficient quantity of tools to electricians/ workman etc.
- 8- In case of any accident during the activities undertaken by the Contractor thereby causing any minor or major or fatal injury to his employees due to any reason, whatsoever, it shall be the responsibility of the Contractor to promptly inform the same to NALCO's Engineer and also to all the authorities envisaged under the applicable laws.
- 9- The Contractor shall follow and comply with all NALCO Safety Rules, relevant provisions of applicable laws pertaining to the safety of workmen, employees, plant and equipment as may be prescribed from time to time without any demur, protest or contest or reservation. In case of any unconformity between statutory requirement and NALCO Safety Rules referred above, the later shall be binding on the contractor unless the statutory provisions are more stringent.

- 10- The Contractors shall provide suitable latest Personal Protective Equipments of prescribed standard to all their employees and workmen according to the need. The Engineer I/c shall have the right to examine these safety equipments to determine their suitability, reliability, acceptability and adaptability. The contractor should also ensure these before their use at worksite.
- 11- Wherever the workers are exposed to the hazards of falling from height, the contractor shall provide full harness safety belts fitted with fall arresting systems to all the employees working at higher elevations and life line wire rope with turn buckles for anchoring the safety belts while working or moving at higher elevations. Safety nets shall also be provided for saving them from fall from heights and such equipment should be in accordance with BIS standards. The contractor must get a permit to work at height from the Engineer-in-Charge before starting the job.
- 12- The contractor should ensure that all electrical installations at the site comply with the requirements of latest electricity acts / rules.
- 13- The contractor shall take all adequate measures to prevent any worker from coming into physical contact with any electrical equipment or apparatus, machines or live electrical circuits which may cause electrical hazards during the work. The contractor shall provide the sufficient ELCBs / RCCBs for all the portable equipments, electrical switchboards, distribution panels etc. to be used by him to prevent electrical shocks to the workmen.
- 14- In case of fire in electrical installations, all electrical supplies are to be disconnected first to the affected system. Fire-fighting at the initial stage may be initiated with the CO2, Dry Powder etc. Water will never be sprinkled onto live electrical system.
- 15- Before starting any job the Contractor will be responsible for the following -
 - a. Ensuring safe components/equipments are used.
 - b. Providing earth leakage circuit breakers on all electrically operated power tools/equipments.
 - c. Inspecting power tools before use and ensuring defective tools are discarded.
 - d. Using 3 core cable and 3 pin plugs for all portable tools and ensuring its earthing.
 - e. Authorized electrician is only attending all electrical job as per latest Electrical Rules & CEA guide lines.
 - f. Ensuring double earthing to all equipments.
 - g. Ensuring all the electrical system is as per Indian Electricity Rules.
 - h. Disconnecting and removing all unwanted cables and wires from electrical system.
 - i. Identification Marks and Numbers are clearly being marked on all electrical distribution boards, switchboards etc. used by the Contractor.
 - j. All electrical system components being protected against damage.
 - k. All electrical joints are being tested to meet the standards.
 - l. Hand lamps are providing with suitable guards.
 - m. Providing personal protective equipments including electrical safety shoes, rubber gloves etc. as per the enclosed PPE matrix.
 - n. Ensuring unauthorized person shall not have access to electrical system.
 - o. Protecting all live parts.
 - p. Ensuring all fuses are replaced with actual current rating.

ANNEXURE-A3

**LIST OF PPEs TO BE ISSUED TO ALL THE CONTRACTUAL EMPLOYEES BY THE
CONTRACTOR FOR USE DURING THE EXECUTION OF JOB AT SITE.
(PPE MATRIX)**

PARTS TO BE PROTECTED	PERSONAL PROTECTIVE EQUIPMENT	PROTECTION AGAINST	REMARKS
HEAD	INDUSTRIAL SAFETY HELMET (IS:2925-1975) & subsequent revision thereof, if any.	FALLING OBJECTS	
EYE	ZERO POWER GOGGLES WITH SIDE FILTER PROTECTION	EYE INJURY DUE TO FLYING OBJECTS. INJURY DUE TO SPARKS AND FLAMES.	
EAR	A) EAR PLUG (FOAM) B) EAR MUFF	HEARING LOSS IN HIGH NOISE AREAS	
RESPIRATORY SYSTEM	DUST RESPIRATOR WITH FILTER/ NOSE MASK FILTER	INHALATION OF HARMFUL DUST.	
BODY	SAFETY BELT, ARC FLASH SUIT	FALL FROM HEIGHT, ELECTRICAL FLASH OVER.	
HAND	ELECTRICALLY TESTED ELECTRICAL RESISTANT HAND GLOVES WITH CERTIFICATE (IS: 4770-1968) & subsequent revision thereof, if any.	ELECTRIC SHOCK	
FOOT	A) INDUSTRIAL SAFETY SHOE WITHOUT STEEL TOE. B) GUM BOOT	A) ELECTRICAL SHOCK B) CABLE GALLERIES, MUDDY AREAS ETC.	

PPE MATRIX (CPP/SMELTER PLANT)

Major activity	Safety Shoe	Safety Helmet	Safety Goggles	Hand Gloves	Face Shields	Safety Belt	Dust control mask	Ear plugs/muffs	Personal alert alarm	Crawl board	SCBA sets
Working at height	Y	Y	Y	Y	NR	Y	Y	Y	NR	NR	NR
Excavation/earth work	Y	Y	Y	Y	NR	NR	Y	Y	NR	NR	NR
Working in noisy area	Y	Y	Y	Y	NR	NR	Y	Y	NR	NR	NR
Working in dusty area	Y	Y	Y	Y	NR	NR	Y	Y	NR	NR	NR
Coal compaction /handling	Y	Y	Y	Y	NR	NR	Y	Y	NR	NR	NR
Sand blasting	Y	Y	Y	Y	NR	NR	Y	Y	NR	NR	NR
Riveting	Y	Y	Y	Y	NR	NR	Y	Y	NR	NR	NR
Chlorine gas leakage attending	Y	Y	Y	Y	Y	NR	NR	NR	NR	NR	Y
Working on fragile roof	Y	Y	Y	Y	NR	Y	Y	Y	NR	Y	NR
Electrical panel checking	Y	Y	Y	Y TESTED RUBBER HANDGLOVES	NR	NR	Y	Y	NR	NR	NR
Gas Storage shed checking	Y	Y	Y	Y	Y	NR	Y	Y	NR	NR	NR
Confined space checking	Y	Y	Y	Y	NR	Y	Y	Y	Y	NR	Y

Note : Y – yes, NR : not required, SCBA : self-contained breathing apparatus, PPE : personal protective equipment.

PPEs shall be selected depending on combination of job and site conditions.

AREA WISE / JOB WISE PPE REQUIREMENTS SMELTER PLANT

1	<u>CARBON AREA</u> <ol style="list-style-type: none"> Industrial Safety Shoes with 4" ankle height as per IS 15298 Part 2-2002 OR its equivalent. For Bake Oven area Industrial Safety Shoes with 4" ankle height having Nitrile sole as per IS 15298 Part-II -2002 or its equivalent. Ladies Industrial Safety Shoes low ankle as per IS 15298:2011 or its equivalent. Safety Helmet as per IS 2925:1984, material-HDPE. Full body harness as per IS 3521 or its equivalent. Cotton / Leather Hand Gloves as per latest IS mark or its equivalent Dust / Mist Respirator shall be FFP2 SL Class as per IS: 9473-2002 or its equivalent. Apron (Pin repair Shop) Head Cover & Apron (Coke & Pitch handling area) Pitch / Fume respirator as per IS 14166:1994 or its equivalent. Safety Helmet with visor as per latest IS or its equivalent {for induction furnace & ladle cleaning of RS (O)}. Safety goggle with blue glass as per latest IS or its equivalent {for induction furnace & ladle cleaning of RS (O)} Special nose mask against fumes & odour as per latest IS or its equivalent for Baking Furnace. 	5	<u>POT LINE (Mechanical & Operation)</u> <ol style="list-style-type: none"> Industrial Safety Shoes with 4" ankle height as per IS 15298 Part 2-2002 or its equivalent. Ladies Industrial Safety Shoes low ankle as per IS 15298:2011 or its equivalent. Safety Helmet as per IS 2925:1984, material HDPE. Safety Goggles as per IS 5983 or its equivalent. HF Nose Mask shall be FFP2 SL as per IS 9473-2001 or its equivalent. Cotton / Leather Hand Gloves as per latest IS mark or its equivalent. Safety helmet with visor as per latest IS or its equivalent. Ear Plug / Muff as per latest IS or its equivalent. Apron, Leg Guard as per latest IS or its equivalent. Full body harness as per IS 3521 or its equivalent
2	<u>CIVIL WORK</u> <ol style="list-style-type: none"> Protective Footwear as per latest IS mark or its equivalent (Ladies & Gents). Safety Helmet as per IS 2925:1984, material HDPE. Dust / Mist Respirator shall be FFP2 SL class as per IS: 9473-2002 or its equivalent. Hand Gloves Full body harness as per IS 3521 or its equivalent Safety Net as per latest IS mark. 	6	<u>HORTICULTURE WORK</u> <ol style="list-style-type: none"> Protective Footwear as per latest IS mark or its equivalent (Ladies & Gents). Safety Helmet as per IS 2925:1984, material HDPE Safety Goggles as per IS 5983. Dust / Mist Respirator shall be FFP2 SL class as per IS:9473-2002 Cotton Hand Gloves & Rubber Hand Gloves as per latest IS mark. Organic vapor nose mask as per latest IS mark or its equivalent. Full body harness as per IS 3521 or its equivalent
3	<u>CAST HOUSE (Mechanical & Operation) & Rolling Plant</u> <ol style="list-style-type: none"> Industrial Safety Shoes with 4" ankle height as per IS 15298 Part 2-2002 or its equivalent. Ladies Industrial Safety Shoes low ankle as per IS 15298:2011 or its equivalent Safety Helmet as per IS 2925:1984, material HDPE Safety Goggles as per IS 5983 or its equivalent. Cotton / Leather Hand Gloves Dust / Mist Respirator Leather Leg Guard Helmet with Visor (Skimming Area) Apron (Direct Sow Casting Area & Ingot Skimming Station) Ear Plug / Muff (Billet Casting Area) of latest IS mark. Full body harness as per IS 3521 or its equivalent Safety helmet with visor as per latest IS or its equivalent 	7	<u>MISCELLANEOUS WORK</u> <u>MES, CRS, CENTRAL STORES, LAB, UTILITY & DESPATCH, FINANCE, PLANT HRD & ADMINISTRATION.</u> <p>Safety Helmet as per IS 2925:1984, material HDPE</p> <ol style="list-style-type: none"> Industrial Safety Shoes as per IS 15298 Part 2-2002/ or its equivalent/Protective Footwear as per latest IS mark or its equivalent (Ladies & Gents). Safety Goggles as per IS 5983. Cotton / Leather Hand Gloves Ear muff/Ear plug (Utility) of latest IS mark or its equivalent. Dust / Mist Respirator shall be FFP2 SL class as per IS: 9473-2002. Rubber / Surgical hand gloves (for acid / alkali use and at the time of chemical analysis) Lab. Full body harness as per IS 3521 or its equivalent Safety helmet with visor as per latest IS or its equivalent
4	<u>ELECTRICAL WORKS</u> <ol style="list-style-type: none"> Industrial Safety Shoes with 4" ankle height as per IS 15298 or its equivalent. Ladies Industrial Safety Shoes low ankle as per IS 15298:2011 or its equivalent. Safety Helmet as per IS 2925:1984, material HDPE or its equivalent Safety Goggles of latest IS mark or its equivalent. Rubber Hand Gloves (for 6.6 / 11 KV test) as per latest IS or its equivalent. Dust / Mist Respirator of latest IS mark or its equivalent. Full body harness as per IS 3521 or its equivalent. 		

Note: 1. The PPEs issued must confirm to latest IS / DGMS approved or its equivalent standard.
2. In case of damage of any PPE of workmen the same shall be replaced by the contractor irrespective of the time of use.

3. Frequency of issue

Sl	Item	Frequency of issue
1	Industrial Safety Shoe	1 pair per year.
2	Safety Helmet	1 No per 2 yrs.
3	Safety Goggles	1 No per year
4	Nose mask	4 Nos per month
5	Cotton hand gloves	3 pairs per month

PPE REQUIREMENTS IN VARIOUS AREAS OF CPP

1.	<u>MECHANICAL AREA</u> (i) Industrial Safety Shoes as per IS 15298 Part-II-2002 or its equivalent. (ii) Safety Helmet as per IS 2925:1984, material-HDPE or ABS. (iii) Full body harness as per IS 3521 or its equivalent. (iv) Cotton/Leather Hand Gloves as per latest IS mark or its equivalent. (v) Dust/Mist Respirator shall be FFP2 SL Class as per IS:9473-2002 or its equivalent. (vi) Safety goggles as pr latest IS or its equivalent. (vii) Boiler Suit/Apron.	6.	<u>POWER HOUSE OPERATION:</u> (i) Industrial Safety Shoes as per IS 15298 Part-II-2002 or its equivalent. (ii) Safety Helmet as per IS 2925:1984, material-HDPE or its equivalent. (iii) Safety Goggles as per IS 5983 or its equivalent. (iv) HF Nose Mask shall be FFP2 SL as per IS 9473-2001 or its equivalent (v) Cotton Leather Hand Gloves as per latest IS mark or its equivalent. (vi) Ear Plug/Muff as per latest IS or its equivalent. (vii) Gum boot (viii) Boiler suit / apron
2.	<u>CIVIL WORK</u> (i) Industrial Safety Shoes as per IS 15298 mark. (ii) Safety Helmet as per IS 2925:1984, material –HDPE or ABS. (iii) Dust/Mist Respirator shall be FFP2 SL Class as per IS:9473-2002 or its equivalent. (iv) Hand Gloves (v) Full body harness as per IS 3521 or its equivalent. (vi) Safety Net as per latest IS mark. (vii) Gum Boot depending on job requirement (viii) Safety Goggles	7	<u>HORTICULTURE WORK</u> (i) Industrial Safety Shoes as per 15298 (ii) Safety Helmet as per IS 2925:1984, material HDPE (iii) Safety Goggles as per IS 5983. (iv) Dust/Mist Respirator shall be FFP2 SL Class as per IS:9473-2002. (v) Cotton Hand Gloves & Rubber Hand Gloves as per latest IS mark. (vi) Full body harness as per IS 3521 or its equivalent.
3.	<u>CHP WORK</u> (i) Industrial Safety Shoes with as per IS 15298 Part-II-2002 or its equivalent. (ii) Safety Helmet as per IS 2925:1984, material-HDPE. (iii) Safety Goggles as per IS 5983 or its equivalent. (iv) Cotton/Leather Hand Gloves. (v) Dust/Mist Respirator (vi) Ear Plug/Muff of latest IS mark. (vii) Full body harness as per IS 3521 or its equivalent. (viii) Special nose mask for coal dust. (ix) Gum Boot depending on job requirement. (x) Full body Apron.	8	<u>MISCELLANEOUS WORK AREAS:</u> (i) Industrial Safety Shoes as per 15298 (ii) Safety Helmet as per IS 2925:1984, material HDPE (iii) Safety Goggles as per IS 5983. (iv) Cotton/Leather Hand Gloves (v) Ear Muff/Ear Plug (Utility) of latest IS mark or its equivalent. (vi) Dust/Mist Respirator shall be FFP2 SL class as per IS: 9473-2002. (vii) Rubber/Surgical Hand Gloves (for acid/alkali use and at the time of chemical analysis) Lab. (viii) Full body harness as per IS 3521 or its equivalent.
4.	<u>ELECTRICAL WORKS:</u> (i) Industrial Safety Shoes as per IS 15298 Part-II-2002 or its equivalent. (ii) Safety Helmet as per IS 2925:1984, material-HDPE or its equivalent. (iii) Rubber Hand Gloves as per latest IS or its equivalent. (iv) Dust/ Mist Respirator of latest IS mark or its equivalent. (v) Full body harness as per IS 3521 or its equivalent. (vi) Arc flash suit / apron / jacket. (vii) Safety Goggles		
5	<u>DM Plant & Water Treatment Plant:</u> (i) Industrial Safety Shoes as per IS 15298 Part-II-2002 or its equivalent. (ii) Safety Helmet as per IS 2925:1984aterial-HDPE or AQBS. (iii) Hand Gloves for chemical handling as per latest IS or its equivalent. (iv) Dust/ Mist Respirator of latest IS mark or its equivalent. (v) Full body harness as per IS 3521 or its equivalent. (vi) Acid / Alkali suit / apron / jacket. (vii) Safety Goggles		

**** For scaffolding / Temporary platform preparation, only MS Pipes / angles are allowed.**

Note:

1. The PPEs issued must confirm to latest IS/DGMS approved or its equivalent standard.
2. In case of damage of any PPE of any PPE of workmen the same shall be replaced by the contractor irrespective of the time of use.
3. Frequency of issue:

Sl. No.	Item	Frequency of issue
1	Industrial Safety Shoe	1/Year
2	Safety Helmet	½ Year
3	Safety Goggles	½ Year
4	Nose Mask	4/Month
5	Cotton Gloves	3/Month

ANNEXURE-A4

ENVIRONMENTAL POLICY (CAPTIVE POWER PLANT)

The Captive Power Plant, NALCO located at Angul, Orissa, generating coal based thermal power, being committed to the Corporate Environmental Policy of the Company, further resolves to minimize the pollution and protect the environment in the impact zone of its operation.

OBJECTIVES SPECIFIC TO CAPTIVE POWER PLANT:

- To achieve continual improvement in use of natural resources.
- To reduce, contain and treat all effluents and emissions of the plant harmful to the environment.
- To take special care in minimizing emission of fly ash and its safe disposal including continual effort for agricultural use of fly ash.
- To reduce dust level in the coal and ash handling areas.
- To create and conserve green belt in and around the plant.
- To create awareness and concern for the environment among the employees and persons working on behalf of the organization.

COMMITMENT:

We, the employees of Captive Power Plant of NALCO commit ourselves for prevention of pollution, continual improvement of the environment. We also resolve to comply with all legal & other requirements on environment applicable to our organization.

S/d
Executive Director (S&P), NALCO

ENVIRONMENTAL POLICY (SMELTER PLANT)

In recognition of interests of the society in securing sustainable industrial growth, compatible with a wholesome environment, NALCO affirms that it assigns high importance to promotion and maintenance of a pollution-free environment in all its activities.

OBJECTIVES:

- To use non-polluting and environment - friendly technology.
- To monitor regularly air, water, land, noise and other environmental parameters.
- To constantly improve upon the standards of pollution control and provide a leadership in environment management.
- To develop employees awareness on environmental responsibilities and encourage adherence to sound environmental practices.
- To work closely with Government & local authorities to prevent or minimise adverse consequences of the industrial activities on the environment.
- To comply with all applicable laws governing environmental protection through appropriate mechanisms.
- To actively participate in social welfare and environmental development activities of the locality around its Units.

COMMITMENT:

We dedicate ourselves to ensure a green and wholesome environment in all areas of our operations for sustainable industrial growth and to set standards in environmental management.

S/d
Executive Director (S&P), NALCO

ANNEXURE-A5

OCCUPATION HEALTH & SAFETY POLICY

Nalco is committed to maintain a Safe, Healthy and Sustainable work environment in all its operations. This shall be achieved by:

- ✚ Focusing on prevention of Accidents and Occupational Health issues.
- ✚ Complying with all legal requirements & other requirements related to Safety and Occupational Health of persons and establishing clearly defined goals & procedures to achieve the same.
- ✚ Ensuring Safety & Health of all employees and contract workers in its premises, including those involved in transportation, cleaning and other such activities.
- ✚ Conducting Periodic Safety Audits, Environment Audits, Health Check-ups and Risk Assessment by both internal and external qualified persons.
- ✚ Considering aspects related to Safety and Health of personnel as well as environmental issues at the time of procurement of equipment and selection of technologies.
- ✚ Ensuring health of persons in the peripheral locations, likely to be affected by our operations.
- ✚ Periodically monitoring and reviewing safety & occupational health issues at relevant levels, including the highest levels.
- ✚ Communicating Safety Hazards and health related issues to all concerned through suitable means, including training.
- ✚ Involving the workmen in Policy implementation as well as identification of potential issues.
- ✚ Considering Health & Safety performance of individuals at different levels during their career advancement as per Nalco's policy.
- ✚ Establishing and maintaining suitable set-up with competent persons to monitor and bring to the notice of the management any issues related to unsafe conditions & practices.
- ✚ Striving for continual improvements, exceeding statutory compliance levels, wherever feasible.

22.10.2015
Bhubaneswar

Sd/-
Chairman-cum-Managing Director

QUALITY POLICY

Quality will form the core of our business philosophy. Meeting the needs and expectations of the customer and consistently improving our systems and work ethos will be our chosen path in achieving excellence in business and fulfilling our social obligations.

Guiding Principles

- ✚ To ensure a Healthy Return on investment by maximizing Operational Efficiency, Capacity Utilization and Productivity.
- ✚ To continually improve and redesign systems, Processes and Practices in order to ensure Error Prevention and improve Response Time.
- ✚ To adopt Internal Customer Focus as a means to External Customer Satisfaction.
- ✚ To treat Human Resource as the key to Quality Excellence and ensure Development, Involvement and Satisfaction of Employees.
- ✚ To ensure High Quality of Inputs through Proactive Interaction with Suppliers.
- ✚ To meet obligations towards the society as a Responsible Corporate Citizen.
- ✚ To Provide value for money to all stakeholders.
- ✚ To follow Ethical Business Philosophy at all times.

Commitment

We dedicate ourselves to the Quality Policy and Objectives of the Company in letter and spirit and commit to continuously strive for their fulfilment.

22/10/2015
Bhubaneswar

Chairman-cum-Managing Director

ANNEXURE-A6

SOCIAL ACCOUNTABILITY POLICY

We at NALCO are committed to provide a socially accountable work environment to all employees and uphold ethical business practices by respecting employees' rights to ensure a decent Workplace.

We shall achieve these by adopting a companywide culture, which will help to promote:

- Involvement of all employees in sustenance of SA 8000:2014 Standard;
- Conforming to all requirements of SA 8000:2014 Standard;
- Complying with National laws, other applicable laws and other requirements to which the organization subscribes;
- Respecting the International instrument as describes in the SA 8000:2014 Standard.
- Continual improvement initiatives in all social aspects;
- Learning and training opportunities to all employees;

This policy is communicated and understood within the organization.

Date: 23.02.2017

Sd/-
Chairman-cum-Managing Director

ENERGY POLICY

Enhancing Energy Performance, comprehensively optimizing energy use, Energy consumption and energy efficiency, is a major imperative for an energy intensive industry like ours. In recognition of this, we focus on improvement of Energy Performance in all areas of operations with thrust on planning Energy Objectives based on the enshrined Guiding Principles.

Guiding Principles

- To Endeavour for reduction in specific consumption of energy in all forms and in all areas of operations.
- To ensure availability of information and necessary resources for achieving objectives and targets.
- To comply with all applicable legal, regulatory and other requirements related to energy use, consumption and efficiency.
- To espouse energy efficient technology encompassing procurement of energy efficient products & services and design for Energy Performance improvement.
- To carry out energy audits and energy reviews, at planned intervals, to improve energy performance.

Commitment

We affirm our commitment to continually improve our energy performance and strive for achieving the objectives and targets.

Sd/-
Chairman-cum-Managing Director

ANNEXURE-A7

GENERAL ENVIRONMENTAL REQUIREMENT (SMELTER / CAPTIVE POWER PLANT)

1. The contractor should adhere to safe environmental practices and shall perform in line with the environment policy of the company. The contractor has to ensure efficient use of natural resources like water, fuel oil and lubricants.
2. It will be the responsibility of the contractor to safely dispose off the waste generated in the processes of any job to the allotted location as assigned by Manager-in-charge in a manner so as to minimize their harmful concentration effects in the environment.
3. The contractor should ensure that oil/grease; chemicals and toxic substances are stored/ handled properly so that they do not find their way into the industrial drain and the atmosphere.
4. The contractor should make use of equipments having permissible noise limits and not polluting the atmosphere by any means. The contractor shall also guard against any hazardous & unsafe working conditions.
5. The various activities of the contractor should not create any adverse effect on ambient air & water quality at work site and adjoining area. It will be the responsibility of the contractor not to cause damage to the afforestation/green belt created inside/ outside the plant.
6. Contract should ensure proper awareness among workers to maintain a clean environment inside/outside the plant.
7. The emission level of the vehicles, construction equipments etc deployed by the contractor should comply with the norms specified by statutory authorities/ acceptable standards.
8. The contractor should avoid use of toxic and hazardous chemicals. If use of toxic and hazardous chemicals becomes unavoidable, their presence should be within the limits specified by the acceptable standards. The contractor should declare before use of chemicals, the nature of the chemicals i.e. Toxic/ non-toxic, hazardous/ non-hazardous to the Manager-in-charge and obtain his clearance before using such chemicals.
9. The contractor should ensure that disposal of used chemicals are disposed off to the drains only after neutralization of the chemicals and after clearance of the Manager-in-charge.

MINIMUM SAFETY EQUIPMENTS TO BE PROVIDED BY THE CONTRACTOR TO THE WORKMEN.

1. The contractor shall provide safety shoes, safety helmets to their workmen while executing the job.
2. Dust respirators must be used by the contractor workers working in dust area.
3. Face shield must be used by the welders.
4. While working on a height, Safety belt must be used by the workers.
5. Suitable face mask must be used the contract workers while working out painting jobs.

ANNEXURE-A8**GENERAL GUIDELINE TO BIDDER ON REVERSE AUCTION**

1. If a bidder does not participate in the Reverse Auction, the price quoted by him in the price bid shall be considered as the valid price of that bidder. The inter-se position of the said bidder shall be considered based on their position on completion of reverse auction.
2. **Price bid shall be opened at 10:00 AM on DD/MM/YYYY and Reverse Auction shall commence at 03:00 PM of the same day and shall remain open for 01 (One) Hour.**
3. Starting bid price shall be the L-1 offer price received against the tender.
4. **Bid Decremental Value shall be Rs.9612/- (Rupees Nine Thousand Six Hundred Twelve only) (which is @ 0.01% of the declared estimated value).**
5. Auto Extension Time shall be fixed at 10 Minutes
6. Other relevant parameters shall be displayed in the CPP Portal reverse auction window.
7. CPP Portal Server time shall be the basis of Start time & Closing time for bidding and shall be binding for all.
8. Auction flow is started and is closed after completion of the process. Once the Auction process is initiated the system takes over for auto auction activity. Then, comparison chart is generated.
9. The bidders to participate in tender-cum-auction process in CPP Portal, has to log into CPP Portal (i.e. <https://eprocure.gov.in/eprocure/app>) with DSC to access the application and quote from their own offices/place of their choice. Once logged in, the software gives them a platform to place bids.
10. All electronic bids submitted during the reverse auction process shall be legally binding on the bidder. The bid values submitted by the bidder are digitally signed by the bidders before submitting. The bidder, after initial submission of a bid, cannot subsequently increase the bid. They can only reduce their bid by the minimum permissible decrement or its multiples. The last bid submitted by the bidder in the Reverse Auction will be considered as the valid price bid offered by that bidder and will be the basis for evaluation / acceptance by Nalco.
11. System displays L1 landed price in auction creation form and allows TIA to edit the value as 'start bid' price. Normally, TIAs will enter the L-1 Price as the start bid price.
12. **Elapsed time:** Shall be fixed at ten minutes. There will be auto extensions of time, every time, (by ten minutes) in case of any reduction recorded in the last auto-extension-time-duration. The reverse auction will come to a close only when there is no further reduction recorded in the last ten minutes slot.
13. **Maximum Seal Percentage:** It is the maximum reduction that can be allowed in the bidding process in a single go. Higher reduction will not be allowed by the system. This protects any possible mistakes by bidders. For any higher discount, the bidder has to repeat the action and the system allows it.
14. Only the chronologically last bid submitted by the bidder till the end of the auction shall be considered as the valid price bid of that bidder. Any bid submitted earlier by the bidder prior to submission of his last bid will not be considered as valid price bid.

PROPOSED SITE ORGANISATION

NAME OF TENDERER :

Tenderer is to indicate here the site organization, he proposes to set up for execution of the work.

It is understood that this will be augmented from time to time depending on the requirements for timely completion of the work as directed by the Engineer-in-Charge.

Tenderer is also to furnish the bio-data of the Resident Engineer & key personnel to be deployed at site.

COMPLIANCE TO INTEGRITY PACT:

Bidders are required to unconditionally accept the "Integrity Pact (IP)" (to be executed on plain paper), as per format attached at Annexure-C21 of NIT, which may be considered as pre-signed by the Employer, and submit the same duly signed on all pages by the Bidder's Authorized Signatory in a separate sealed envelope before stipulated NIT / submission time at the address specified in the NIT. Bidder and its Subsidiary(ies) and/or Holding Company and/or Subsidiary(ies) of its Holding Company / Consortium members shall individually sign Integrity Pact (IP) and shall submit in a separate sealed envelope before stipulated NIT submission time at the address specified NIT. Bidder's failure to comply with the aforesaid requirement regarding submission of Integrity Pact (IP) shall lead to outright rejection of offer Proposal as being non-responsive and shall not be opened.

In case of selected bidder being a Consortium, in addition to above, after incorporation of Joint Venture Company, Integrity Pact shall be signed by the Joint Venture Company along with Project Agreement.

1. Independent External Monitors (IEMs) :

At present there is a panel of Independent External Monitors (IEMs) in NALCO. The panel of IEMs consists of the following.

A)	Ms. Archana Ranjan, IRS (Retd.) A 4/1, Vasant Vihar, New Delhi- 110057, e-mail: ranjan.archana@gmail.com	B)	Smt. Deepa Krishan, IRS (Retd.) C 2603, Sushant Lok-1, Gurgaon, Haryana, PIN-122002, e-mail: deepakrishan@gmail.com	C)	Dr. Meeran C Borwankar, IPS (Retd.) C 10/5, Vasant Vihar, New Delhi-110052 e-mail: mcborwankar@gmail.com
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- In respect of this Tender, the panel of Independent External Monitors (IEMs) would be monitoring the Bidding Process and execution of Agreement to oversee implementation and effectiveness of the Integrity Pact Program.

The details of the Independent External Monitors (IEM) are given above who will oversee the compliance to the terms of The Integrity Pact (IP) which forms a part of this Tender.

IEMs are authorized to examine /consider all references made to it under this tender. The bidder(s), in case of any dispute(s) / complaint(s) pertaining to this package may raise the issue either with the designated 'Nodal Officer' in NALCO or directly with the IEM.

Bidder may write to the IEM through E-mail (Provided in the tender) for their grievances, if any, giving details of the tender reference, name of the tender issuing officer and Nalco's Unit for quick identification of the tender by the IEM.

- The Independent External Monitors (IEMs) have the right to access without restriction to all Project documentations of the NALCO. The Monitor is under contractual obligation to treat the information and documents of the Bidder / Subsidiary(ies) and/or Holding Company and/or Subsidiary(ies) of its Holding Company / Consortium members/Sub Contractors with confidentiality.
- If the Employer has terminated the Contract pursuant to Section-3 of the Integrity Pact (IP), NALCO shall act in accordance with **Section 6 of The Integrity Pact**.

ANNEXURE A9**PREFERENCE TO MAKE IN INDIA****ORDER NO. P-45021/2/2017-PP(BE-II), DTD: 16.09.2020**

- 1.0 The bidders are requested to go through the GoI Order No: P-45021/2/2017-PP(BE-II), DTD: 16.09.2020 for the purpose of Purchase Preference on the basis of Local Content and submit the Declaration by the Bidder accordingly.
- 2.0 For the purpose of this order dtd.16.09.2020:-
 - 2.1 Local content means the **amount of value added in India** which shall, unless otherwise prescribed by the nodal ministry, **be the total value of the item procured** (excluding net domestic indirect taxes) **minus the value of imported content in the item** (including all customs duties) **as a proportion of the total value, in percent.**
 - 2.2 Class I local supplier means a supplier or service provider whose goods, services or works offered for procurement has local content equal to or more than 50%, as defined at cl. 2.1 above.
 - 2.3 Class II local supplier means a supplier or service provider whose goods, services or works offered for procurement has local content equal to or more than 20% but less than 50%, as defined at cl. 2.1 above.
 - 2.4 Non-local supplier means a supplier or service provider whose goods, services or works offered for procurement has local content less than 20%, as defined at cl. 2.1 above.
 - 2.5 '**Margin of purchase preference**' means the maximum extent to which the price quoted by a "Class-I Local supplier" may be above the L1 for the purpose of purchase preference. The margin of purchase preference shall be 20% against the tender.
- 3.0 Subject to the provisions of the above order and to any specific instructions issued by the Nodal Ministry or in pursuance of this order, purchase preference shall be given to 'Class-I Local supplier' in procurement undertaken by procurement entities in the manner specified here under:-

CASE-I (FOR DIVISIBLE QUANTITY): All the provisions of the order No.P-45021/2/2017-PP(BE-II) dtd.16.09.2020 shall be applicable for this tender towards purchase preference.

However, in case of participation by MSE & ancillary units, the tender quantity reserved for MSE & ancillary units as per purchase preference policy of NALCO for MSEs as mentioned in the tender document shall take precedence over the purchase preference against the above mentioned order (to be mentioned, if applicable).

- 4.1 In the procurement of goods or works which are divisible in nature, the 'Class-I Local Supplier' shall get purchase preference over 'Class-II local supplier' as per the following procedure:
 - a) Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-I local supplier', the contract of full quantity will be awarded to L1.
 - b) If L1 bid is not a 'Class I local supplier', 50% of the order quantity shall be awarded to L1. Thereafter, the lowest bidder among the 'Class I Local supplier' will be invited to match the L1 price for the remaining 50% quantity subject to Class-I local supplier's quoted price falling within the margin of purchase preference and contract for that quantity shall be awarded to such 'Class-I Local supplier' subject to matching the L1 price. In case such lowest eligible 'Class-I Local supplier' fails to match the L1 price or accepts less than the offered quantity, the next higher 'Class-I Local supplier', within the margin of purchase preference shall be invited to match the L1 price for the remaining quantity and so on and the contract shall be awarded accordingly. In case some quantity is still left uncovered on 'Class-I Local supplier', then such balance quantity may also be ordered on the L1 bidder.

4.2 'Class-II local supplier' will not get purchase preference in any procurement undertaken by procuring entities.

CASE-11(FOR NON-DIVISIBLE QUANTITY): All the provisions of the order No. P-45021/2/2017-PP(BE-II) dtd.16.09.2020 shall be applicable for this tender towards purchase preference.

4.3 In the procurement of goods or works which are not divisible in nature, the 'Class-I Local Supplier' shall get purchase preference over 'Class-II local supplier' as per the following procedure:

- a) Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-I local supplier', the contract will be awarded to L1.
- b) If L1 bid is not a 'Class I local supplier', the lowest bidder among the 'Class I Local supplier' will be invited to match the L1 price subject to Class-I local supplier's quoted price falling within the margin of purchase preference and contract shall be awarded to such 'Class-I Local supplier' subject to matching the L1 price.
- c) In case such lowest eligible 'Class-I Local supplier' fails to match the L1 price, 'Class-I Local supplier' with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the 'Class-I Local supplier' within the margin of purchase preference matches the L1 price, the contract may be awarded to the L1 bidder.

4.4 'Class-II local supplier' will not get purchase preference in any procurement undertaken by procuring entities.

5.0 Verification of local content.

5.1 The 'Class-I local supplier'/'Class II-local supplier' at the time of tender, bidding or solicitation shall be required to indicate percentage of local content and provide self-certification that the item offered meets the local content requirement for 'Class-I local supplier'/'Class II-local supplier', as the case may be. They shall also give details of the location(s) at which the local value addition is made. **Declaration to be given in the format attached/enclosed below.**

5.2 In case of procurement for a value in excess of Rs.10 crores, the 'Class-I local supplier'/'Class II-local supplier' shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of the companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

5.3 Decisions on complaints relating to implementation of this order shall be taken by the competent authority which is empowered to look into procurement-related complaints relating to the procuring entity.

6.0 Only "Class-I local suppliers and Class-II local suppliers", as defined under the order, shall be eligible for participation against this tender. The offers of 'Non-Local Suppliers' shall not be considered for evaluation against this tender.

=====XXXX=====

(Declaration by the bidder on their letter head)

To,
GGM(T&C),
M/s. National Aluminium Company Limited,
Smelter Plant, Nalconagar,
Dist.-Angul, Odisha-759145

Sub: Declaration of % of Local content along with the place of value addition. (Ref. No: Gol order No: P-45021/2017-PP (BE-II), Dated: 16.09.2020)

Tender Ref. No.: SMLT/T&C/CPPP/OMC-5719/NIT/5040 Date: 14.10.2023

Dear Sir,

We, M/s. _____ having its office
at _____ (address) hereby
confirm that the offered product as _____% of the local content.

Following is/are the location(s) at which local value addition is made:

Yours sincerely,

Signature

Name : _____

Designation : _____

Contact No. : _____

ANNEXURE-A10**Compliance of Public order on Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017 and ORDER NO:F.No.6/18/2019-PPD DATED 23/07/2020 & 24/07/2020****DEFINITIONS**

1. GOI vide Order (Public Procurement No.1, 2 & 3) dated 23 Jul 2020 & 24 Jul 2020 has imposed Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017 on bidders from a country which shares a land border with India.
2. "Bidder" for the purpose of this Order (Public Procurement No.1, 2 & 3) (including the term 'tenderer', 'consultant' 'vendor' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency, branch or office controlled by such person, participating in a procurement process
3. "Bidder from a country which shares a land border with India" for the purpose of this Order (Public Procurement No.1, 2 & 3) means
 - a. An entity incorporated, established or registered in such a country; or
 - b. A subsidiary of an entity incorporated, established or registered in such a country; or
 - c. An entity substantially controlled through entities incorporated, established or registered in such a country; or
 - d. An entity whose beneficial owner is situated in such a country; or
 - e. An Indian (or other) agent of such an entity; or
 - f. A natural person who is a citizen of such a country; or
 - g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above

Note: "Beneficial owner" for the purpose of above paragraph (3) will be as under:

- i. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person(s), has a controlling ownership interest or who exercises control through other means.

Explanation

- a) "Controlling ownership interest" means ownership of, or entitlement to, more than twenty-five per cent of shares or capital or profits of the company;
- b) "Control" shall include the right to appoint the majority of the directors or to control the management or policy decisions, including by virtue of their shareholding or management rights or shareholder's agreements or voting agreements;
- ii. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
- iii. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;

- iv. Where no natural person is identified under (i) or (ii) or (iii) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
- v. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
- vi. "Agent" for the purpose of this Order (Public Procurement No.1, 2 & 3) dtd 23 Jul 2020 & 24 Jul 2020 is a person employed to do any act for another, or to represent another in dealings with third persons.

Rule: Following shall be complied by the Bidders of the said countries while submitting bids.

- A) Any bidder from a country who shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. The Competent Authority for the purpose of registration under this Order shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT). However, Order will not apply to bidders from those countries (even if sharing a land border with India) to which the Government of India has extended lines of credit or in which the Government of India is engaged in development projects. Lists of countries to which lines of credit have been extended or in which development projects are undertaken are given in the website of the Ministry of External Affairs. This order shall also not apply to procurement by Indian missions and by offices of government agencies / undertakings located outside India.
- B) **The Bidder shall have to submit declaration / certificate as per the attached Format towards compliance of Public Order on Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017. B)**
- C) For works contracts, including Turnkey contracts, the successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority. The definition of "Contractor from a country which shares a land border with India" shall be as in paragraph (3) above.

Format for Declaration towards Compliance of Order (Public Procurement No.1, 2 & 3) dtd 23 Jul 2020 & 24 Jul 2020 on Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017 .

This declaration must form part of all tenders & it contains general information and serves as a declaration form for all bidders. (Before completing this declaration, bidders must study the General Conditions, Definitions, Govt Directives applicable in respect of Public Procurement No.1, 2 & 3) dtd 23 Jul 2020 & 24 Jul 2020 on Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017& prescribed tender conditions).

DECLARATION BY AUTHORISED SIGNATORY OF THE FIRM

I, the undersigned , (full names),
do hereby declare, in my capacity as
of M/s(name of bidder entity), that:

- 1) The facts contained herein are within my own personal knowledge.
- 2) I have read the Order (Public Procurement No.1, 2 & 3) dtd 23 Jul 2020 & 24 Jul 2020 on the subject of Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017 regarding restrictions on procurement from a bidder of a country which shares a land border with India and comply to all the provisions of the Order.
- 3) I certify that M/s(name of bidder entity) is not from such a country or, is from such a country (strike out whichever is not applicable), has been registered with the Competent Authority. I hereby certify that this SUPPLIER fulfills all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority is attached].
- 4) I understand that the submission of incorrect data and / or if certificate / declaration given by M/s(name of bidder entity) is found to be false, this would be a ground for immediate termination and further legal action in accordance with law as per Clause 12 of the Public Order on Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017

AUTHORISED SIGNATURE:

DATE: _____

Seal / Stamp of Bidder

PART –B

Contract specific information

ANNEXURE-B1

SMLTER T&C DEPARTMENT
Web site: www.nalcoindia.com
CONTRACT DETAILS

Form no: F-02/CNT/IDPM/02

Page 1 of 2

1.0	Name of the Work	Miscellaneous Civil Works for Repair & Maintenance of Residential and Non-Residential Building including external and internal services in Nalconagar Township & CISF Colony.
1.1	Nature of the Work	REVENUE (INTERMITTENT CONTRACT)
1.1(i)	Details of "Items Critical to quality" in case of "Specialized Jobs".	NOT APPLICABLE
1.1(ii)	Minimum Workable offer if applicable	Clause No.22.2 of Annexure-A1 may be referred for detail.
1.2	Location of the work	OUTSIDE PLANT PREMISES
2.0	NIT reference	SMLT/T&C/CPPP/OMC-5719/NIT/5040
3.0	Contract Period	24 (TWENTY-FOUR) MONTHS
4.0	No. of Agency required and %distribution of work(subject to availability of bidders)	a) Number of Agency: SIX (06) b) Distribution of Work: 25 : 15 : 15 : 15 : 15 : 15
4.1	Mode of tendering	OPEN (REVERSE-AUCTION E-TENDER)
4.2	Type of bidding	TWO PART
4.3	Earnest Money Deposit(EMD)	Rs.2,50,000/- (Rupees Two Lakh Fifty Thousand only) (Ref. Clause 4.0 of Annexure-A1).
4.4	Tender fee	Rs.500=00/- (Rupees Five Hundred Only) (FOR LTE / SINGLE / PROPRIETARY – NA)
5.0	Tender e-Submission Start Date/Time.	From Date: 14.10.2023
5.1	Tender e-Submission Last Date/Time.	By 03:00 PM of Date: 13.11.2023
6.0	e-Tender Opening Date/Time	On 10:00 AM of Date: 15.11.2023
7.0	Validity of Offer	04 (FOUR) MONTHS from the Date of Tender Opening
8.1	Bank Guarantee / Indemnity Bond value against Free Issue Materials.	(i) B.G : APPLICABLE, Applicable, Rs.1,61,250/- for 25% Job & Rs.96,750/- for 15% Job. (ii) I.B : APPLICABLE, Applicable, Rs.6,45,000/- for 25% Job & Rs.3,87,000/- for 15% Job. (Ref clause no:20.2 of Annexure-A1)
8.2	Bank Guarantee against spare materials / equipments taken outside the Plant.	(i) B.G: NOT APPLICABLE (Ref clause no:20.2 of Annexure-A1)
9.0	Defect Liability Period (Ref clause 30 of Annexure-A1)	12 (TWELVE) MONTHS (Ref clause 30 of Annexure-A1)

Form no: F-02/CNT/IDPM/02

Issue No. :002 Rev.: 00

Page 2 of 2

10.1	Current minimum daily wages of all categories of labour	Refer Annexure-B5
10.2.1	The values of L_0 and Y applicable (L_0 = Minimum labour rate) (Y = Labour component)	$L_0 = ₹ 554/-$ & $Y = 59.46\%$ (Ref Annexure-B5)
10.2.2	The values of D_0 and Y applicable (D_0 = Diesel rate at Angul at the time of tendering) (Y = Fuel cost component)	NOT APPLICABLE
10.3.1	Labor hike reimbursement against change in minimum wages.	APPLICABLE (Ref clause-28.0 of Annexure-A1)
10.3.2	Fuel escalation against change in Fuel Price	NOT APPLICABLE (Ref clause-29.0 of Annexure-A1)
10.4	HRD clearance	APPLICABLE (Ref clause 17,18, 19 of Annexure-A1)
10.5	PF & ESI	APPLICABLE (Ref clause 2.2.3 ,31.7 of Annexure-A1)
11	Type of Contract under GST & Applicability of GST & ITC on GST	Applicable as per CGST/ SGST/ UTGST & IGST (Ref Clause No.25 of Annexure-A1)
12	Service Accounting Code (SAC) of the contract/Harmonized system of nomenclature (HSN) code	APPLICABLE. (Ref Annexure-C18)
13	Recovery towards compensation for delay	Refer Clause no: 32 of Annexure-A1.
14	Recovery of Building and Other Const. workers' BOCW (RE & CS) Cess.	Refer Clause no: 27.8 of Annexure-A1.
15	Gate pass details	Total 40 (Forty) Nos. gate passes and temporary passes as and when required shall be issued for execution of 100% Job.

IMPORTANT POINTS TO BE NOTED FOR SUBMISSION OF BID

16.	The tender document should be digitally signed, before online submission.
17.	Correction & over writings are not permissible. Any corrections should be signed with date by the person, signing the tender document.
18.	If any tenderer is having any unauthorized structure / occupation inside Nalco Township / Plant, their offer will not be considered for evaluation and shall be liable for rejection.
19.	All the supporting documents submitted with the offer should be attested by a gazetted officer or Notary Public.
20.	The bidder has to submit the 'Necessary Forms' which are to be downloaded, filled up and signed before uploading.
21.	Pre Contract Integrity Pact at Annexure-C21 must be filled up and signed by the tenderer.
22.	You are requested to go through "Check list for bidder" and Clause No- 07 of Annexure-A1 of NIT details regarding Mode, Submission, Receipt & Opening of Tender.

Shri Promoda Kumar Panda
Tender Inviting Authority
Tender & Contract Dept., Smelter Plant

Sub: Miscellaneous Civil Works for Repair & Maintenance of Residential and Non-Residential Building including external and internal services in Nalconagar Township & CISF Colony.

AGENCIES INTENDING TO PARTICIPATE SHALL FULFILL THE FOLLOWING MINIMUM PRE-QUALIFICATION CRITERIA (WITH SUPPORTING DOCUMENTS & THEY NEED TO FILL UP ANNEXURE-C25 TO ANNEXURE-C27 OF THE NIT TO ENSURE SUBMISSION OF ALL DOCUMENTS AS PER REQUIREMENT OF NALCO)

PRE QUALIFYING CRITERIA.

A) TECHNICAL

Experience criteria	Documentary proof
<p>The bidder should have experience of having successfully completed "<i>Similar Work</i>" during the last seven years ending on last day of the month previous to the one in which NITs are invited, should be either of the followings;</p> <p>i. Three similar completed/partially completed works each (with above criteria) having executed value not less than Rs.48.06 Lakhs (Rupees Forty-Eight Lakh Six Thousand only).</p> <p style="text-align: center;">OR</p> <p>ii. Two similar completed/partially completed works each (with above criteria) having executed value not less than Rs.60.08 Lakhs (Rupees Sixty Lakh Eight Thousand only).</p> <p style="text-align: center;">OR</p> <p>iii. One similar completed/partially completed work (with above criteria) having executed value not less than Rs.96.12 Lakhs (Rupees Ninety-Six Lakh Twelve Thousand only).</p> <p>The work experience should be of "Working directly" and possess relevant experience as per the details given under experience criteria. "Working directly" implies, working as a Contractor or Sub Contractor under above authorities who is the Principal Owner of the work.</p> <p>Evaluation criteria: Cost of the completed works by the bidder shall be escalated @ 10% per annum (simple rate) to bring them at the current price level.</p> <p>(The cost of work completed within one year prior to original date of bid opening shall not be considered for any weightage. The weightage shall only be considered for work completed prior to one year of original date of bid opening on annual basis and no weightage shall be given for part of the year)</p> <p>"Similar Work" means "Construction/Repair/Maintenance/Renovation/Modification of civil works for Residential/Non-residential building".</p> <p>Partially completed work in progress (not abandoned) shall be considered.</p>	<p>1. The bidder should submit copy of following documents duly attested by a notary public or Gazetted officer.</p> <p>a) Work Order with value along with Amendment, if any, Scope of Work & Bill of quantity for assessment of Experience Criteria.</p> <p>b) Satisfactory Completion Certificate indicating the value of work executed & period of contract obtained from Principal Owner of the work for whom the work has been executed.</p> <p>2. In case the bidder submits the credentials as a sub-contractor the following copies are to be submitted duly attested by a notary public or gazette officer:</p> <p>a) Detailed work order / PO / Agreement from the main agency.</p> <p>b) Completion certificate issued by main agency indicating the value of work executed & period of contract.</p> <p>c) Completion certificate issued by the Principal / project authorities in favour of the main agency showing due completion of the package.</p> <p>3. In case of partially completed works the party has to submit the part completion certificate indicating the value of work completed and the performance /progress of the bidder should be satisfactory.</p> <p>NB:- The Experience / Completion Certificates shall be considered only when it bears the Name and Designation of Issuing Authority. This is only applicable for Experience/Completion Certificates issued after 30/06/2022.</p>

Shri Promoda Kumar Panda
Tender Inviting Authority
Tender & Contract Dept., Smelter Plant

B) FINANCIAL

Eligibility criteria	Documentary proof
<p>1) The average annual turnover of the vendor for last three financial years should be minimum Rs.36.05 Lakhs (Rupees Thirty-Six Lakh Five Thousand only).</p> <p>(Turn over shall be escalated @10% per annum (simple rate) to bring them at the current price level. The turnover of the latest previous year shall not be considered for any weightage)</p> <p>2) Net worth of the bidder during the last financial year shall be positive as per audited balance sheet.</p> <p>Note: (For bids received prior to 30th June of any year, the financial figure for the previous to previous year may also be considered for evaluation. Whereas for bids submitted after 30th June, the bidder may also submit financial statement for the previous year certified by Chartered Accountant/Auditor for consideration of their bid.)</p>	<p>The bidders have to submit the copies of audited financial statements and profit & loss accounts of the relevant years duly attested by a notary public or gazette officer in support of both the qualifying criteria of turnover and net worth along with the bid.</p>

C) CRIMINAL BACKGROUND:

The bidder or its Proprietor/Partner(s)/Director(s) of the firm should not have been convicted by a court of Law for an offence involving moral turpitude in relation to business dealings during the past seven years for acceptance of the offer. The bidder shall give an **affidavit** to this effect. The affidavit must be affirmed before the competent judicial authority or duly notarized by the Notary only after date of said tender floating. Besides, bidder should furnish litigation history of their firm or group firm (if claiming fulfillment of PQC on group entity terms). The litigation history shall be as per the Format at Annexure-C22 for the purpose of affidavit:

- D)** The bidder should possess independent EPF, ESI, & PAN based GST registration certificates of their firm (as applicable). The party should also possess PAN in the name of the firm or sole proprietor. The bidders are required to upload copy of EPF & ESI certificates and PAN along with the proof of ownership of their firm (in case of PAN is in the name of sole proprietor) along with the offer.
- E)** **The bidder needs to submit (upload) the photocopies of all brief orders presently under execution by them as a part of their concurrent commitment (Ref. Cl. No. 5.4 of General Information of NIT, Part-A).**

Note: Agencies intending to participate shall fulfill minimum Pre-Qualification Criteria (With supporting documents & they need to fill up Annexure-C6 to Annexure-C8 of the NIT. All the supporting documents submitted should be attested by a Notary Public or a Gazetted Officer.

Shri Promoda Kumar Panda
Tender Inviting Authority
Tender & Contract Dept., Smelter Plant

ANNEXURE-B2**SCOPE OF WORK**

Sub: Miscellaneous Civil Works for Repair & Maintenance of Residential and Non-Residential Building including external and internal services in Nalconagar Township & CISF Colony.

SCOPE OF WORK ALONG WITH TECHNICAL SPECIFICATION**1. INTENT OF THE SCOPE & TECHNICAL SPECIFICATION:-**

The intent of this scope & technical specification is to enable tenderer to submit a detailed and comprehensive offer for TENDER SPECIFICATION FOR **"Miscellaneous Civil works for Repair & Maintenance of Residential and Non Residential Building including external and internal services in Nalconagar Township & CISF colony"** as per specification and direction of Engineer in charge. NALCO's G.C.C., technical specification and special condition of contract shall form part of this specification. List of residential and non-residential building is enclosed as Annexure-I & II.

2. SCOPE:

The scope of the contract shall be in general for TENDER SPECIFICATION FOR **"Miscellaneous Civil works for Repair & Maintenance of Residential and Non Residential Building including external and internal services in Nalconagar Township & CISF colony"**.

All general civil, structural, masonry, concreting, painting, finishing and carpentry works etc. including external and internal services pertaining to repair & maintenance of all residential and non-residential building in Nalconagar township and CISF colony at Nalconagar, Angul.

The contractor will be solely responsible for arranging man, materials, Tools, tackles, etc. within shortest possible time to execute the work. The scope of the work also consists of providing all incidental items not shown or specified in the bill of schedule of item but reasonably implied or necessary for the proper completion of the work including revision & amendment there to as may require and approved by the EIC during execution of the work. The contractor will have to engage minimum one number of qualified Civil Engineer & required number of experienced supervisors, Technicians workmen etc. for smooth execution of the work. The contractor has to assess the required manpower and will furnish to the department by filling in the G.C.C. format no. Appendix-II, III & IV. (Copies of Appendix-II, III & IV are enclosed) The offer is liable to be rejected if the above information is not furnished.

3. TENDER DRAWINGS:

The preliminary layout drawing of Township master plan & overall plot plain of CISF colony may be seen in contract cell or Township civil maintenance Department for tendering purpose only to have broad idea on the works. However, the works will have to be carried-out as per job order/ drawings released for maintenance and construction work by the Engineer-in-charge or his authorized representative from time to time. (Ref: Annexure-V for township layout)

4. TECHNICAL SPECIFICATION:

Work shall be carried out in accordance with description of schedule of item of work, drawing, CPWD specification and Indian standard specifications.

If the CPWD specification do not cover the same, the work should be carried out as per Indian standard specification or any other standard in order of preference subject to the approval of Engineer-in-charge. In case of any controversy/doubt reference to be made to all the above mentioned standards and documents and most stringent conditions amongst these shall be followed and Owner's decision shall be final and binding.

The bidder should go through and acquaint himself with the above documents before quoting the rates of this tender.

5. FREE ISSUE MATERIALS

- a) Cement in non-returnable bags.
- b) Tor steel Reinforcement
- c) Structural steel
- d) Fly ash brick (will be issued from CPP on availability)
- e) GI/ Aluminium sheet from Nalco store.
- f) Bitumen emulsion.
- g) Any other required as per contract item.

The agency will have to submit an indemnity bond for an amount of 80% and a Bank Guarantee of 20% towards the cost of free issue materials required. The free issue materials shall be issued after submission of initial security deposit (ISD), Indemnity bond and Bank Guarantee as detailed above. Free issue materials shall be issued progressively based on reconciliation of free issue materials submitted by the party and duly certified by the MIC.

The contractor is responsible for lifting the above materials from the issue point of owner and the materials will have to store in the safe custody and reconciled after the completion of work as provided in general condition of contract. Procurement and supply of all other materials consumables, including necessary tools, machinery etc. shall be the responsibility of contractor.

Reconciliation of free issue materials will be done with respect to actual consumption in the permanent work and the total quantities issued for the work. Wastage percentage for free issue materials will be as per the provision of general condition of contract.

6. Materials, tools, tackles and equipments under the contractor scope:

All other material except Nalco's supply shall be under the scope of contractor.

All tools and tackles, equipment like concrete mixer, vibrator etc. required for this work shall be arranged and will be under the scope of contractor.

List of tools and tackles:- The contractor must have these following tools & tackles available with him at the camp office round the clock and the necessary register must have to maintain to access it availability by the engineer in charge.

Mixture machine, Vibrator (with 40mm/20mm needle), Trucks/Tractor & hand/ rickshaw trolley, M.S. scaffolding pipe, Shuttering (steel / ordinary plank), Electric drilling machine, Electric scrapping machine, Shovel, Spade, crow bar 50mm dia, Manila rope 25mm dia, Ladder different length up to 9Mtr, Masons kits (Trowel of all size, Plumb, Yard leveler, Mason's hammer, Sprit level), Iron pan, Measuring box(300x300x375)mm, Carpentry tools & kits, Dumpy level with staff 4M, Pick axe, Axe, Sickles, GI bucket 20", Sludge pump 5HP with suction & delivery hose 10m each), Sewerage line cleaning equipment, Brooms and wire brushes etc.

Carpentry tools and kits with electric hand drilling machine has to be provided to carpenter for miscellaneous work against the manpower supply item.

7. EXECUTION & SUPERVISION:-

The contractor shall have to work as per the direction of the Engineer in charge besides his own supervision by qualified engineer/supervisor. The contractor shall report to Engineer in charge daily in the morning 8AM and receive the necessary instructions & guidance from the Engineer in charge for the jobs to be attended and give the feedback of the progress of the previous day's work. The Engineer in charge will decide the nature of work and his decision will be final & binding. The contractor will have to furnish the execution schedule of the jobs as per required completion date by the Engineer-in-charge and have to complete the work as per the schedule. The contractor have to follow the job procedure. As enclosed in Annexure-III & IV.

8. CONTRACT PERIOD:-

The contract period is **24 Months (Twenty-four months)** from the date of issue of L.O.I./ Brief order. Time is the essence of work. All the works should be completed within the time schedule.

9. INSPECTION OF SITE:-

The tenderer shall inspect and examine the site and its surrounding and shall satisfy himself before submitting his tender as to the nature of ground and sub-soil, the form and nature of the site, the elevation of the water table during different seasons, means of access to the site, the accommodation he may require and all other matters incidental there to and in general shall himself obtain all necessary information on the risks, contingencies and other circumstances which may influence or affect his tender. They shall be deemed to have satisfied themselves that the rates quoted by them in the tender will be adequate to complete the work according to the specifications and conditions attached thereto and they have taken into account all conditions and difficulties that may be encountered during its progress and to have quoted for all labour and material rates complete, which shall include cost of material with taxes, royalties, octroi and other duties, lead, lift, loading, unloading, freight and all other charges necessary for completion of the work to the entire satisfaction of the Engineer –in-charge.

10. MOBILISATION:-

The contractor will be required to mobilize within 10 days from the date of issue of L.O.I./Brief order. The contractor will furnish on mobilization, detail lists of equipments like tools and tackle etc. and manpower deployed for the work and get the approval of Engineer in charge before starting the job.

11. QUANTITIES VARIATION:-

The quantities of the various items mentioned in the schedule are purely tentative and may vary up to any extent or may be deleted altogether of some particular items. The quoted item rates shall remain firm during the tendency of the contract. The contractor should therefore on his own interest, get an indication of the probable extent of work to be executed under any particular item in the schedule before quoting.

12. PAYMENT TERMS:-

90% Payment shall be made to the contractor against submission of only computerized monthly/bimonthly R.A. bills in duplicate duly approved and certified by Engineer in charge whose certificate shall be final and conclusive. Balance 10% from the R.A. bills shall be deducted towards security deposit. If security deposit is submitted by the contractor then the full amount passed shall be paid to the contractor excluding other recoveries like taxes duties cess, octroi, mobilization advance, secured advance etc.

The RA bill/ final bill in duplicate shall be accompanied by the following documents:-

- a) Joint measurement sheet of job order.
- b) Details of measurement sheet. (Proforma-E-I)
- c) Abstract of job order amount (Proforma-E-II)
- d) Abstract of measurement (itemwise quantity) (Proforma-B-I)
- e) Abstract of measurement (Quantity and amount) (Proforma-B-II)
- f) Statement of Material reconciliation (Proforma-C-I)
- g) Statement of Material received from Nalco (Proforma-C-II)
- h) Statement of item wise consumption (Proforma-C-III)
- i) Statement of secured advance against material (Proforma-D)

- j) Royalty statement for minor minerals (Proforma-F)
- k) Contractor invoice for GST with registration certificate.
- l) Safety clearance certificate.
- m) HRD clearance certificate.
- n) Test certificate.

Additional for final bill

- a) Deviation statement.
- b) No claim certificate
- c) No due certificate
- d) Completion certificate

13. ROYALTY:-

Royalty towards use of minor minerals against this work shall be deducted from the various bills proportionately as per the directive of State Govt. / competent authority.

14. ELECTRICITY & WATER FOR EXECUTION OF WORK ON SITE:

Electricity required exclusively for execution of work at site inside the township shall be made available free of cost at a point within 500meters of the work site. Further distribution is to be done by the contractor as per requirement at his own cost. Electricity required for contractors establishment and works within their designated office and work shop premises shall be chargeable as per Nalco's rate.

Water required for the work shall have to be arranged by the contractor.

For the works outside the township, the contractor will make his own arrangement for electricity and water.

All precautions shall be taken by the contractor to ensure safe and efficient utilization of electrical power under supervision of a licensed supervisor and technicians and as per I.E rules subject to statutory clearances as applicable.

15. LAND, POWER SUPPLY & WATER FOR CONTRACTOR'S FIELD OFFICE, GODOWN AND WORKSHOP.

- a) **Land:-** Nalco will at his discretion and convenience and **for the duration of the contract period of the work plus three months** may provide the land for construction of contractor's field office, godowns, workshops and assembly yard required for the execution of contract at suitable place. The contractor shall at his cost construct all these temporary buildings structures and may provide suitable water supply sanitary and electrical arrangement as approved by the Engineer –in-charge and other inspectorates.
- As per general condition of the contract a token of Rs.100.00 per hectore or part thereof per annum or part thereof shall be charged for land so made available.
- On completion of the work the contractor shall remove all works erected for site office as per the direction of Manager-in-charge.
- Land provided shall be solely on incense basis which is terminable at any time without notice or without assigning any reasons.
- In event of any such termination or completion of the contract, the contractor shall forth with vacate the premises.

- b) **Electricity:-** Electricity for contractor's field office, godown, workshop, fabrication and erection yard if required near field office shall be chargeable basis as per G.C.C clause No. 2.2 & 2.3,2.4, subject to direction of Engineer-in-charge.

The cost of power supply shall be payable at every month at the rate of Rs. 2.85/ KWH (subject to amended from time to time) which will be deducted from the running bill or deposited by the party to Nalco as per the advice of electrical department.

- c) **Water:-** Limited quantity of water near camp shall be provided on free of cost at a point within 500mtr, subject to availability. Further connection to be done by the contractor as per requirement at his own cost.

16. OTHER TERMS AND CONDITIONS:

All other terms and conditions not specifically stated in the forgoing clauses shall be as per NIT and G.C.C and shall remain unaltered and binding on the contractor.

17. GENERAL:

Bidders are requested to make themselves fully conversant with the General Condition of the Contract special conditions of the contract, Tech specification and the site condition before quoting.

18. AGREEMENT:

The following documents shall form the integral part of the agreement.

- The tender NIT
- Special Conditions of Contract.
- General Condition of Contract of Nalco.
- Schedule of quoted/agreed items rates.
- Any other documents which was agreed during negotiation/ discussion which has contractual obligations.

ANNEXURE-B3**SPECIAL CONDITIONS OF CONTRACT**

Sub: Miscellaneous Civil Works for Repair & Maintenance of Residential and Non-Residential Building including external and internal services in Nalconagar Township & CISF Colony.

1. GENERAL

- a) Special condition of contract shall be read in conjunction with the general condition of contract, schedule of rates, specifications of work, drawings and any other document forming part of this contract wherever the context so required.
 - b) Where any portion of the special condition of the contract is repugnant to or at variance with any provisions of the general condition of contract then unless a different intention appears, the provision of the special condition of contract shall be deemed to override the provisions of the general conditions of contract only to the extent such repugnancies or variations in the special conditions of contract as are not possible of being reconciled with the provisions of general condition of contract.
 - c) The materials, design and workmanship shall satisfy the applicable standards, specifications contained herein and codes referred to. Where the technical specifications stipulate requirements in addition to those contained in the standard codes and specifications, those additional requirements shall also be satisfied.
 - d) Wherever it is mentioned in the specifications/ bill of quantities that the contractor shall perform certain work or provide certain facilities, it is understood that the contractor shall do so at his own cost and the contract price shall be deemed to have included cost of such performances and provisions, so mentioned.
 - e) In case of contradiction between relevant Indian standards, general condition of contract, special condition of contract, specifications, drawing, schedule of price/ rates, the following shall be prevail in order of precedence.
 - i) Detailed letter of intent along with statement of agreed variation and its enclosures.
 - ii) Schedule of rates.
 - iii) Special condition of contract
 - iv) Drawing
 - v) Technical specification
 - vi) Standards.
 - vii) General condition of contract
2. NALCO's General conditions of contract (GCC) & Special conditions of contract if any shall form part of this contract. The tenderer is advised to see the same in the office of the contract cell during office hours before quoting the rates. It will be taken for granted by NALCO that tenderer has seen and gone through all the terms and conditions available as on date and shall abide by this.
 3. Wherever transport of material is applicable, the contractor has to ensure that goods carried during transportation do not exceed permitted lead and weight as certified by registering authority for the respective vehicles.
 4. Wherever applicable Bank Guarantee are to be submitted in Nalco's latest prescribed format only.
 5. The temporary camp office shall be maintained with an attendant along with a mobile phone for day to day/ emergency instruction and communication round the clock.

6. In general the contractor will be asked to execute the maintenance activities for a specified area given to him during the starting of the contract but it does not give any privilege to the contractor that he will not execute the maintenance work in any other area of the township when asked for. Similarly the contractor will not have any claim if other agencies are asked to do the maintenance work in the specified area earmarked to him, if the services of other agencies demand for quick compliance of defect/ maintenance work or vice versa.

In nut-shell the specified area earmarked to the contractor before starting the contract is only and to facilitate the Engineer-in-charge for easy planning of the maintenance activities.

7. The contractor at his own interest has to keep a close liaison with the Engineer-in-charge or with his authorized representative for receiving the job order, compliance of defect and other related official work for the smooth execution of the contract. If any job order is pending during the month that should be revalidated in the next month positively before starting work.
9. The contractor have to engage the minimum required qualified Engineer for this work so that the technical aspect of the maintenance work could be assessed for planning the job towards its quick & correct compliance and necessary documentation work.
10. The contractor after receiving the job order has to inspect the site by his engineer within 1 day (one) of the receipt of the job order and submit the report of the defect and other related information along with the execution schedule of the work to the engineer in charge and must obtain the clearance from the engineer in charge or his authorized representative before starting the maintenance work.

11. COMPENSATION FOR DELAY

Since the maintenance of Petty civil works of residential & non-residential building along with water supply, sewerage and other allied services are urgent in nature, these maintenance work as per the job order is to completed at the earliest possible time as per job procedure and execution schedule duly approved by the engineer in charge (Ref Annexure-III). ANY UNJUSTIFIED DELAY IN ATTENDING THE MAINTENANCE WORK AS PER THE JOB ORDER A PENALTY @1% OF THE WORK VALUE OF THAT PARTICULAR JOB ORDER PER WEEK AND MAXIMUM 10% OF THE JOB ORDER VALUE SHALL BE LEVIED FROM THE RUNNING BILL.

12. The contractor has to maintain a register containing the job order number, details of job to be done, schedule date of completion of the job & actual completion date of the job for monitoring of the progress of work. This register must be available at camp/office round the clock for the inspection of the engineer in charge or his authorized representative.
13. No new job orders will be issued to the contractor if a minimum of 50(fifty) nos job order are pending with the contractor beyond the scheduled completion date accepted by the contractor. Since attending the complain is a continuous process, the new job order shall be issued to other contractor as per decision taken by the concerned Office-in-charge.

14. Computerized contractor's billing system

After completion of work the party will return the job orders with signature of occupant on daily basis to the concerned Officer-in-charge for joint measurements, recording the measurements in the job sheet and acceptance for entry in the Nalco computerized billing system.

After completion of entry of measurement in the Nalco computerized billing system and passing by the group in charge, the copy of bill shall be obtained by the contractor from the civil office for submission of monthly/ bi-monthly RA bill with all relevant documents as per provision in the contract.

For all payment purpose measurement shall be based on execution drawing issued to the agency from time to time. Whenever the details are not available or in adequate in the execution drawing, physical joint measurements shall be taken in the presence of the agency. Measurement shall be made in unit indicated in the schedule of rate/ bill of quantity as per measurement mode of IS-1200.

15 Distribution of area of work for township civil maintenance contract.

SI No	Bidder Position	Distribution of area/ location	Percentage of total scope of work	Remarks
1	L-1	Maintenance of residential buildings of sector-1, 2, 3, 4 and maintenance of vacant quarters of TA, TB, TBT, TC and TD including external services of the respective areas in Nalconagar township.	25.00%	The distribution of area of work are not limited to the above. In case of emergency, the area of work may change as per decision of MIC.
2	L-2	Maintenance of all non-residential buildings including Hostels as per enclosed list of Annexure-II, including Electrical substations & community garages in Nalconagar township. Maintenance of external services of the respective areas is also included.	15.00%	-Do-
3	L-3	Maintenance of vacant quarters of A, B, C & D type quarters in Nalconagar township.	15.00%	-Do-
4	L-4	Maintenance of residential buildings of sector-5, 7 & 9 including external services of the respective areas in Nalconagar township.	15.00%	-Do-
5	L-5	Maintenance of residential buildings of sector-6 & 8 including external services of the respective areas in Nalconagar township.	15.00%	-Do-
6	L-6	Maintenance of residential and non-residential buildings of CISF colony including maintenance of vacant quarters of CISF colony and general maintenance of Sr. DPS. Maintenance of external services is also included in the respective areas.	15.00%	-Do-

Note:- The distribution of area are not limited to the above. In case of emergency, the area of work of concerned agency may change as per decision of MIC.

16 Total numbers of gate pass for 100% job shall be limited to **40 (forty)**. Temporary gate passes to be issued as and when required for completion of work.

17 Deployment of Manpower

Sufficient number of civil engineer (Diploma / Degree) and experienced supervisors shall be deployed by the contractor for each package of the maintenance contract for smooth execution of the work.

18 Manager-in-charge shall ensure that, the value of un-reconciled free issue materials should not exceed the bank guarantee amount at any point of time.

ANNEXURE-D**INSPECTION & TEST PROCEDURE****A. Test procedure:-**

1. The contractor shall carry out the various tests as enumerated in the technical specifications of the tender document and the technical documents that will be furnished to him during the performance the works and no separate payment shall be made unless otherwise specified in the schedule of rates.
2. All tests either on the field or at outside Laboratories concerning the execution of the work and supply of materials by the contractor shall be carried out by contractor at his own cost.

B. Inspection procedure:-

1. The work is subject to inspection at all times by the Engineer-in-charge. The contractor shall carry out all instructions given during inspection and shall ensure that the work is being carried out according to the technical specifications of this tender. The technical documents and the relevant codes of practice furnished to him during the performance of the work.
2. The contractor shall provide access ladders, lighting and necessary instruments at his own cost for inspection of work
3. Any work not conforming to the execution drawings, specifications or codes shall be rejected forthwith and the contractor shall carry out the rectifications at his own cost.
4. All results of inspection and tests will be recorded in the inspection reports, proforma of which will be approved by the Engineer-in-charge. These reports shall form part of the completion documents.
5. Inspection and acceptance of the work shall not relieve the contractor from any of his responsibilities under this contract.

ANNEXURE-E**SPECIFIC SAFETY AND ENVIRONMENTAL REQUIREMENT****1: SAFETY REQUIREMENTS:**

The contractor shall have to take necessary safety arrangements/ precautions for the workmen engaged by them and shall be responsible for any first aid / emergency treatment for their workmen. The contractor shall have to arrange for 3rd. party insurance and workmen compensation insurance for safety. In addition the contractor shall have to abide by all fire & safety regulations of the owner. The contractor has to execute the work after taking necessary clearance from the authorized safety officer of the safety dept. available at Smelter Plant. Safety appliances like safety shoes, gloves, helmet etc. should be provided by the contractor to all workmen working under him. In case the contractor fails to provide necessary safety appliances to his workmen, the same will be issued to the contractor by NALCO and necessary recoveries shall be made from the contractor's bill.

2: ENVIRONMENTAL REQUIREMENTS:

The contractor shall adhere to safe environmental practices and shall perform in the line with company's available environment policy. The contractor shall also guard against any hazardous and unsafe working conditions. Scraps waste generated during different activities including its disposal should be in a manner to minimize their harmful concentration effects on the environment. The various activities at site should not create any adverse effect on ambient air and water quality at work site and adjoining areas.

3: PRE-MEDICAL CHECK UP:

Contractors will have to submit medical certificate from a Government Hospital or registered medical practitioner in the prescribed format for the workmen engaged by him along with application for gate pass and for annual renewal. No gate pass will be issued/ renewed unless the medical certificate is enclosed along with the application.

ANNEXURE-I

LIST OF RESIDENTIAL QUARTER IN NALCONAGAR TOWNSHIP

SI No	TYPE OF QUARTER	NO OF UNIT			REMARKS
		NALCO TOWNSHIP	CISF COLONY	TOTAL	
1	TA (Single Storey)	160	--	160	
2	TB(Single Storey)	68	--	68	
3	TBT(Single Storey)	38	--	38	
4	TC(Single Storey)	39	--	39	
5	TD(Single Storey)	6	--	6	
	D (Single Storey)	102	--	102	
6	A (Double Storied)	924	120	1044	
7	B (Double Storied)	1252	56	1308	
8	C (Double Storied)	296	--	296	
9	D (Double Storied)	20	--	20	
10	D (Duplex)	64	--	64	
11	A (Three Storied)	--	114	114	
12	B (Three Storied)	1080	132	1212	
13	C (Three Storied)	66	30	96	
	Total	4115	452	4567	

ANNEXURE-II

LIST OF NON RESIDENTIAL BUILDING IN NALCONAGAR TOWNSHIP

SL. NO	NAME OF NON RESIDENTIAL BUILDING	NO OF UNIT
1	Hospital complex /First aid	1
2	Club (Officers club, The club, TT Gym)	3
3	Market complex (Temp GI /Permanent/New)	3
4	Guest house/Transit house (SAN/NAN/TH-1/TH-2)	4
5	Officers association office	1
6	Community centre (RCC & GI)	1
7	Theatre auditorium near Gopabandhu park	1
8	School (Jr.SVM-1 & 2, Sr.SVM, Jr.DPS)	5
9	Stadium	1
10	Badminton court (GI sheeting)	1
11	Boiler & Factories Inspector's lab office	1
12	OSPCB office	1
13	Telephone exchange (BSNL/Nalco)	2
14	LPG gas go down (GI sheeting)	1
15	IOB/ESI (GI sheeting)	2
16	Reserve Police shed	1
17	Police station	1
18	Bus stop	9
19	Entry gate with goomty	4
20	Pump house	2
21	STP	1
22	G-4 office shed	1
23	Horticulture complex & sanitary office	1
24	Estate office	1
25	Vermi compost	1
26	Union office (NPEU/NSCU/NNEU/NES/SC&ST/ NKS)	5
27	Kalyan mandap	1
28	Estate office (new building)	1
29	Hostel (BH-I & II, SOT, BMN & RSSJN)	5
30	Sr. DPS	1

ANNEXURE-III

**NALCO S&P COMPLEX, ANGUL
TOWNSHIP CIVIL MAINTENANCE AND SERVICES
Job procedure for attaining of civil maintenance work.**

Lodge of complain – Zero date.

1. Day-1 - Entry of complain in the computer.
2. Day-2 & 3 - Identification of complain including inspection of qtr and completion of emergency work.
3. Day-4 - Issue of job order to concerned contractor.

Duration for completion of various work

SI No.	Description of work	Duration for completion of work (in Days)
A	Internal plumbing	a)Repairing of W/S and sanitary fittings.
		b)Replacement of water supply fittings.
		c)Replacement of sanitary fittings.
		d)Replacement of water supply pipe line after dismantling of floor, wall etc.
		e)Replacement of sanitary pipes after dismantling of floor, wall etc.
B	Wood works	a)Repairing of door/window fittings.
		b)Replacement of door/window fittings.
		c)Repairing of door/window shutter with primer and painting.
		d)Replacement of door/window shutter with painting.
		e)Replacement of broken glass.
C	Water seepage/leakage	a)Minor water seepage from roof/sunshade.
		b)Major water seepage from roof.
		c)Stagnation of water in roof.\sun shade
		d)water seepage in toilet/bed room/bath room/ kitchen from 1 st /2 nd floor.
		e)Refixing of rain water pipe / soil pipe.
		f)Replacement of rain water /soil pipe etc.
D)	Inside painting	a)Wall paintings.
		b)Steel/wood work painting.
E)	Masonry work	a)Repairing of wall / roof
		b)Repairing of floor
		c)Replacement of floor.
		d)Repairing of approach road.
		d)Repairing of plinth protection/ court yard etc.

F)	Steel work	a)Repairing of door/window shutter/ rolling shutter/ collapsible gate.	07
		b)Replacement of steel items	15
G)	Aluminium work	c)Repairing of aluminium work	03
		d)Replacement or P/F of aluminium work	07
H)	External W/S, sewerage and drainage system	a)Repairing of water supply line.	On emergency basis as and when required.
		b)Replacement of water supply main line.	15
		c)Rectification of sewerage line.	On emergency basis as and when required.
		d)Replacement of sewerage line.	30
		e) Repairing of manholes	15
		f) Repairing of storm water drain	7
		g) Construction of new drain	15
I)	Supply items	a) Wood works	7
		b) Sanitary fittings	3
		c) GI / CPVC fittings	3
		d) CI fittings.	7
		e) Other materials	4

- Return of job orders within 1 day after compliance and acceptance of occupants to the concerned engineer.
- Inspection of completed works and joint measurement with the authorized representative of contractor within 3 days after receipt of completed job orders.
- Quarter wise valuation of work.
- Advise for billing.
- Submission of RA bill on monthly/bimonthly basis.

ANNEXURE-IV

Format of job order
NALCO S&P COMPLEX, ANGUL
TOWNSHIP CIVIL MAINTENANCE AND SERVICES

Computerized complain No						Nature of complain received	P. No/ Mobile No	Identification of complaint	Action taken	Remarks
DD	MM	YY	Qtr type	No	No comp					
XX	XXX	XX	XXX	XXXX	XXX					
					1					
					2					
					3					
					4					

Identification of complaint	I-Inspected INR- inspection not Required BS- Beyond the scope AA- May be executed on getting administrative approval (to be obtained by the requisitioner)
Action taken	IC- Identified and completed. JO- Job order issued.
Remarks	Completed on

NAME OF WORK:			
NAME OF AGENCY:		PARTY CODE:	
WO NO.		JOB ORDER NO.	

SI No	Description of work to be carried out under the scope of the job order	Scheduled completion date.	Actual completion date.

Signature
Sup/ Engineer(Nalco)
representatives

Signature
Area In-charge

JO received in duplicate
Sign of authorized

Of contractor

Signature of occupant with mobile No. After completion of work	Sign of Contractor	Sign of Nalco after obtaining feedback report from occupant.
---	--------------------	---

Original copy to be returned by the contractor within a day after compliance for joint measurement.

Joint Measurement

SI No	Item No	Description of item	Unit	Measurement					Rate	Amount	Remarks
				No	L	B	H	Qty			
1	2	3	4	5	6	7	8	9	10	11	12

Signature of Contractor

Sign of Sup/ Engineering (Nalco)

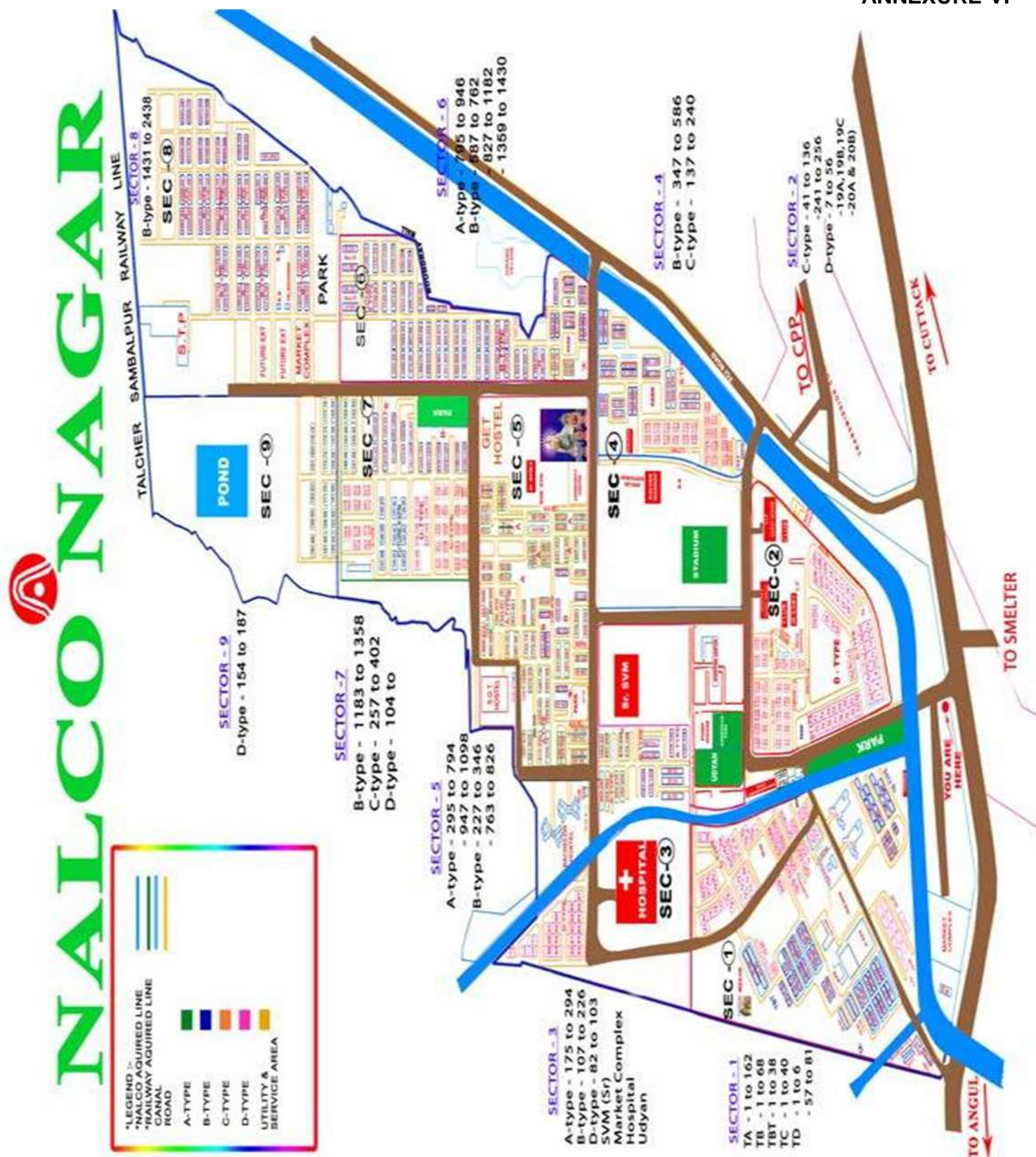
Sign of area in-charge.

ANNEXURE-V

BRIEF SCOPE OF WORK INDICATED IN THE SCHEDULED OF ITEMS

A	EARTH WORK
B	CONCRETE WORK
C	BRICK WORK
D	STONE WORK
E	WOOD AND PVC WORK
F	STEEL WORK
G	FLOORING
H	ROOFING WORK
I	PLASTER AND PUNNING
J	PAINTING
K	DISMANTLING/ DEMOLISHING
L	REPAIR OF DOOR & WINDOW
M	SANITARY ITEMS
N	WATER SUPPLY (PPR, CPVC & GI PIPE)
O	CI PIPE AND SPECIAL
P	DRAINAGE
Q	SUPPLY OF MATERIAL
R.	MISCELLANEOUS WORK

ANNEXURE-VI



APPENDIX - II

NAME OF WORK:

NAME OF TENDERER:

DETAILS OF EQUIPMENTS, TOOLS & TACKLES

1. Tenderer shall submit herein details of equipment, tools, tackles, etc. required to perform the work and shall note in each case whether the same is (a) already owned by tenderer and available for use on this contract (b) anticipated to be hired by Contractor or (c) anticipated to be purchased by Contractor, in case of (a) anticipated (b) and (c) Location of hirer or supplier shall be stated.

Sl. No.	Description Make, Mode & Capacity	Year of Manufacture	Category (a) or (b) or (c) below	Location	Remarks
(1)	(2)	(3)	(4)	(5)	(6)

2. Contractor agrees to augment the above chart with additional number/category of equipment, if required to complete the work within the agreed time schedule of completion and directed by the Engineer-in-charge.
3. In case of hiring of equipment from other agencies, copies of the arrangements made with the hire/supplier shall have to be furnished.

SIGNATURE OF TENDERER

APPENDIX – III

**DETAILS OF MINIMUM MANPOWER PROPOSED
TO BE DEPLOYED ON THIS WORK**

Sl. No.	Details of Manpower	No.	Remarks
---------	---------------------	-----	---------

Note:- Please furnish the above details in two categories - To be deployed by (I) Contractor and (II) Sub-contractors.

Minimum manpower deployment shall be based broadly as above and will be modified as mutually agreed to suit the detailed construction programme jointly worked out, further if any additional manpower is required for completion of work in time, the same shall be provided by you as directed by Engineer without any extra cost.

The manpower proposed to be deployed in the work needs to be given quarter wise separately for direct personnel of the contractor and the manpower proposed to be deployed through the sub-contractors.

APPENDIX – IV

**ORGANISATION CHART SHOWING NO. OF QUALIFIED
ENGINEERS & SUPERVISORY PERSONNEL ETC.**

Sl. No.	Details of personnel to be deployed on this work.	No.
---------	--	-----

Note:- Names and short resume of their experiences may also be given for key personnel.

The tentative chart of your site organization as above furnished by you shall be subject to variation to suit the construction programme requirement and as directed by Owner/Engineer.

ANNEXURE-B4

QUANTITY & RATE SCHEDULE

Sub: Miscellaneous Civil Works for Repair & Maintenance of Residential and Non-Residential Building including external and internal services in Nalconagar Township & CISF Colony.

**{Online (+/- %) Percentage BOQ
i.e. Annexure-B4 enclosed
separately with this tender}.**

ANNEXURE-B5

Minimum Wages of Contract Labours
W.E.F. 01/Apr/23

SL NO	CATEGORY	MINIMUM RATES OF WAGES PAYABLE INCLUSIVE OF WAGES FOR WEEKLY OFF, VDA & CANTEEN SUBSIDY			
		MINIMUM WAGE RATES (INCLUSIVE OF WAGES FOR WEEKLY OFF & VDA) IN Rs. .	ADDITIONAL ELEMENT IN Rs.	CANTEEN SUBSIDY IN Rs	TOTAL IN Rs
1	UNSKILLED WORKER	494.00	44.00	16.00	554.00
2	SEMI SKILLED WORKER	616.00	44.00	16.00	676.00
3	SKILLED WORKER	736.00	44.00	16.00	796.00
4	HIGHLY SKILLED WORKER	858.00	44.00	16.00	918.00

ADDITIONAL PPE/SAFETY REQUIRMENT SPECIFIC FOR THE JOB OTHER THAN PPE MATRIX AND SAFETY REQUIRMENT SPECIFIED at Page 31,32,33

The List of PPEs are available in the Scope of Work.

Declaration by the Bidder (Contractor)

I do hereby agree to provide the ISI/CE marked PPEs as required to ensure safe working conditions in consultation with NALCO's Safety Dept. to the workers to be engaged by me while working inside the plant. I also agree to follow the "Safety Code for Contractors" issued by Safety dept, Smelter Plant, NALCO.

(Signature of bidder)

PART –C

Formats for contract execution

ANNEXURE-C 1**FORWARDING LETTER AND UNDERTAKING**

From: _____

To
Tender Inviting Authority
National Aluminium Company Ltd.

Sub: Letter of Undertaking.

1. Having carefully examined all the Tender Documents under reference no. **SMLT/T&C/CPPP/OMC-5719/NIT/5040 Date: 14.10.2023** we offer to complete the works in conformity with all the terms and conditions as detailed in the Tender Documents.
2. We here by confirm that we have downloaded the complete set of tender documents along with the set of enclosures hosted in www.eprocure.gov.in website. We confirm that the bid document has not been edited or modified by us. In case, it is observed by NALCO that the bid document has been edited or modified, we agree for the rejection of the bid by NALCO.
3. We undertake, if our tender is accepted, to commence the work from the effective date of contract and to carry out work as stipulated in the contract
4. We have submitted the Earnest Money Deposit amount through DD/BC/PO/BG as instructed by you.
5. We agree to abide by this Tender initially for a period as mentioned at point -7 of F-02 form as validity of offer from the date of opening of Tender and it shall remain binding on us and may be accepted at any time before the expiry of that period
6. **Further we agree to the Pre-Contract Integrity Pact which is part of this tender and has signed the Pre Contract Integrity Pact as at Annexure-C21 duly filled up for further necessary action at your end.**
7. Should this Tender be accepted, we hereby agree to abide by and fulfill all Terms and Conditions of Tender Document as accepted by us and in default thereof, to forfeit and pay to NALCO such sums of money as stipulated in conditions contained in Tender Documents. We understand that NALCO is not bound to accept the lowest or any Tenders received and NALCO reserves the right to reject any or all tender without any liability.
8. This Tender together with written "Acceptance" thereof, shall constitute a binding CONTRACT between NALCO and us, till a formal contract is executed.

Date _____ day of _____

Signature _____

(NAME IN BLOCK LETTERS)

(To be signed by authorized person.)

Fax: _____, Mob: _____

Email: _____

(Seal of the Company)

ANNEXURE-C2

MANDATORY INFORMATION OF THE BIDDER

All Fields are Mandatory. Enclose Certificate/documentary evidence for fields marked with *.	
Authorized Signatory *	
Legal Name of Firm as per PAN *	
Trade Name of Firm as per GST *	
Postal address of the firm:	
House No. / Plot No	:
Street Name	:
City :	District :
State:	Pin Code : Country:
* CPP Portal Login ID:	
Phone No. :	Mobile No. :
Valid Email ID. :	
Gender : Male / Female / Other
Category : General / SC / ST
Type * Micro / Small/ Medium / Ancillary	Micro/Small/Medium..... Ancillary..... Yes/No
EPF No. :	ESI No. :
PAN No. :	GSTN No. :
Bank Name * Br.Name..... Br.Place.....	
Bank A/c No (enclose cancelled cheque)* IFS Code.....	

Date: _____

(Signature and official seal of the Proprietor / Authorized Person)

TENDER No.:
SMLT/T&C/CPPP/OMC-5719/NIT/5040

Subject: Miscellaneous Civil Works for Repair & Maintenance of Residential & Non-Residential Building including external and internal services in Nalconagar Township & CISF Colony.

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ANNEXURE-C3

EXCEPTION / DEVIATION STATEMENT TO THE TENDER TERMS & CONDITIONS

In case of no deviation please write 'No Deviation' in the space below:

Sl. No	Reference of Tender Document			Subject	Deviation / Exception
	Page No.	Clause No.	Para No.		

Signature & Seal of bidder.

ANNEXURE-C4

-: DECLARATION BY THE BIDDER :-

I _____ representing the bidder, do declare on behalf of the firm as hereunder :

* That, I am the PROPRIETOR of the bidder's firm. I undertake to submit proof of ownership as and when demanded by NALCO.

OR

* That I am the authorized signatory to the tender documents holding valid Power of attorney. Certified copy of the valid power of Attorney is enclosed with the offer.

NOTE: Strike out whichever is not applicable.

- (a) That, we do not have any FINANCIAL/PROFESSIONAL stake in any of the other bidders participating in this tender;
- (b) That, this firm has not been blacklisted/debarred/banned in any unit of NALCO/Other PSUs / GOVT of India/ State Govts/ Quasi Govt. organizations.
- (c) That, we are not in any arbitration/legal cases with NALCO and no cases are pending in court of law.
- (d) That, the proprietor/partners/directors/ employees of the firm have never been a part of any blacklisted/debarred/banned firms or company in any unit of NALCO/Other PSUs / GOVT of India/ State Govts/ Quasi Govt. organizations.
- (e) That, we have never been prosecuted by any statutory authority
- (f) That, any change in the constitution of the firm shall be made with prior clearance from NALCO.
- (g) That, we have studied all the clauses/sub-clauses terms and conditions of the tender documents including GCC and our offer fully comply with the requirements spelt out in the tender documents.
- (h) We undertake to abide by and comply with all the safety and environmental regulations in force in NALCO during the execution of work.
- (i) We undertake to abide by and comply with all the applicable provisions of laws governing contract workers engaged by you for this work.
- (j) We undertake to receive payment through E-payment mode.
- (k) The **Annexure-19** and **Annexure-20** regarding relatives working in NALCO are filled up and enclosed.
- (l) The **Annexure-C8** regarding present commitment of the tenderer are also properly filled up and enclosed.
- (m) That we have quoted the rates in figures as well as words.
- (n) We undertake that we do not have any unauthorized structure / construction inside Nalco-nagar Township or Plant. We also undertake to remove any / all such structures, if detected by Nalco later on in compliance of GCC terms and conditions.
- (o) We declare that all supporting documents of the offer submitted are attested by a Gazetted officer / Notary public.
- (p) **I/we declare that the document down loaded by me/my company is/are not tampered in any form.**
- (q) **We undertake that my workers shall use electronic Punch cards at the Plant gates at the time of entry and exit if introduced by NALCO. Failing which he shall not be allowed into the Plant.**

I further declare that all above statements are true. If at any time during pre-ordering/post ordering stage of the contract, it is found otherwise, action as deemed fit by NALCO including 'rejection of my offer' / 'banning/blacklisting' me/my firm / my company etc. may be taken. The same will be binding on me / firm / company represented by me. I also hear by authorize and request any bank, person, firm, corporation, Govt. Officers etc. to furnish pertinent information as deemed necessary and as requested by Nalco to verify this statement or regarding my/our competency and general reputation.

Date: _____

Signature Authorized Person With seal

ANNEXURE-C5**Undertaking on Downloaded tender documents**

We here by confirm that, we have downloaded the complete set of tender documents along with the set of enclosures hosted in Central Public Procurement Portal website, www.eprocure.gov.in. We confirm that the bid document has not been edited or modified by us and all pages have been submitted. It is confirmed that we have quoted as per the original NIT unless otherwise specifically mentioned as deviation in the deviation sheet.

Suppression of this information in any form if detected at any stage will be disqualification and will lead to rejection of the offer or termination of the contract as the case may be.

Date:_____

Signature Authorized Person With seal

ANNEXURE-C6

PQC – Technical

Detailed Work Order and Execution Statistics

Sl. No.	W.O no	Work description	W.O Period. (From Dt ----- To dt-----)	W.O value (In Rs.)	Final Executed Value (in Rs.)	Completion date.	Page Ref. for attachmen t.
1	2	3	4	5	6	7	8

*Period for 6 months or more will be treated as One Year and less than 6 months will be ignored.

Signature of the Bidder

ANNEXURE-C7

PQC – Financial
Details of Turnover / Net worth

NAME OF TENDERER : _____

(A) - TURNOVER (Profit & Loss Account)

Sl No	Financial Year	Turnover in Rs Lakh	Document placed at Page No & File No
1	Last year		
2	1st Previous Year to Last Year		
3	2nd Previous Year to Last Year		

(B) - NETWORTH (Balance sheet)

Sl No	Financial Year	Mention whether Networth is Positive/Negative	Document placed at Page No & File No
1	Last year	Positive/Negative	

Signature & Seal of bidder.

ANNEXURE-C8

DETAILS OF PRESENT COMMITMENTS OF THE TENDERER

AS ON Dt.31/10/2023 (*)

(Last day of Month Previous to Bid Due Date)

Name of Work: (*): **Miscellaneous Civil Works for Repair & Maintenance of Residential & Non-Residential Building including external and internal services in Nalconagar Township & CISF Colony.**

Tender Reference No(*): **SMLT/T&C/CPPP/OMC-5719/NIT/5040** **Date: 14.10.2023**

I/We _____, age _____ years, son of _____ do hereby solemnly affirm and declare as follows for on behalf of Firm _____.

Sl. No.	Full postal Address of client & Name of Officer-in-Charge with telex / Telephone No.	Description of work	Value of contract	Date of commencement of work	Scheduled Completion period	Completion in % as on date	Expected date of completion	Amount of Balance work during the period of Next 12 Months from the date of declaration	Remarks
1	2	3	4	5	6	7	8	9	10

It is certified that the above particulars furnished are true and correct. If any information given is found to be misleading at a later date NALCO will have the authority to take necessary action as per provision of the contract and as per laid down procedure of the Company.

Signature of the bidder _____

Name of the Bidder _____

Company Seal

ANNEXURE-C9

TAX INVOICE

[See Rule 46 of the Central Goods and Services Tax Rules, 2017]

Details of Supplier

Name

Address

GSTIN/Unique ID

ORIGINAL FOR RECIPIENT

DUPLICATE FOR SUPPLIER OF SERVICE

Date :

Inv Serial No. :

Service PO Ref. :

**Details of Recipient
(Billed to)**

Name

Address

State

State Code

GSTIN/Unique ID

Place of supply:

Name of State:

Details of Consignee (Shipped to)

Name

Address of delivery

State

State Code

GSTIN/Unique ID

Sr. No.	Description of Goods / Services	HSN Code / SAC	Qty.	Unit	Rate (per item)	Total	Discount	Taxable Value	CGST		SGST /UTGST		IGST		CESS	
									Rate	Amt	Rate	Amt	Rate	Amt	Rate	Amt
	Freight															
	Insurance															
	Packing and Forwarding Charges															
	Total Invoice Value (In figure)															
	Total Invoice Value (In Words)															
	Amount of Tax subject to Reverse Charges															

E.&.O.E

Electronic Reference Number

Name of the Signatory
Designation / Status

Signature

Note:

- Payment of GST is subject to reflection of the party's invoice in GSTR 2A/Anx-2 (GST new return) of NALCO.
- In case of Supply of service, the tax invoice shall be as follows: "ORIGINAL FOR RECIPIENT", "DUPLICATE FOR SUPPLIER".
- The tax invoice can be signed with digital signature also.
- In case of unregistered recipient where the value of the taxable supply is less than INR 50,000/-, name and address of the recipient and the address of delivery, along with the name of the State and its code shall be recorded in the invoice if he requests for the same.
- Where an invoice is required to be issued under section 31(3)(f) of the CGST Act, a registered person may issue a consolidated invoice at the end of a month for supplies covered under section 9(4), the aggregate value of such supplies exceeds rupees five thousand in a day from any or all the suppliers.

ANNEXURE-C10

Bank MANDATE FORM for e-payment
(To be submitted in Duplicate)

To
National Aluminium Company Limited
Nalco Nagar – 759145, Dist.-Angul, Orissa.

Dear Sir,
Sub. :- Authorization for release of payment due from NALCO.....through
e-mode facilities of RTGS/NEFT/Internet Banking.

Refer Order No..... Date.....
And/ or Tender/ Enquiry/ Letter No. **SMLT/T&C/CPPP/OMC-5719/NIT/5040 Date: 14.10.2023**

(Please fill in the information in CAPITAL LETTER PLEASE tick wherever it is applicable)

1. Name of the party :
2. Address of the party :

: City: Pin Code

E-mail ID :

Permanent Account Number. :

3. Particulars of Bank :

Bank Name		Branch name	
Branch Place		Branch City	
Pin Code		Branch Code	
MICR. No.			
Account type	Savings:	Current:	Cash Credit:
Account No.(as appearing in the Cheque Book).			
(9 digits code number appearing on the MICR band of the cheque supplied by the Bank. Please attach Xerox copy of a cheque of your bank for ensuring accuracy of the bank name, branch name & code and Account number)			
IFSC Code.			

4. Date from which the mandate should be effective:

I hereby declare that the particulars given above are correct and complete. If any transaction is delayed or not effected for reasons of incomplete or incorrect information, I shall not hold National Aluminium Company Limited responsible. I also undertake to advise any change in the particulars of my account to facilitate updation of records for purpose of credit of amount through Internet / RTGS / NEFT.

Place:

Date:

Signature of the Party / Authorized Signatory

.....
Certified that particulars furnished above are correct as per our record.

Bank's Stamp:

Date:

(Signature of the Authorized Official from the Banks)

- N.B.:**
- 1) RTGS / NEFT charges if any, is to borne by the party.
 - 2) One cancelled cheque of the concerned bank with signature & stamp of the bidder is to be attached with the bank mandate form.

ANNEXURE-C11

INDEMINTY BOND AGAINST FREE ISSUE MATERIAL TO SELLER/CONTRACTORS

WHEREAS National Aluminium Company Limited (here in after referred to as "THE OWNER") which expression shall unless repugnant to the context includes their legal representatives, successors and assigns having their registered office at "NALCO BHAWAN, P/1,NAYAPALLI, BHUBANESWAR-13, Orissa" has entered into a Contract with M/s _____ placed a Telex of intent _____ (here in after referred to as the "Contractor their legal representatives, successors and assigns")

On the terms and conditions as set out interalia, in the owner's Contract No. _____/WO/_____, Date:_____and various documents forming part thereof herein after collectively referred to as the "Said Contract" which expression shall include all amendments, modification and/or verification thereto.

AND WHEREAS:

- i) The owner subject to availability has agreed to supply to the contractor raw materials for the purpose of execution of the said contract by the "Contractor" (the raw materials to be supplied by the owner to the contractor herein after for the sake of brevity referred to as the "said materials") and pending execution by the "Contractor" of the said contract incorporating the said materials. The said materials shall be under the custody and charge of the contractor and shall be kept, stored, altered, worked upon and/or fabricated at the sole risk and expense of the contract.
- ii) As a pre-condition to the supply of the said materials by the owner to the "contractor", the owner has required the contractor to furnish to the owner an Indemnity Bond in the manner and upon terms and conditions herein after indicated.

NOW, THEREOF, in consideration of the promises aforesaid the contractor hereby irrevocably and unconditionally undertakes to indemnify and kept indemnified the owner from and against all loss, damage and destruction (inclusive but not limited to any or all loss of damage or destruction to or of the said materials or any item or part thereof by theft, pilferage, fire flood, storm, tempest, lightening, explosion, storage, chemical or physical action or reaction, bending, warping, exposure, resting, faulty, workmanship, faulty fabrication or faulty method or technique of fabrication, strike, riot, civil commotion or other act or omission or commission whatsoever within or beyond the control of the contractor, misuse an misappropriation (inclusive but not limited to misuse or misappropriation by the contractor and the contractor's servants and/or agents).

Whatsoever to or of in the said , materials or any part of item thereof from the date that the same or relative part of the item thereof or complete fabricated work(s) incorporating the said materials and undertake to pay to the owner forthwith on demand in writing with protest or demure the value AS SPECIFIED BY THE OWNER of the said materials or item or part thereof ,lost damage, destroyed, misused and /or misappropriated, as the case may be, TOGETHER WITH the owner's cost and expense (inclusive of but not limited to handling, transportation, cartage, freight, packing and inspection cost/expenses) upto _____ and aggregate limited or _____ (Rupees _____only) or ay penal recovery in respect of the same in the terms of the contract and the contractor hereby agree with the owner that:-

- i) The indemnity/undertaking shall be continuing Indemnity/undertaking shall remain valid and irrevocable for all claims, of the owner arising hereunder up to and until the midnight of _____ HOWEVER, if the contract for which this indemnity/undertaking is given is not completed by this date, the *contractor hereby agree to extend the Indemnity/undertaking till time as required to fulfill the contract.
- ii) This Indemnity/undertaking shall not be determined or change of constitution or insolvency of the * contractor but shall be in all respects and for all purpose be binding and operative until payment of all money payable the owner in terms thereof.
- iii) The mere statement of allegation made by or on behalf of the owner in any notice or demand or other writing addressed to the * contractor as to any of the said materials or item or part thereof having been lost, damaged, destroyed, misused, or misappropriate while in the custody of the contractor and/or prior to the completion of the completion of the completed fabricated work(s) and delivery to job site thereof incorporating the said materials shall be conclusive of the fact of the said materials or item or part thereof having being supplied to the contractor and/or the loss, damaged, destruction, misused, or misappropriate thereof as the case may be, while in the custody of the contractor and/or prior to the completion of the completed fabricated work(s) and delivery to job site thereof incorporating the said materials without necessary of the part of the owner to produce any documentary proof or other evidence whatsoever in contract in support of this.
- iv) The amount sated in any notice of the demand addressed by the owner to the contractor as to the value of such said materials lost, damaged destroyed, misused or misappropriated, inclusive relative to the cost and expenses incurred by the owner in connection therewith shall be conclusive of the value of such said materials and the said cost and expense as also of the amount liable to be paid to be paid to the owner.

This Indemnity Bond is supplemental and not in super session of the contractual conditions.

The undersigned as full power to execute this Indemnity Bond on behalf of the contractor under the power delegated by the Board of directors of _____ vide its Board resolution dated _____ copy of which placed at Annexure-"A'

SIGNED BY COMPETENT AUTHORITY

Place:- SMELTER / CPP, NALCO,ANGUL

DATE:-

ANNEXURE-C12

PROFORMA FOR BANK GUARANTEE FOR EARNEST MONEY DEPOSIT

(To be executed on non-judicial stamped paper of appropriate value)

B. G. No. _____

Date: _____

1. WHEREAS M/s National Aluminium Company Limited (A Government of India Enterprise), having its Unit/Office at(UNIT/OFFICE ADDRESS ISSUING THE TENDER) (hereinafter called "The Company" which expression shall unless repugnant to the subject or context includes its legal representatives, successors and assigns) has issued Tender paper vide its Tender No..... dt.....for(hereinafter called "the said tender") to M/s.(hereinafter called the said Tenderer(s)" which expression shall unless repugnant to the subject or context includes their legal representatives, successors and assigns and as per terms and conditions of the said tender, the tenderer shall submit a Bank Guarantee for `(Rupeesonly) towards earnest money in lieu of cash.
2. WEBank, having its branch office at, IFS Code..... and Branch Mail ID.....do hereby undertake to pay the amount due and payable under this guarantee without any demur, merely on a demand from the Company stating that in the opinion of the company which is final and binding, the amount claimed is due because of any withdrawal of the tender or any material alteration to the tender after the opening of the tender by way of any loss or damage caused to or would be caused or suffered by the Company by reason of any breach by the said tenderers(s) of any of the terms and conditions contained in the said tender or failure to accept the Letter of Intent Agreement or that the amount covered under this Guarantee is forfeited. Any such demand made on the Bank by the Company shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding ` (Rupees.....only).
3. We undertake to pay to the Company any money so demanded notwithstanding any dispute or disputes raised by the tenderer(s) in any suit or proceeding pending before any office, court or tribunal relating thereto our liability under this present guarantee being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under. Our liability to pay is not dependent or conditional on the Company proceeding against the tenderer.
4. The guarantee herein contained shall not be determined or affected or suspended by the liquidation or winding up, dissolution or change of constitution or insolvency of the said tenderer(s) but shall in all respect and for all purposes be binding and operative until payment of all money due or liabilities under the said contract(s)/ Order(s) are fulfilled.
5. WEBank Ltd. further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the finalization of the said tender and that it shall continue to be enforceable till the said tender is finally decided and order placed on the successful tenderer(s) and or till all the dues of the company under or by virtue of the said tender have been fully paid and its claims satisfied or discharged or till a duly authorized officer of the company certifies that the terms and conditions of the said tender have been fully and properly carried out by the said tenderer(s) and accordingly discharges the guarantee.

6. That the Company will have full liberty without reference to us and without affecting this guarantee to postpone for any time or from time to time. The exercise of any of the power of the Company under the tender.
7. Notwithstanding anything contained herein before, our liability shall not exceed Rs..... (Rupees.....only) and shall remain in force till.....Unless a demand or claim under this Guarantee is made on us within three months from the date of expiry, we shall be discharged from all the liabilities under this guarantee.
8. We.....Bank, lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Company in writing. We further undertake to keep this Guarantee renewed from time to time on the request of Tenderer(s).
9. WeBank further agree that this Guarantee shall be invocable at Angul / Bhubaneswar, (Bank), Branch office at....., IFS Code..... with Address....., PIN 75....., having Branch Mail Id.....

Date.....

Corporate Seal of the Bank

.....Bank

By its constitutional Attorney

Signature of duly Authorised person

On behalf of the Bank With seal & signature code

Details of Persons Issuing the BG:

Name-----

Address for Correspondence: -----

Telephone & Fax No.

E-mail:

Note: 1 : BGs to be furnished from any of the approved banks of NALCO.

Note 2: : BG confirmation must be sent to our Banker through SFMS with the followings details :

Beneficiary : NATIONAL ALUMINIUM CO LTD.

Banker : State Bank of India

Branch : Kandsar(Nalco Nagar)

A/C No : **00000010657908114(Smelter)**

IFSC Code : SBIN0008279

Address of Bank : AT/P.O – Kandsar, P.S - Nalco Nagar, Dist – Angul , ODISHA,, Pin - 759145

Mail id : sbi.08279@sbi.co.in

ANNEXURE-C13

CONTRACT CUM PERFORMANCE BANK GUARANTEE BY SELLER/ CONTRACTOR.

(To be executed on non-judicial stamped paper of appropriate value)

B. G. No.....

Date.....

1. WHEREAS National Aluminium Company Limited (A Government of India Enterprise) having its Unit/Office at (UNIT/OFFICE ADDRESS WHERE THE WORK IS EXECUTED) (hereinafter referred to as "The Company" which expressions shall unless repugnant to the subject or context includes its legal representatives, successors and assigns) has entered into a contract with M/s. has placed a purchase order on M/s.....(hereinafter referred to as "Contractor(s)/Seller(s)" which expression shall unless repugnant to the subject or context includes their legal representatives, successors and assigns) for(work/assignment description) on the terms and conditions as set out inter alia, in the Company's contract No./ P.O. No.datedand various documents forming part thereof hereinafter referred to as the "said contract" which expression include all amendments, modifications and/ or variations thereto and whereas the Contractor(s)/Seller(s) has agreed for due execution of the entire contract and guarantees its performance including any parts executed through any other agencies/subcontractors.

AND WHEREAS one of the conditions of the "said contract" is that "contractor(s)/seller(s) shall furnish to the Company a Bank Guarantee from a bank for% (.....percent) of the total value of the "said contract" against due and faithful performance of the "said contract" including defect liability obligations and the performance guarantee obligations of the contractor(s)/seller(s) for execution/ supplies made under the "said contract."

2. WEBank, having its branch office at, IFS Code..... and Branch Mail ID.....do hereby agree and undertake to pay the amount due and payable under this guarantee without any demur merely on a demand from the Company stating that in the opinion of the Company, which is final & binding, the amount claimed is due by reason of default made by the Contractor(s)/Seller(s) in performing any of the terms & conditions of the said Contract including defect liability obligations, in fulfilling the performance guarantee obligation or loss or damage caused to or would be caused to or suffered by the Company by reason of any breach by the said Contractor(s)/Seller(s) of any of the terms & conditions of the contract. Any such demand made on the Bank by the Company shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However our liability under this guarantee shall be restricted to ` (Rupees.....only).
3. We undertake to pay to the Company any money so demanded not withstanding any dispute or disputes raised by the contractor(s)/Seller(s) in any suit or proceeding pending before any office, court or tribunal relating thereto our liability under this present guarantee being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under. Our liability to pay is not dependent or conditional on the Company proceeding against the Contractor(s)/Seller(s).
4. The guarantee herein contained shall not be determined or affected or suspended by the liquidation or winding up, dissolution or change of constitution or insolvency of the said Contractor(s)/Seller(s) but shall in all respect and for all purposes be binding and operative until payment of all money due or liabilities under the said contract(s)/Order(s) are fulfilled.

5. WeBank 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 Contract(s)/Order(s) and that it shall continue to be enforceable till all the dues of the company under or by virtue of the said Contract(s)/Order(s) have been fully paid and its claims satisfied or discharged or till a duly authorised officer of the Company certifies that the terms and conditions of the said Contract(s)/Order(s) have been fully and properly carried out by the said contractor(s) and accordingly discharges the guarantee.
6. WeBank further agree with the Company that the company shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Contract(s)/Order(s) or to extend the time of performance by the said Contractor(s)/Seller(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Company against the said Contractor(s)/Seller(s) and to forbear or enforce any of the terms and conditions relating to the said Contract(s)/Order(s) and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor(s)/Seller(s) or for any forbearance, act or omission on the part of the Company or any indulgence by the Company to the said Contractor(s)/Seller(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
7. Notwithstanding anything contained herein before, our liability shall not exceed Rs.....(Rupees.....only) and shall remain in force till.....Unless a demand or claim under this Guarantee is made on us within three months from the date of expiry, we shall be discharged from all the liabilities under this guarantee.
8. We.....Bank, lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Company in writing. We further undertake to keep this Guarantee renewed from time to time at the request of Contractor(s)/Sellers(s).
9. WeBank further agree that this Guarantee shall be invocable at Angul / Bhubaneswar, (Bank), Branch office at....., IFS Code..... with Address....., PIN 75....., having Branch Mail Id.....

Date.....

Corporate Seal of the Bank

.....Bank

By its constitutional Attorney

Signature of duly Authorised person

On behalf of the Bank With seal & signature code

Details of Persons Issuing the BG:

Name-----

Address for Correspondence: -----

Telephone & Fax No.

E-mail:

Note: 1 : BGs to be furnished from any of the approved banks of NALCO.

Note: 2 : BG confirmation must be sent to our Banker through SFMS with the followings details :

Beneficiary : NATIONAL ALUMINIUM CO LTD.

Banker : State Bank of India

Branch : Kandsar(Nalco Nagar)

A/C No : **00000010657908114(Smelter)**

IFSC Code : SBIN0008279

Address of Bank : AT/P.O – Kandsar,P.S - Nalco Nagar, Dist – Angul ,ODISHA,, Pin - 759145

Mail id : sbi.08279@sbi.co.in

ANNEXURE-C14

BANK GUARANTEE FOR SECURITY DEPOSIT

(To be executed on non-judicial stamped paper of appropriate value)

B. G. No. _____

Date: _____

1. In consideration of National Aluminium Company Limited (A Government of India Enterprise), having its UNIT/Office at _____ (UNIT/OFFICE ADDRESS WHERE THE WORK IS EXECUTED) (hereinafter called " The Company" which expression shall unless repugnant to the subject or context includes its legal representatives, successors and assigns) having agreed to exempt M/s.(Hereinafter called "the said Contractor(s)/ Seller(s)"), which expression shall unless repugnant to the subject or context includes their legal representatives, successors and assigns) from the demand under the terms and conditions of Contract(s)/ Order(s) No. dt.for (work/assignment description) of Security Deposit for the due fulfillment by the said contractor(s)/seller(s) of the terms and conditions contained in the said Contract(s)/Order(s), on production of Bank Guarantee for ` (Rupees only).
2. WEBank, having its branch office at, IFS Code..... and Branch Mail ID.....do hereby agree and undertake to pay the amount due and payable under this guarantee without any demur, merely on a demand from the Company stating that in the opinion of the company which is final and binding, the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the Company by reason of any breach by the said Contractor(s)/seller(s) of any of the terms and conditions contained in the said contract(s)/orders(s) or by reasons of the said Contractor(s)/ Seller(s) failure to perform the said Contract(s)/ Order(s) including defect liability obligations or that the amount covered under this guarantee is forfeited. Any such demand made on the Bank by the Company shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding ` (Rupees.....only).
3. We undertake to pay to the Company any money so demanded notwithstanding any dispute or disputes raised by the contractor(s)/Seller(s) in any suit or proceeding pending before any office, court or tribunal relating thereto our liability under this present guarantee being absolute and unequivocal. The payment so made by us under this bond shall be valid discharge of our liability for payment there under. Our liability to pay is not dependent or conditional on the Company proceeding against the Contractor(s)/Seller(s).
4. The guarantee herein contained shall not be determined or affected or suspended by the liquidation or winding up, dissolution or change of constitution or insolvency of the said Contractor(s)/Seller(s) but shall in all respect and for all purposes be binding and operative until payment of all money due or liabilities under the said contract(s)/ Order(s) are fulfilled.
5. WeBank 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 Contract(s)/ Order(s) and that it shall continue to be enforceable till all the dues of the company under or by virtue of the said Contract(s)/Order(s) have been fully paid and its claims satisfied or discharged or till a duly Authorised officer of the company certifies that the terms and conditions of the said Contract(s)/Order(s) have been fully and properly carried out by the said contractor(s) and accordingly discharges the guarantee.

6. WeBank further agree with the Company that the company shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Contract(s)/Order(s) or to extend the time of performance by the said Contractor(s)/Seller(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Company against the said Contractor(s)/Seller(s) and to forbear or enforce any of the terms and conditions relating to the said Contract(s)/Order(s) and we shall not be relieved from our liability by reason of any such variations, or extension being granted to the said Contractor (s)/ Seller(s) or for any forbearance, act or omissions on the part of the Company or any indulgence by the Company to the said Contractor(s)/Seller(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
7. Notwithstanding anything contained herein before, our liability shall not exceed Rs.....(Rupees.....only) and shall remain in force till.....Unless a demand or claim under this Guarantee is made on us within three months from the date of expiry, we shall be discharged from all the liabilities under this guarantee.
8. We.....Bank, lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Company in writing. We further undertake to keep this Guarantee renewed from time to time at the request of Contractor(s)/ Sellers(s).
9. WeBank further agree that this Guarantee shall be invocable at Angul / Bhubaneswar, (Bank), Branch office at....., IFS Code..... with Address....., PIN 75....., having Branch Mail Id.....

Date.....

Corporate Seal of the Bank

.....Bank

By its constitutional Attorney

Signature of duly Authorised person

On behalf of the Bank With seal & signature code

Details of Persons Issuing the BG:

Name-----

Address for Correspondence: -----

Telephone & Fax No.

E-mail:

Note: 1 : BGs to be furnished from any of the approved banks of NALCO.

Note:2 : BG confirmation must be sent to our Banker through SFMS with the followings details :

Beneficiary : NATIONAL ALUMINIUM CO LTD.

Banker : State Bank of India

Branch : Kandsar(Nalco Nagar)

A/C No : **00000010657908114(Smelter)**

IFSC Code : SBIN0008279

Address of Bank : AT/P.O – Kandsar, P.S - Nalco Nagar, Dist – Angul ,ODISHA, Pin - 759145

Mail id : sbi.08279@sbi.co.in

ANNEXURE-C15

BANK GUARANTEE AGAINST FREE ISSUE OF MATERIALS
(To be executed on Non-judicial stamp paper or appropriate value)

GUARANTEE NO.....

DATE :.....

1. WHEREAS National Aluminium Company Limited (hereinafter referred to as "the Company") which expression shall unless repugnant to the context includes their legal representatives, successors and assigns having their registered office at NALCO BHAWAN, P/1, NAYAPALLI, BHUBANESWAR-751 061, Odisha, and their Branch Unit/office at _____ (UNIT/OFFICE ADDRESS), has entered into a Contract with M/s _____ (hereinafter referred to as the Contractor which expression shall unless repugnant to the context include their legal representatives, successors and assigns for the work of _____ on the terms and conditions as set out, inter-alias, in the Company's Contract No. _____ dated: _____ and various documents forming part thereof hereinafter collectively referred to as the "said contract" which expression shall include all amendments, modifications and/or variations thereto.

AND WHEREAS one of the conditions of the said contract is that the Company has agreed to supply to the contractor raw-materials (hereinafter referred to as the "said materials") for the purpose of execution by the contractor of the said contract and pending execution by the contractor of the said contract incorporating the said materials, the said materials shall be under the custody and charge of the contractor and shall be kept, stored, altered, worked upon and/or fabricated at the sole risk and expense of the Contractor.

2. AND WHEREAS the Company has asked the contractor for adequate security for the said materials to be supplied to the contractor under the contract.

3. AND WHEREAS at the request of the contractor the Company has agreed to accept a bank guarantee from _____ with Registered Office at _____ (hereinafter referred to as "the surety").

4. NOW THIS GUARANTEE WITNESSETH that in consideration of the Company having at the request of contractor agreed to accept a Bank Guarantee of the Surety amounting to ` _____ (Rupees _____ only) in respect of the said materials against any and all loss, damage, destruction (inclusive of but not limited to any and all loss or damage or destruction to or of the said materials or any item or part thereof by theft, pilferage, fire, explosion, storage, chemical or physical action or reaction, bending, wrapping exposure, rusting, faulty workmanship, faulty methods or technique of fabrication, or other act of omission or commission whatsoever within the control of the contractor, misuse or misappropriation by the contractor and the contractor's servant and/or agents whatsoever to or of in the said materials or any part of items thereof from the date the said materials was supplied to the contractor upto and until the date of return to the Company of the said materials or relative part of item thereof or completed fabricated work(s) incorporating the said materials, the surety shall indemnify and pay, without protest or demur and without recourse to the contractor, the Company upto and not exceeding altogether a sum of ` _____ (Rupees _____ only) on demand by the Company. The decision of the Company as to any loss, damage, destruction, misuse and misappropriation under the terms and conditions of this guarantee shall be final and binding on the Surety.

5. THIS GUARANTEE is irrevocable and will remain in force and effect upto and until the said materials have been returned to the Company as per terms of the said contract and intimation thereof being given by the Company to the surety on the aggregate amount payable hereunder has been paid by the surety to the Company, whichever is earlier.
6. Notwithstanding anything stated above, the liability of the surety under the guarantee is restricted to _____ (Rupees _____ only) and this guarantee will remain in force upto _____ in the first instance. However, if the contractor's obligations under this guarantee is not completed or fully performed within this period, the surety hereby agrees to further extend the guarantee till such time as is required to fulfill such obligations.
7. We have the power to issue this guarantee in your favour under memorandum and Articles of Association and the undersigned has full power to do so under the power of Attorney dated _____ granted to him by the Bank.
8. Unless a claim made on us within three months from the date of expiry, i.e., _____, all our rights under the said guarantee shall be forfeited and we shall be relieved, and discharged from all liabilities there under.
9. We Bank, having its branch office at, IFS Code..... and branch Mail ID.....lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Company in writing. We further undertake to keep this Guarantee renewed from time to time at the request of Consultant.
10. WeBank further agree that this Guarantee shall be invocable at Angul / Bhubaneswar, (Bank), Branch office at....., IFS Code..... with Address....., PIN 75....., having Branch Mail Id.....

Date.....

IFSC Code:.....

Corporate Seal of the Bank

.....Bank

By its constitutional Attorney

Signature of duly Authorised person

On behalf of the Bank With seal & signature code

Details of Persons Issuing the BG:

Name-----

Address for Correspondence: -----

Telephone & Fax No.

E-mail:

Note: 1 : BGs to be furnished from any of the approved banks of NALCO.

Note: 2 : BG confirmation must be sent to our Banker through SFMS with the followings details :

Beneficiary : NATIONAL ALUMINIUM CO LTD.

Banker : State Bank of India

Branch : Kandsar (Nalco Nagar)

A/C No : 00000010657908114(Smelter) IFSC Code : SBIN0008279

Address of Bank : AT/P.O – Kandsar, P.S - Nalco Nagar, Dist - Angul , ODISHA, Pin - 759145

Mail id : sbi.08279@sbi.co.in

ANNEXURE-C16

BANK GUARANTEE FOR ADVANCE PAYMENT

(To be executed on non-judicial stamped paper of appropriate value)

B. G. No. _____

Date: _____

1. In consideration of National Aluminium Company Limited (A Government of India Enterprise), having its Unit/Office at _____ (UNIT/OFFICE ADDRESS WHERE THE WORK IS EXECUTED) (hereinafter called "The Company" which expression shall unless repugnant to the subject or context includes its legal representatives, successors and assigns) having agreed to make an advance payment of Rs.....(Rupees.....only) to M/s. (hereinafter called "the said Contractor(s)/Seller(s)" which expression shall unless repugnant to the subject or context includes their legal representatives, successors and assigns) from the demand, terms and conditions of Contract/Order No..... dated. for (work/assignment description) on production of a bank guarantee equivalent to 110% / 115% of the advance payment indicated above. BG amount would be based on advance verses contract value i.e. (i) 110% if advance to be paid is up to 10% of contract value ; otherwise (ii) 115%.
2. WEBank, having its branch office at, IFS Code..... and Branch Mail ID.....do hereby agree and undertake to pay the amount due and payable under this guarantee without any demur, merely on a demand from the Company stating that in the opinion of the Company which is final and binding, the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the Company by reason of non-payment/adjustment of any part of the said advance or any dues to the company or any breach by the said Contractor(s)/seller(s) of any of the terms and conditions contained in the said contract(s)/orders(s) or by reasons of the Contractor(s)/Seller(s) failure to perform the said Contract(s)/Order(s). Any such demand made on the Bank by the Company shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs..... (Rupees.....only).
3. We undertake to pay to the Company any money so demanded notwithstanding any claim dispute or disputes raised by the contractor(s)/Seller(s) in any suit or proceeding pending before any office, court or tribunal relating thereto our liability under this present guarantee being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under. Our liability to pay is not dependable or conditional on the Company proceeding against the Contractor(s)/Seller(s).
4. The guarantee herein contained shall not be determined or affected or suspended by the liquidation or winding up, dissolution or change of constitution or insolvency of the said tenderer(s) but shall in all respect and for all purposes be binding and operative until payment of all money due or liabilities under the said contract(s)/order(s) are fulfilled.
5. WeBank 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 Contract(s)/Order(s) and that it shall continue to be enforceable till all the dues of the Company under or by virtue of the said Contract(s)/Order(s) have been fully paid and its claims satisfied or discharged or till a duly authorized officer of the Company certifies that the terms and conditions of the said Contract(s)/Order(s) have been fully and properly carried out by the said Contractor(s)/Seller(s) and accordingly discharges this guarantee.
6. That the Company will have fully liberty without reference to us and without affecting this guarantee to postpone for any time or from time to time the exercise of any of the power of the Company under the Contract(s)/Order(s).

7. Notwithstanding anything contained herein before, our liability shall not exceed Rs..... (Rupees.....only) and shall remain in force till.....Unless a demand or claim under this Guarantee is made on us within three months from the date of expiry, we shall be discharged from all the liabilities under this guarantee.
8. We Bank, further agree that this Guarantee shall be invocable at our place of business at Angul/Bhubaneswar (Bank Name),.....(Branch name and address of the Branch), Odisha, Pin-751...
9. WeBank further agree that this Guarantee shall be invocable at Angul / Bhubaneswar, (Bank), Branch office at....., IFS Code..... with Address....., PIN 75....., having Branch Mail Id.....

Date.....
Corporate Seal of the Bank
IFS Code:

.....Bank
By its constitutional Attorney

Signature of duly Authorised person
On behalf of the Bank With seal & signature code

Details of Persons issuing the BG:
Name-----
Address for Correspondence: -----
Telephone & Fax No.-----
E-mail : -----

Note: -

- 1) BGs to be furnished from any of the approved banks of NALCO and processed through SFMS.
- 2) BG confirmation must be sent to our Banker through SFMS with the followings details :

Beneficiary : NATIONAL ALUMINIUM CO LTD.

Banker : State Bank of India

Branch : Kandsar(Nalco Nagar)

A/C No : **00000010657908114(Smelter)**

IFSC Code : SBIN0008279

Address of Bank : AT/P.O – Kandsar, P.S - Nalco Nagar, Dist – Angul , ODISHA,, Pin – 759145

Mail id : sbi.08279@sbi.co.in

ANNEXURE-C17

LIST OF STANDARDISED BANKS

I. List of PSU Banks			
Sl. No.	Name of the Bank	Sl. No.	Name of the Bank
1.	Allahabad Bank	11.	Indian Bank
2.	Andhra bank	12.	Oriental Bank of Commerce
3.	Bank of Boroda	13.	Punjab and Sind Bank
4.	Bank of India	14.	Punjab National Bank
5.	Bank of Maharashtra	15.	State Bank of India
6.	Canara bank	16.	Syndicate Bank
7.	Central bank of India	17.	UCO Bank
8.	Corporation Bank	18.	Union Bank of India
9.	Dena Bank	19.	Vijaya Bank
10.	IDBI Bank		

II. List of Private Banks			
Sl. No.	Name of the Bank	Sl. No.	Name of the Bank
1	HDFC Bank	9	The South Indian Bank Ltd.
2	ICICI Bank	10	The Karur Vysya Bank Ltd.
3	Axis Bank	11	The Karnataka Bank Ltd.
4	Kotak Mahindra Bank Ltd.	12	IDFC Bank
5	YES Bank	13	RBL Bank
6	IndusInd Bank	14	The Lakshmi Vilas Bank Ltd.
7	The Federal Bank Ltd.	15	Tamilnadu Mercantile Bank Ltd.
8	The Jammu & Kashmir Bank Ltd.	16	City Union Bank Ltd.

III. List of Foreign Banks					
Sl. No.	Name of the Bank	BIC	Sl. No.	Name of the Bank	BIC
1	Abu Dhabi Commercial Bank Ltd.	ADCB AE AA	19	KEB Hana Bank	KOEX KR SE
2	Australia & New Zealand Banking Group Limited	ANZB AU 3M	20	Krung Thai Bank Public Company Ltd.	KRTH TH BK
3	Bank Of America NA	BOFA US 3N	21	Mashreqbank PSC	BOML AE AD
4	Bank of Bahrain and Kuwait B.S.C.	BBKU BH BM	22	Mizuho Bank Ltd.	MHCB JP JT
5	Bank of Ceylon	BCEY LK LX	23	National Australia Bank Ltd.	NATA AU 33
6	Barclays Bank PLC	BARC BG 22	24	Sberbank	SABR RU MM
7	BNP Paribas	BNPA FR PP	25	Shinhan Bank	SHBK KR SE
8	Citibank N.A.	CITI US 33	26	Societe Generale	SOGE FR PP
9	Commonwealth Bank of Australia	CTBA AU 2S	27	Sonali Bank Ltd.	BSON BD DH
10	Credit Agricole Corporate & Investment Bank	BSUI FR PP	28	Standard Chartered Bank	SCBL GB 2L
11	Credit Suisse AG	CRES CH ZZ	29	Sumitomo Mitsui Banking Corporation	SMBC JP JT
12	DBS Bank Ltd.	DBSS SG SG	30	The Bank of Nova Scotia	NOSC CA TT
13	Deutsche Bank AG	DEUT DE FF	31	The Bank of Tokyo-Mitsubishi UFJ, Ltd.	BOTK JP JT
14	Doha Bank	DOHB QA QA	32	The Hongkong & Shanghai Banking Corp. Ltd.	HSBC HK HH
15	FirstRand Bank Ltd.	FIRN ZA JJ	33	The Royal Bank of Scotland PLC	RBOS GB 2L
16	Industrial Bank of Korea	IBKO KR SE	34	United Overseas Bank Ltd.	UOVB SG SG
17	Industrial & Commercial Bank of China Limited	ICBK CN BJ	35	Westpac Banking Corporation	WPAC AU 2F
18	JP Morgan Chase Bank	CHAS US 33	36	Woori Bank	HVBK KR SE

[illegible]

ANNEXURE-C19

NATIONAL ALUMINIUM COMPANY LIMITED
SMELTER PLANT / CAPTIVE POWER PLANT DIVISION

INSTRUCTION FOR BIDDERS: FILLING UP OF FOLLWING ANNEXURES ARE MUST, WITHOUT WHICH THE OFFER IS LIABLE FOR REJECTION.

The tenderer shall carefully study the list of directors of NALCO from the website written below

<https://nalcoindia.com/company/nalco-leadership/board-of-directors/>

and state "Yes" or "No" to questions given below:

Sl.No.	Description	Write "Yes" or "No"
1.	Whether the tenderer is a relative of any of the directors of NALCO?	
2.	If the tenderer is a firm, any of NALCO Directors or any of their relatives is a partner in the tender's firm?	
3.	If the tenderer is a Company Registered under Company's Act 1956, whether any of NALCO's Directors is a member of Director of the Company?	

Note: If Yes to any of the above questions, please give the name of NALCO's Director and relationship of the tender / partner / member / Director as the case may be.

Sl. No.	Name	Relationship

SIGNATURE OF THE TENDERER

ANNEXURE-C20

Important: Suppression of information shall be viewed seriously and action deemed fit would be taken including termination of the contract.

(Strike out which is not applicable)

1. I/We hereby declare that none of my/our relative is an employee of NALCO.
2. I/We hereby declare the following are the employee/s of NALCO is/are my/our relative/s.

Sl.No.	Name of the employee/ P.No. / Designation/Place of Posting.	Relationship with the employee.
1		
2		
3		

(PLEASE ATTACH EXTRA SHEET, IF REQUIRED)

SIGNATURE OF THE TENDERER

ANNEXURE-C21**PRE CONTRACT INTEGRITY PACT****General**

This pre-bid pre-contract Agreement (hereinafter called the Integrity Pact) is made on _____ day of the month of _____ 2023, between, on one hand, the National Aluminium Company Limited (NALCO), a company registered under the Companies Act 1956 and a Government of India Enterprise, having its Registered Office at NALCO Bhawan, P/1, Nayapalli, Bhubaneswar-751013, Odisha, India (referred to as NALCO) acting through **Shri Debasish Chattarjee, GGM (CRG/T&C) S&P** (with designation of the Officer) (hereinafter called the "BUYER", which expression shall mean and include, unless the context otherwise requires, his successors in office and assigns) of the First Part and M/s. _____ represented by Shri _____, Chief Executive Officer (hereinafter called the "BIDDER / Seller" which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns) of the Second Part.

WHEREAS the BUYER proposes to procure "**Miscellaneous Civil Works for Repair & Maintenance of Residential & Non-Residential Building including external and internal services in Nalconagar Township & CISF Colony**" and the BIDDER/Seller is willing to offer/has offered the stores and

WHEREAS the BIDDER is a private company / public company /Government undertaking/ partnership /registered export agency, constituted in accordance with the relevant law in the matter and the BUYER is a Company under the administrative control of the Ministry of Mines, Govt. of India.

NOW THEREFORE

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence / prejudiced dealings prior to during and subsequent to the currency of the contract to be entered into with a view to :-

Enabling the BUYER to obtain the desired said stores/equipment at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement, and

Enabling BIDDERS to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the BUYER will comment to prevent corruption, in any form, by its officials by following transparent procedures.

The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:

Commitments of the BUYER

- 1.1 The BUYER undertakes that no official of the BUYER, connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the BIDDER, either for themselves or for any person or organisation or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.
- 1.2 The BUYER will, during the pre-contract stage, treat all BIDDERS alike and will provide to all BIDDERS the same information and will not provide any such information to any particular BIDDER which could afford an advantage to that particular BIDDER in comparison to other BIDDERS.
- 1.3 All the officials of the BUYER will report to the appropriate Government office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.
2. In case any such preceding misconduct on the part of such official(s) is reported by the BIDDER to the BUYER with full and verifiable facts and the same is prima facie found to be correct by the BUYER, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the BUYER and such a person shall be debarred from further dealings related to the contract process. In such a case while an enquiry is being conducted by the BUYER the proceedings under the contract would not be stalled.

Commitments of BIDDERS

3. The BIDDER commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contractor post-contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following :-
 - 3.1 The BIDDER will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the BUYER, connected directly or indirectly with the bidding process, or to any person, organisation or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.
 - 3.2 The BIDDER further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the BUYER or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the contract or any other contract with the Government for showing or forbearing to show favour or disfavour to any person in relation to the contract or any other contract with the Government.
 - 3.3 BIDDERS shall disclose the name and address of agents and representatives and Indian BIDDERS shall disclose their foreign principals or associates.
 - 3.4 BIDDERS shall disclose the payment to be made by them to agents / brokers or any other Intermediary, in connection with this bid / contract.
 - 3.5 The BIDDER, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of the BUYER or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.
 - 3.6 The BIDDER will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.
 - 3.7 The BIDDER will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
 - 3.8 The BIDDER shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the BUYER as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The BIDDER also undertakes to exercise due and adequate care lest any such information is divulged.
 - 3.9 The BIDDER commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable fact.
 - 3.10 The BIDDER shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.
 - 3.11. If the Bidder or any employee of the Bidder or any person acting on the behalf of the Bidder, either directly or indirectly, is a relative of any of the officers of the Buyer, or alternatively, if any relative of an officer of the Buyer has financial interest/stake in the Bidder's firm, the same shall be disclosed by the Bidder at the time of filing of tender. The term "relative" for this purpose would be as defined in Section 6 of the Companies Act 1956.
 - 3.12. The Bidder shall not lend to or borrow any money from or enter into monetary dealings or transactions, directly or indirectly, with any employee of the Buyer.
 - 3.13. 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.

4. Previous Transgression

- 4.1. The Bidder declares that no previous transgression occurred in the last three years immediately before signing of this integrity Pact, with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India or any Government Department in India that could Justify Bidder's exclusion from the tender process.
- 4.2. The Bidder agrees that if it makes incorrect statement on this subject, Bidder can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

5. Sanctions for Violations :

- 5.1. Any breach of the aforesaid provisions by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER) shall entitle of the BUYER to take all or any one of the following actions, wherever required: -
 - (i) To immediately call off the pre-contract negotiations without assigning any reason or giving any compensation to the BIDDER. However, the proceedings with the other BIDDER(s) would continue.
 - (ii) The Earnest Money Deposit (in pre-contract stage) and/or Security Deposit / Performance Bond (after the contract is signed) shall stand forfeited either fully or partially, as decided by the BUYER and the BUYER shall not be required to assign any reason therefore.
 - (iii) To immediately cancel the contract, if already signed, without giving any compensation to the BIDDER.
 - (iv) To recover all sums already paid by the BUYER, and in case of an Indian BIDDER with interest thereon at 2% higher than the prevailing Prime Lending Rate of State Bank of India, while in case of a BIDDER from a country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to the BIDDER from the BUYER in connection with any other contract for any other stores, such outstanding payment could also be utilized to recover the aforesaid sum and interest.
 - (v) To en-cash the advance bank guarantee and performance bond / warranty bond, if furnished by the BIDDER, in order to recover the payments, already made by the BUYER, along with interest.
 - (vi) To cancel all or any other Contracts with the BIDDER. The BIDDER shall be liable to pay compensation for any loss or damage to the BUYER resulting from such cancellation / rescission and the BUYER shall be entitled to deduct the amount so payable from the money(s) due to the BIDDER.
 - (vii) To debar the BIDDER from participating in future bidding processes of NALCO for a minimum period of five years, which may be further extended at the discretion of the BUYER.
 - (viii) To recover all sums paid in violation of this Pact by BIDDER(s) to any middleman or agent or broker with a view to securing the contract.
 - (ix) In cases where irrevocable Letters of Credit have been received in respect of any contract signed by the BUYER with the BIDDER, the same shall not be opened.
 - (x) Forfeiture of Performance Bond in case of a decision by the BUYER to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.
- 5.2. The BUYER will be entitled to take all or any of the actions mentioned at para 5.1(i) to (x) of this Pact also on the Commission by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER), of an offence as defined in Chapter IX of the Indian Penal Code 1860 or Prevention of Corruption Act, 1988 or any other statute enacted for prevention of corruption.
- 5.3. The decision of the BUYER to the effect that a breach of the provisions of this Pact has been committed by the BIDDER shall be final and conclusive on the BIDDER. However, the BIDDER can approach the independent Monitor(s) appointed for the purposes of this Pact.

6. Independent External Monitors (IEMs):

- 6.1. The BUYER has a panel of Independent External Monitor (hereinafter referred to as IEMs) for this Pact in consultation with the Central Vigilance Commission as mentioned in NALCO'S NIT/NALCO's website (www.nalcoindia.com).
- 6.2. The task of the IEMs shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact.
- 6.3. The IEMs shall not be subject to instructions by representatives of the parties and perform their functions neutrally and independently.
- 6.4. Both the parties accept that the IEMs have the right to access all the documents relating to the project / procurement including minutes of meetings.
- 6.5. As soon as the IEM notices, or has reason to believe, a violation of this Pact, he will so inform the Authority designated by the BUYER.
- 6.6. The BIDDER(s) accepts that the IEM has the right to access without restriction to all Project documentation of the BUYER including that provided by the BIDDER. The BIDDER will also grant the IEM, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The IEM shall be under contractual obligation to treat the information and documents of the BIDDER / Subcontractor(s) with confidentiality.
- 6.7. The BUYER will provide to the IEM 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 parties. The parties will offer to the IEM the option to participate in such meetings.
- 6.8. The IEM will submit a written report to the designated Authority of BUYER / Secretary in the Department / within 8 to 10 weeks from the date of reference or intimation to him by the BUYER / BIDDER and should be occasion arise, submit proposals for correcting problematic situations.

7. Facilitation of Investigation:

In case of any allegation of violation of any provisions of this Pact or payment of commission, the IEMs shall be entitled to examine all the documents including the Books of Accounts of the BIDDER and the BIDDER shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

8. Law and Place of Jurisdiction:

This Pact is subject to Indian Law. The place of performance and jurisdiction is the seat of the BUYER.

9. Other Legal Actions:

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

10. Validity:

- 10.1 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. 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 CMD, NALCO.
- 10.2 Should one or several provisions of this Pact turn out to be invalid, the remainder of this Pact shall remain valid. In this case, the parties will strive to come to an agreement to their original intentions.

11. If the bidder/ Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members
12. The parties hereby sign this Integrity Pact at _____ on _____.

For & on behalf of

For & on behalf of

BUYER

BIDDER

Name of the Officer: **Mr. Debasish Chattarjee**
Designation: **GGM (CRG/T&C) S&P Complex**
Company: **NALCO**
Official Seal

Witness

Witness

1. _____

1. _____

2. _____

2. _____

.....

ANNEXURE-C22

BEFORE THE NOTARY PUBLIC
A F F I D A V I T

I, aged about years, S/O:, At-....., PO-....., Dist-....., Pin-....., State:, Designation: of M/s. have not been convicted by a court of Law for an offence involving moral turpitude in relation to business dealings during the past seven years for acceptance of the offer. I do hereby solemnly affirm and state as follows:

INFORMATION REGARDING CURRENT LITIGATION, DEBARRING EXPELLING OF BIDED OR
ABANDONMENT OF WORK BY THE BIDDER

1.	(a)	Is the bidder currently involved in any litigation relating to the works.	Yes/No
	(b)	If yes, give details:	
2.	(a)	Has the bidder or any of its constituent partners been debarred/ expelled by any agency in India during the last 5 years.	Yes/No
	(b)	If yes, give details:	
3.	(a)	Has the bidder or any of its constituent partners failed to perform on any contract work in India during the last 5 years.	Yes/No
	(b)	If yes, give details:	
4.	(a)	Arbitration cases pending.	Yes/No
	(b)	If yes, give details:	
5.	(a)	Disputed incomplete works.	Yes/No
	(b)	If yes, give details:	
6.	(a)	Pending civil cases against the firm or its Proprietor/Partner(s)/Director(s) involving moral turpitude in relation to business dealings.	Yes/No
	(b)	If yes, give details:	
7.	(a)	Pending criminal cases against the firm or its Proprietor/Partner(s)/Director(s) involving moral turpitude in relation to business dealings.	Yes/No
	(b)	If yes, give details:	
8.	(a)	Punishments awarded under civil cases or criminal cases involving moral turpitude in relation to business dealings	Yes/No
	(b)	If yes, give details:	

Note:

If any information in this schedule is found to be incorrect or concealed, qualification application will be summarily be rejected.

Signature of the bidder

Date :

ANNEXURE-C23

AGREEMENT

CONTRACT AGREEMENT FOR THE WORK OF.....

....., **Service Purchase Order No.:**, **Dated.**/...../.....
on theth day of the month of.....of the year two thousand..... between
M/s..... in the town of..... **AT/PO-....., DIST-.....**
STATE....., PIN-..... here in after called the "Contractor" (which terms shall
unless excluded by or repugnant to the subject or context include its successors and permitted assignees)
of the one part and the **NATIONAL ALUMINIUM COMPANY LIMITED** hereinafter called the "**OWNER**"
(Which term shall, unless excluded by or repugnant to the subject or context include its successors and
permitted assignees) of the other part.

Whereas:

- (A) The owner being desirous of having provided and executed certain works mentioned enumerated or referred to in the tender documents including Notice Inviting Tender/Letter Inviting Tender, General Conditions, Drawings, Plans, Time schedule of Completion of jobs, and other documents has called for Tender.
- (B) The Contractor has inspected the site and surroundings of the works specified in the tender documents and has satisfied himself by careful examination before submitting his tender as to the nature of the surface strata, soil, subsoil and ground, the form and nature of site and local conditions, the quantities, nature and magnitude of the work, the availability of labour and materials necessary for the execution of work, the means of access to site, the supply of power and water thereto and the accommodation he may require and has made local and independent enquiries and obtained complete information as to the matters and things referred to or implied in the tender documents or having any connection therewith, and has considered the nature and extent of all probable and possible situations, delays, hindrances or interferences to or with the executions and completion of the work to be carried out under the contract, and has examined and considered all other matters, conditions and things and probable and possible contingencies, and generally all matters incidental thereto and ancillary thereof affecting the execution and completion of the work and which might have influenced him in making his tender.
- (C) The Notice Inviting Tender/ Letter Inviting Tender, General conditions of Contract, Special Conditions of Contract, General Obligations, Specifications, Drawings, Plans, Time Schedule of Completion of jobs, Letter of Acceptance of Tender and any statement of agreed variations with its enclosures, copies for which are hereto annexed form part of this contract though separately set out herein and are included in the expression "CONTRACT" wherever herein used.

01) Service Purchase Order No.:

AND WHEREAS:

The owner accepted the Tender of the Contractor for the provision and the execution of the said work at the rates stated in the schedule of quantities of works and finally approved by owner (Hereinafter called the "Schedule of Rates") upon the terms and subject to the conditions of contract. Now this agreement witnesses and it is hereby agreed and declared as follows:-

- 01. In consideration of the payment to be made to the contractor for the work to be executed by him, the contractor hereby covenants with the owner that the contractor shall and will duly provide, execute and complete the said works and shall do and perform all other acts and things in the contract mentioned or described or which are to be implied there from or may be reasonably necessary, for the completion of the said works and at the said times and in the manner subject to the terms and conditions or stipulations mentioned in the contract.

02. In consideration of the due provision execution and completion of the said work, the owner does hereby agree with the contractor that the owner will pay to the contractor the respective amounts for the work actually done by him and approved by the owner at the scheduled rates and such other sum payable to the contractor under provision of the such contract, payment to be made at such time and in such manner as provided for in the contract.

A N D

03. In consideration of the due provisions execution and completion of the said work the contractor does hereby agree to pay such sums as may be due to the owner for the services rendered by the owner to the contractor such as power supply, water supply and others as set for in the said contract and such other sums as may become payable to the owner towards the controlled items of consumables materials or towards loss, damage to the owner's equipment, materials, construction plant and machinery, such payments to be made at such time and in such manner as is provided in the contract. It is specially and distinctly understood and agreed between the owner and the contractor that the contractor shall have no right, title or interest in the site made available by the owner for execution of the works or in the building, structure or works executed on the said site by the contractor or in the goods, articles, materials etc. brought on the said site (Unless the same specifically belongs to the contractor) and the contractor shall not have or deemed to have any lien whatsoever charge for unpaid bills nor will be entitled to assume or retain possession or control of the site or structures and the owner shall have an absolute and unfettered right to take full possession of the site and to remove the contractor, his servants, agents and materials belonging to the contractor and lying on the site.

The contractor shall be allowed to enter upon the site for execution of the works only as a licensee simplicitor and shall not have any claim, right, title or interest in the site or the structure erected thereon and the owner shall be entitled to terminate such license at any time without assigning any reason. The materials including sand, gravel, stone, loose earth rock etc. dug up or excavated from the said site shall unless otherwise expressly agreed under this contract, exclusively belong to the owner and the contractor shall have no right to claim over the same and such excavations and materials should be disposed off on account of the owner according to the instructions in writing issued from time to time by the Engineer-in-Charge.

In witness whereof the parties have executed these presents in the day and the year first above written.

Signed & delivered for &
on behalf of Owner

Signed & delivered for &
on behalf of Contractor.

(NATIONAL ALUMINIUM CO.LTD.)

(M/S.....)

PLACE: NALCO SMELTER / CPP DIVISION ANGUL. PLACE:.

IN THE PRESENCE OF TWO WITNESSES.

NALCO'S WITNESS.

CONTRACTOR'S WITNESS.

01)_____01)_____

02)_____02)_____

PLACE: NALCO, SMELTER

ANNEXURE-C24

COMMERCIAL QUESTIONNAIRE

Bidder's reply/ confirmation as furnished in the Commercial Questionnaire (CQ) shall supersede the stipulations mentioned elsewhere in their offer.

SL. NO.	NALCO'S QUERY	BIDDER'S REPLY/ CONFIRMATION
1.0	Confirm that your offer is valid for 04 (Four) months from the actual date of tender opening at online portal.	
2.0	Confirm that Earnest Money Deposit (EMD) as per tender stipulations have been furnished along with bid.	
3.0	Confirm that the following documents are submitted with Part-I:	
a)	All documents as per CHECK LIST.	
b)	Master Index as enclosed with Bidding Document is submitted in unpriced part duly signed and stamped on each page.	
c)	Compliance letter for Addendum/ Amendments as a token of acceptance (Applicable, if issued).	
4.0	Confirm that Price bid has been uploaded in the CPP/GeM portal separately.	
5.0	Schedule of Price	
a)	Price must be filled in the soft copy of the SOR furnished along with the tender document. Please note that the format of the Excel file including columns of Item No., Description, Unit, Quantity, name of file or worksheet etc. are not to be edited by the tenderer.	
b)	Confirm that rate/ price has been quoted for all items of SOR.	
c)	Confirm that deviation/terms & conditions are not mentioned in the price part. In case any terms and condition is mentioned in the price part, the same shall be treated as null and void.	
6.0	Confirm your compliance to critical stipulations of bidding document as mentioned in ITB.	
7.0	Confirm that you have studied complete tender document including technical and commercial part and your offer is in accordance with the requirements of the tender document.	
8.0	Confirm your compliance to total Scope of Work mentioned in the Bidding Document.	
9.0	Confirm your acceptance for 'Scope of Supply' mentioned in the tender document and confirm that all materials shall be supplied as per Standards and Specification.	
10.0	Confirm your acceptance for Time Schedule as mentioned in tender document.	
11.0	Confirm that your quoted price includes all taxes, duties as applicable for this WORK in accordance with the provision of General Conditions of Contract and Special Conditions of Contract.	
12.0	Confirm that your quoted price includes all types of insurance as per the provisions of General Conditions of Contract and Special Conditions of Contract.	
13.0	Confirm that all costs resulting from safe execution of WORK, such as safety induction, use of protective clothing, safety glasses and helmet, safety precaution taken during monsoon, or any other safety measures to be undertaken by the Contractor for execution of work are included in the quoted rates.	

SL. NO.	NALCO'S QUERY	BIDDER'S REPLY/ CONFIRMATION
14.0	Confirm that adequate numbers of construction equipments, tools, tackles etc. have been proposed which will be sufficient to complete the work as per the time schedule.	
15.0	Confirm that you have proposed adequate project/site organization with qualified supervisory personnel having requisite experience including personnel responsible for safety, planning, stores, QA/QC etc.	
16.0	Confirm that while submitting your price, you have taken consideration of scope of supplies, scope of work and technical requirement mentioned in Bidding Document.	
17.0	Confirm that only exception and deviation indicated in the specific format shall be considered and evaluated. Deviations listed at any other places of the tender documents shall not be considered.	
18.0	Confirm that you have your own QA/QC programme for executing this work.	
19.0	Confirm that Bidder is not involved in any Litigation/ Arbitration/debarring/expelling, otherwise, if involved, please furnish information about the same.	
20.0	Confirm that the Bidder is not under liquidation, court receivership or similar proceedings.	
21.0	Confirm the following:	
a)	The planning schedule, S-curves etc., submitted by the bidder with his Bid, are indicative and shall not be basis for extra compensation in case actual needs are higher.	
b)	Detailed planning schedule developed by CONTRACTOR after contract award may be subject to fluctuations depending upon actual progress of the project and available work front.	
c)	Co-ordination and making available by Contractor of all staff, manpower, construction equipment, tools, cranes, etc. and materials as required for a timely completion of all WORK as per Owner's construction and priority schedule and in accordance with the available work front are included in the quoted rates.	
22.0	Please confirm whether you need Mobilization Advance or not.	
23.0	Please confirm that you have submitted Tender Fee in the Unpriced Part of your Bid in case Bidding Document downloaded from website. In case of non-submission of tender fee as specified, tender shall not be considered for evaluation.	

SIGNATURE OF BIDDER : _____

NAME OF BIDDER : _____

COMPANY SEAL : _____



NATIONAL ALUMINIUM COMPANY LIMITED

(A Government of India Enterprise)

TENDER & CONTRACT DEPT., SMELTER PLANT / CAPTIVE POWER PLANT

Web site: www.nalcoindia.com

ANNEXURE-C25

CHECKLIST FOR BIDDER.

Following information along with the attested copy/copies of all the supporting documents as applicable, are to be submitted in the envelope of Single part/ two-part bid (Ref cl. No-25.1 of Annexure-A1).

Sl No.	Documents description	For Two Part	For Single Part
1.	(a) EMD Amount as per NIT specification.	Yes / No	Yes / No
	(b) Cost of tender document, if downloaded from Internet.	Yes / No	NA
2.	E.P.F. A/c CODE	Yes / No	Yes / No
3.	E.S.I. A/c CODE	Yes / No	Yes / No
4.	PAN No.	Yes / No	Yes / No
5.	E MAIL ID (Annexure-C4)	Yes / No	Yes / No
6.	Phone no/ Mobile no (Annexure-C4)	Yes / No	Yes / No
7.	PAN based GST registration No	Yes / No	Yes / No
8.	GST No	Yes / No	Yes / No
9.	Solvency Certificate from a Bank	Yes / No	NA
10.	Power of Attorney of the signatory / Authorized signatory nominated by the company for the tender, if signed by other than proprietor.	Yes / No	Yes / No
11.	Proof of ownership/partnership of the firm/company attached.	Yes / No	NA
12.	Offer is submitted in the original NIT documents	(a) Obtained from T&C Department, (b) Downloaded from Internet	Yes / No Yes / No
13.	Deviation from the NIT terms & conditions in deviation sheet only. (Ref :-Annexure-C3)	Yes / No	NA
14.	Signed declaration form by authorized signatory as per Annexure-C4	Yes / No	Yes / No
15.	Undertaking of downloaded tender documents as per Annexure-C5	Yes / No	NA
16.	Bank mandate for e-payment form as per Annexure-C10	Yes / No	Yes / No

Sl No.	Documents description	For Two Part	For Single Part
17.	Annexure-C19 & C20 regarding relatives in NALCO	Yes / No	Yes / No
18.	Annexure-C8 regarding details of commitments and information of the tenderer	Yes / No	NA
19.	Documentary evidence in support of pre-qualifying criteria of the NIT Work Orders listing as per (Annexure-C6) Work Orders listing as per (Annexure-C7)	Yes / No Yes / No	NA
20.	Copies of audited Balance Sheet / Profit & Loss account for the last three Financial Years	Yes / No	Yes / No
21.	Copy of statutory license, if applicable	Yes / No	Yes / No
22.	List of tools & tackles	Yes / No	NA
23.	All the pages of the offer including GCC are signed by the bidder	Yes / No	Yes / No
24.	Supporting documents are attested by Gazetted Officer / Notary Public	Yes / No	Yes / No
25.	Price Bid contains no conditions in any form	Yes / No	Yes / No
26.	Pre Contract Integrity Pact (Annexure-C21)	Yes/No	NA

NB:- If any of the information is not furnished, the offer of the party shall be liable for rejection and the consideration of the offer is at the discretion of NALCO.

SIGNATURE OF TENDERER WITH SEAL

ANNEXURE-C26

CHECK LIST FOR SUBMISSION OF OFFER

Bidder is requested to fill this check list and ensure that all details/ documents have been furnished as called for in the tender document along with duly filled in, signed and stamped **checklist with Part-I bid**.

Please tick the box and ensure compliance:

- 1.0 **Bid submission Letter** as per proforma attached in bidding document.
Submitted. ☐
- 2.0 **Information about Bidder** as per proforma attached in bidding document.
Submitted. ☐
- 3.0 **EMD** of requisite amount is submitted in the form of DD/BG/BC from any scheduled bank as mentioned in tender document, in separate sealed envelope marked "Earnest Money Deposit".
Submitted in the form of DD/ BG ☐ EMD value: Rs. _____
BG No. _____ Dated _____ Valid up to _____ Claim period upto _____
DD No. _____ Dated _____ Drawn on _____ Valid up to _____
BC No. _____ Dated _____ Drawn on _____ Valid up to _____
- 4.0 **Validity of Offer** is up to _____ **Months** from the date of submission of offer.
Yes ☐ Valid Up to _____.
- 5.0 **Annual Turnover Details** as per proforma including **Audited Balance Sheets including Profit and Loss Account Statement** for the last 3 (Three) years.
Submitted. ☐ Submitted for the years:
1. _____
2. _____
3. _____
- 6.0 Fresh Solvency Certificate from your Bankers (Date of issue of this certificate should not be earlier than one year from the date of opening of Techno-commercial Part).
Submitted. ☐ Certificate dated _____
From (Name of Bank) _____
- 7.0 **Details of Past Experience** in the proforma enclosed in the Bidding Document.
Submitted. ☐
- 8.0 **Details of Present Commitments** in the proforma enclosed in the proforma enclosed in the Bidding Document.
Submitted. ☐
- 9.0 List of minimum equipment proposed to be deployed for the work in the proforma enclosed in the Bidding Document.
Submitted. ☐ Ref.: _____

10.0 Deployment Schedule of equipment proposed for the work in the proforma enclosed in the Bidding Document.

Submitted. Ref. _____

11.0 Proposed Site Organisation (as per proforma enclosed in the Bidding Document)

i) Submitted Ref. _____

ii) Qualification and Experience of Resident Engineer/ Site-in-Charge and other key personnel have been mentioned in the site organization chart.

Yes Ref. _____

iii) Number of Key Personnel under different heads have been mentioned in the Site Organisation Chart.

Yes Ref. _____

iv) Site Organization Chart includes qualified and experienced Quality Control Engineer, Planning Engineer and Safety Officer.

Yes Ref. _____

12.0 Deployment Schedule of Supervisory Personnel proposed for the work in the proforma enclosed in the Bidding Document.

Submitted Ref. _____

13.0 Power of Attorney in favour of person who has signed the offer in stamp paper of appropriate value.

Submitted. Ref. _____

14.0 Partnership Deed in case of partnership firm and Articles of Association in case of limited company.

Submitted.

15.0 Declaration regarding relationship with client's Director

Submitted.

16.0 Copy of P.F & ESI code, Service Tax registration certificate:

Submitted.

17.0 An Overall Schedule, clearly indicating all important milestone of the construction activities.

Submitted. Ref. _____

18.0 Bid Compliance Statement (confirmation for no deviation stipulated in Bid) in the proforma enclosed.

Submitted. Ref. _____

19.0 Exception and Deviation Statement in the proforma enclosed.

Submitted.

20.0 All the documents submitted in requisite number of copies as mentioned in the Bidding Document and are readable/legible.

Submitted. No. of copies submitted: _____

21.0 Original Biding Document along with blank (un-priced) copy of Price Bid/ Schedule of Rates, corrigendum and addendum (if any).

Submitted.

22.0 All pages/ documents are stamped and signed by the authorised signatory of the bidder.

Yes.

SIGNATURE OF BIDDER: _____

NAME OF BIDDER: _____

COMPANY SEAL: _____

ANNEXURE-C27

APPENDIX FOR DOCUMENTS TO BE SUBMITTED BY BIDDER

Sl. No.	Contents	File Name (To be saved as)	Page Nos.
1	DD / Banker's Cheque /MSME / NSIC / UAM	EMD.pdf	---- to ---
2	i) Work Order Copy with scope of work and BOQ	Tech PQC.pdf	---- to ---
	ii) Completion Certificate		---- to ---
	iii) Amendment Copy, if applicable		---- to ---
3	i) Balance Sheet and Profit & Loss statements of last 3 financial years (Audited by C.A)	Fin PQC.pdf	---- to ---
	ii) Bank Solvency of last financial year		---- to ---
4	i) PF	Comm PQC.pdf	---- to ---
	ii) ESI		---- to ---
	iii) PAN		---- to ---
	iv) PAN based GSTIN		---- to ---
	v) Power of Attorney /ownership/Certificate of Incorporation		---- to ---
	vi) Affidavit of No Litigation (Original)		---- to ---
5	i) Declaration of Relatives (Appendix – C19 & C20 of NIT	Forms.pdf	---- to ---
	ii) Details of Present Commitments of the tenderer (ANNEXURE-C8 of NIT)		---- to ---
	iii) Exception / Deviation statement to the tender terms & conditions (ANNEXURE-C3 of NIT)		---- to ---
	iv) Declaration by the bidder (ANNEXURE-C4 of NIT)		---- to ---
	v) Bank Mandate Form for e-payment (Annexure-C10 of NIT)		---- to ---
	vi) SAC Code (Annexure-C18 of NIT)		---- to ---
	vii) Undertaking of downloading of tender document (Annexure-C5 of NIT)		---- to ---
6	Pre-Contract Integrity Pact (Annexure-C21 of NIT)	PCI.pdf	---- to ---

NOTE –

1. The above details must be filled up and submitted, along with the bid document.
2. All the above mentioned documents needs to be submitted along with the offers.
3. The bid submitted must have 6 files as mentioned above and must contain the contents specified against each file.

Page nos. (Ex:- pages --- to ---) must be mentioned against each file.

ANNEXURE-C28

NO DUE CERTIFICATE

1. Vendor Code: Vendor Name:
2. Work Order Ref with Date:
3. Description of Work as per Order :
4. Reference of User Dept :

This is to certify that the contractor do not have any due regarding Material, Tools, Equipment, Consumables, Rent, Electricity, Water Charges, Ground Rent, Hiring Charges, etc. and Compensation for damages if any.

However, dues of contractor under the performance guarantee / defect liability shall continue for the performance guarantee / defect liability period notwithstanding the above certificate/ agreement.

for National Aluminium Co. Ltd.

Date:

Signature.

Name:

Designation:

Department:

.....

NO CLAIM CERTIFICATE

1. Vendor Code: Vendor Name:
2. Work Order Ref with Date:
3. Description of Work as per Order:
4. Reference of User Dept:
5. Final Bill Value Claimed:

This is to certify that we do not have any other claims on M/s. National Aluminium Company Limited against the above contract except what is already claimed in the Final Bill subject to processing/passing in Finance as per Contract Conditions and Security Deposit/Performance guarantee.

for National Aluminium Co. Ltd.

for Contractor

Date:

Signature

Signature

Name:

Name:

Designation:

Seal:

Department:

ANNEXURE-C29**WORK COMPLETION CERTIFICATE**

1. Name Of the Work:
2. Work Order Reference No. & Date:
3. SAP Purchase Order No.
4. Name of the Contractor & SAP Vendor Code:
5. Contract Period: From To
6. Amended Contract Period: From To
7. Contract Value (Excluding GST) (Rs.):
8. Final Amended Contract Value (Excluding GST) (Rs.):
9. Actual Value of Completed Work (Excluding GST) (Rs.):
10. Date of Actual Commencement of Work:
11. Date of Completion of Work:

Certified that the above work has been completed in all respects as per terms & conditions of the contract and the performance is satisfactory.

(Signature of EIC/MIC)

Name:

Designation:

Dept.:

Date:

(Signature of HOD)

Name:

Designation:

Dept.:

Date:

ANNEXURE-C30**Format:- (To be submitted with BID)****ANTI-PROFITEERING DECLARATION FORMAT**

To whomsoever it may concern.

I, Mr. _____, Proprietor/_____ (other authorized signatories) of M/s. _____, hereby solemnly and sincerely declare that, while giving this quotation to 'Nalco' against Tender No. **SMLT/T&C/CPPP/OMC-5719/NIT/5040** **Date: 14.10.2023**, me/my firm/my company has abided by all Tax Laws and Rules including but not limited to Section 171 of the Central Goods and Services Tax Act, 2017.

I, hereby solemnly and sincerely further declare that me/my firm/my company will continue to abide by the said laws, including but not limited to Section 171 of the Central Goods and Services Tax Act, 2017, as applicable from time to time during the life of the tender and during execution of any order placed with reference to the said tender.

I further declare that, me/my firm/my company, in furtherance and in compliance to the said section, will make commensurate reduction in the basic prices w.r.t. Input Tax benefits and reduction in Tax charged to 'Nalco' w.r.t. Output Tax benefits in connection with goods and/or services provided.

I further declare that the foregoing is true and correct and the same is a legal obligation and failure to fulfil if could result in penalties under the law.

Date: _____

Place: _____

To be signed by the authorized person under the firm's seal.

ANNEXURE-C31**Format:- (To be submitted at the time of release of Final Due)****ANTI-PROFITEERING DECLARATION FORMAT**

To whomsoever it may concern.

I, Mr. _____, Proprietor/_____ (other authorized signatories) of M/s. _____, hereby solemnly and sincerely declare that, while executing the Order No. _____ Dt._____, me/my firm/my company has abided by all Tax Laws and Rules including but not limited to Section 171 of the Central Goods and Services Tax Act, 2017.

I further declare that, me/my firm/my company, in furtherance and in compliance to the said section, have not made profit out of reduction in Input Tax benefits where ever applicable and reduced Tax charged to 'Nalco' w.r.t. Output Tax benefits in connection with goods and/or services provided.

I further declare that the foregoing is true and correct and the same is a legal obligation and failure to fulfil if could result in penalties under the law.

Date: _____

Place: _____

To be signed by the authorized person under the firm's seal.

GENERAL CONDITIONS OF CONTRACT (GCC)

(Enclosed separately with this Tender)

&

Online Tender Reference copy of Percentage BoQ to be filled up by the bidder.

(Enclosed separately with this Tender)

Percentage BoQ

ANNEXURE - B4

Tender Inviting Authority: Mr. P.K. Panda, DGM(Mech.), T&C Department, Smelter Plant, NALCO, Angul, Odisha-759145

Name of Work: Miscellaneous Civil Works for Repair & Maintenance of Residential and Non-Residential Building including external and internal services in Nalconagar Township & CISF Colony.

Contract No: OMC-5719

Name of the Bidder/ Bidding Firm / Company :						
PRICE SCHEDULE						
The Bill of Quantity & Schedule of Rates (BOQ & SOR) of individual items are available in Annexure-II of NIT. The overall excess/discount percentage quoted by the bidder in this price bid including the discount amount during Reverse-Auction shall be applicable over the Rates & Amounts for each & every items of BOQ & SOR as available at Annexure-II of NIT.						
NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	Estimated Rate in Rs.P (Service + Material)	TOTAL AMOUNT Without Taxes in Rs. P	TOTAL AMOUNT In Words
1	2	3	4	5	6	7
1	Miscellaneous Civil Works for Repair & Maintenance of Residential and Non-Residential Building including external and internal services in Nalconagar Township & CISF Colony for a period of 24 Months. The Bill of Quantity & Schedule of Rates are available in Annexure-II of NIT. The overall excess/discount percentage quoted by the bidder in this online price bid format including the discount amount during Reverse-Auction shall be applicable over the Rates & Amounts for each & every items of BOQ & SOR as available at Annexure-II of NIT.	1.00	Total Estimated Amount (100% Job)	96120494.71	96120494.71	INR Nine Crore Sixty One Lakh Twenty Thousand Four Hundred & Ninety Four and Paise Seventy One Only
Total in Figures					96120494.71	INR Nine Crore Sixty One Lakh Twenty Thousand Four Hundred & Ninety Four and Paise Seventy One Only
Quoted Rate in Figures			Select		0.00	INR Zero Only
Quoted Rate in Words	INR Zero Only					

ANNEXURE-II

Bill of Quantities & Schedule of Rates

NIT No:

SMLT/T&C/CPPP/OMC-5719/NIT/5040

DATE: 14.10.2023

Sub:

Miscellaneous Civil Works for Repair & Maintenance of Residential and Non-Residential Building including external and internal services in Nalconagar Township & CISF Colony.

Line Item No	Activity SNo.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
1		Service				
1	1	Earth work in excavation	Cubic meter	4,300.00	221.22	951,246.00
1	2	Surface dressing	Square meter	6,000.00	21.34	128,040.00
1	3	Filling earth Lead up to 50M	Cubic meter	1,200.00	192.60	231,120.00
1	4	Filling earth lead up to 1.0KM	Cubic meter	200.00	325.08	65,016.00
1	5	Sand filling	Cubic meter	600.00	991.57	594,942.00
1	6	Crusher dust	Cubic meter	1,000.00	576.99	576,990.00
1	7	Transporting and disposing	Cubic meter	3,000.00	169.18	507,540.00
1	8	Transp-full truck (Trip)	Trip	50.00	978.47	48,923.50
1	9	Transp-full tractor (Trip)	Trip	1,000.00	489.23	489,230.00
1	10	Clearing of grass,	Square meter	5,000.00	5.61	28,050.00
1	11	Felling tree upto 30cm	each	1,000.00	67.88	67,880.00
1	12	Felling tree upto 60cm	each	100.00	333.70	33,370.00
1	13	Chemical herbicide for killing of plant	Liter	10.00	351.93	3,519.30
1	14	Injecting the chemical to trees	each	50.00	113.14	5,657.00
1	15	Hire charges - JCB	Hours	200.00	1,026.50	205,300.00
1	16	Hire charges - Hydra	Hours	20.00	1,099.79	21,995.80
1	17	Hire charges - Dozer	Hours	20.00	1,759.67	35,193.40
1	18	Hire charges - tipper	Days	100.00	1,994.30	199,430.00
1	19	Hire charges - roller	Days	10.00	3,519.35	35,193.50
1	20	Excavation in hard rocks	Cubic meter	10.00	947.42	9,474.20
1	21	Extra Earth work	Cubic meter	20.00	79.25	1,585.00

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SIno.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
1	22	Extra E/W in hard rock	Cubic meter	10.00	142.12	1,421.20
1	23	P/L gravel stone	Cubic meter	10.00	1,521.22	15,212.20
1	24	Excavating trench 80mm	Meter	50.00	195.53	9,776.50
1	25	Excavating trench 300mm	Meter	50.00	319.36	15,968.00
1	26	Dewatering	Hours	10.00	136.87	1,368.70
1	27	Cleaning drain - 0.25sqm	Meter	500.00	5.20	2,600.00
1	28	Cleaning drain - 0.50sqm	Meter	500.00	8.69	4,345.00
1	29	Cleaning drain - 1.00sqm	Meter	200.00	12.17	2,434.00
1	30	Transporting of any kind of materials	Trip	10.00	1,304.60	13,046.00
1	31	Extra over item no. 30	Trip	10.00	818.75	8,187.50
1	32	Berm dressing avg 15cm	Square meter	15,000.00	17.38	260,700.00
1	33	Surface excavation upto 30cm	Square meter	500.00	81.16	40,580.00
1	34	Stacking of red moorum	Cubic meter	100.00	586.56	58,656.00
1	35	Spreading of red moorum	Square meter	1,000.00	11.68	11,680.00
1	36	PCC 1:5:10	Cubic meter	450.00	4,086.84	1,839,078.00
1	37	PCC-1:3:6	Cubic meter	150.00	4,096.58	614,487.00
1	38	PCC-1:2:4	Cubic meter	950.00	4,097.86	3,892,967.00
1	39	RCC 1:2:4 in foundation	Cubic meter	20.00	4,543.06	90,861.20
1	40	RCC 1:1.5:3 in foundation	Cubic meter	300.00	4,449.37	1,334,811.00
1	41	RCC 1:1.5:3 in sup. structure	Cubic meter	100.00	5,350.73	535,073.00
1	42	Precast RCC slab 1:1.5:3	Cubic meter	20.00	5,252.12	105,042.40
1	43	Cent. & shut-below plinth	Square meter	1,200.00	249.77	299,724.00
1	44	Cent. & shut-above plinth	Square meter	600.00	505.07	303,042.00
1	45	Cent. & shut- extra add.height	Square meter	10.00	252.06	2,520.60
1	46	Reinforcement- tor steel	Kilogram	42,000.00	16.56	695,520.00
1	47	Precast concrete jali 40mm	Square meter	50.00	1,156.48	57,824.00
1	48	Precast RCC posts	Cubic meter	5.00	19,964.93	99,824.65
1	49	FRP KB brick- fdn & plinth	Cubic meter	10.00	5,036.68	50,366.80
1	50	FRP KB brick- sup.structure	Cubic meter	10.00	5,923.33	59,233.30
1	51	Half BW in KB in foundation	Square meter	30.00	616.78	18,503.40
1	52	Half BW in KB in sup.structure	Square meter	50.00	713.38	35,669.00
1	53	FPS Brick work in 7cm	Square	10.00	603.88	6,038.80

ANNEXURE-II

Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SIno.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
			meter			
1	54	FPS Brick edging	Meter	10.00	44.79	447.90
1	55	Fly ash brick work- foundation	Cubic meter	600.00	2,825.25	1,695,150.00
1	56	Fly ash BW for MH/IC (For repair work)	Cubic meter	100.00	3,028.69	302,869.00
1	57	Fly ash brick work- sup. Structure	Cubic meter	400.00	3,195.10	1,278,040.00
1	58	Fly ash half brick in fdn	Square meter	350.00	318.50	111,475.00
1	59	Fly ash half brick in sup. str	Square meter	350.00	415.12	145,292.00
1	60	Fly ash Brick work in 7cm	Square meter	10.00	406.33	4,063.30
1	61	Fly ash edging	Meter	200.00	21.51	4,302.00
1	62	Brick work with dismantled brick	Cubic meter	250.00	2,428.85	607,212.50
1	63	RR masonry 1:6 - F&P	Cubic meter	10.00	4,865.79	48,657.90
1	64	Dry stone pitching	Square meter	10.00	551.23	5,512.30
1	65	Wood work in D/W frame- sal	Cubic meter	1.00	92,351.94	92,351.94
1	66	Wood work in frame- Non sal	Cubic meter	4.00	62,907.80	251,631.20
1	67	35mm th. hollock wood panel door	Square meter	1,200.00	2,088.14	2,505,768.00
1	68	25mm Panelled shutter	Square meter	20.00	3,187.87	63,757.40
1	69	Wire gauge shutter(Factory made)	Square meter	20.00	2,612.45	52,249.00
1	70	35mm th Flush door shutter	Square meter	25.00	2,651.41	66,285.25
1	71	30mm th Flush door shutter	Square meter	50.00	2,416.79	120,839.50
1	72	19mm th Block board door shutter	Square meter	10.00	2,161.05	21,610.50
1	73	Lipping with 2nd class teak wood	Square meter	10.00	234.62	2,346.20
1	74	Extra for cutting rebate	Square meter	100.00	82.93	8,293.00
1	75	PVC door frame	Meter	10.00	343.38	3,433.80
1	76	PVC door shutter	Square meter	10.00	2,124.84	21,248.40
1	77	P/F Al. door window	Kilogram	200.00	450.15	90,030.00

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SIno.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
1	78	Repairing of al. door and windows	Square meter	50.00	273.61	13,680.50
1	79	C/E channel, tapper clip	Meter	300.00	122.19	36,657.00
1	80	PVC/ Neoprene/ rubber gasket,	Meter	100.00	22.22	2,222.00
1	81	Fabricating & erecting	Kilogram	6,000.00	32.70	196,200.00
1	82	Steel work	Kilogram	1,500.00	117.97	176,955.00
1	83	P/F bolt including nut washer	Kilogram	50.00	112.63	5,631.50
1	84	Angle iron frame	Meter	14,000.00	100.78	1,410,920.00
1	85	Repair of door frame sides	each	1,000.00	273.29	273,290.00
1	86	Repair of window frame 1200x1200	each	800.00	218.63	174,904.00
1	87	Repair of window frame above 1200x1200	each	100.00	295.15	29,515.00
1	88	Profile-B (105x60)mm	Meter	10.00	427.11	4,271.10
1	89	Profile-C (165x60)mm	Meter	10.00	450.57	4,505.70
1	90	P/F MS grill	Kilogram	1,500.00	151.53	227,295.00
1	91	P/F MS door	Kilogram	50.00	121.70	6,085.00
1	92	Flat brick soling	Square meter	100.00	243.51	24,351.00
1	93	25mm tick CC pavement	Square meter	1,500.00	114.43	171,645.00
1	94	40mm tick CC pavement	Square meter	7,000.00	183.08	1,281,560.00
1	95	Extra marking chequers	Square meter	100.00	55.41	5,541.00
1	96	25mm CC flooring	Square meter	1,000.00	211.52	211,520.00
1	97	40mm CC flooring	Square meter	4,000.00	338.45	1,353,800.00
1	98	Cement plaster skirting 18mm thick	Square meter	50.00	375.89	18,794.50
1	99	Ceramic wall tiles (Rs.35-40/Sqft)	Square meter	300.00	842.88	252,864.00
1	100	Ceramic wall tiles Tilofix (Rs.35-40/Sq	Square meter	500.00	860.47	430,235.00
1	101	Ceramic floor tiles (Rs.35-40/Sqft)	Square meter	200.00	801.95	160,390.00
1	102	Ceramic floor tiles Tilofix (Rs.35-40/Sq	Square meter	100.00	794.68	79,468.00
1	103	Vitrified floor tiles (Rs. 60-70/Sqft.)	Square meter	400.00	1,037.28	414,912.00
1	104	Vitrified floor tiles (Rs.	Square	200.00	1,243.72	248,744.00

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
		70-80/Sqft.)	meter			
1	105	Vitrified floor tiles Tilo fix (Rs.60-70	Square meter	250.00	1,032.37	258,092.50
1	106	Vitrified floor tiles Tilo fix (Rs.70-80	Square meter	300.00	1,236.44	370,932.00
1	107	Matt finished vitrified tile	Square meter	200.00	1,039.43	207,886.00
1	108	Granite stone flooring	Square meter	250.00	3,135.59	783,897.50
1	109	Marble stone flooring	Square meter	10.00	2,315.42	23,154.20
1	110	Edge moulding 18 mm thick marble/ granit	Square meter	50.00	329.88	16,494.00
1	111	20mm Kuddappa stone flooring	Square meter	200.00	914.72	182,944.00
1	112	20mm kota stone flooring	Square meter	150.00	1,256.71	188,506.50
1	113	Pavement tile 25mm	Square meter	400.00	968.11	387,244.00
1	114	Pavement tile 40mm	Square meter	100.00	1,090.40	109,040.00
1	115	Chequered tile - light red shade	Square meter	50.00	700.62	35,031.00
1	116	10mm thick acid and alkali resistant til	Square meter	5.00	1,265.26	6,326.30
1	117	Extra for repair of floor/wall tile	Square meter	50.00	542.34	27,117.00
1	118	Polyninyl chloride sheet flooring	Square meter	10.00	410.59	4,105.90
1	119	Door sill concrete size (65x40)mm	Meter	500.00	80.00	40,000.00
1	120	Door sill granite size (70x20)mm	Meter	50.00	271.74	13,587.00
1	121	MS angle nosing with lugs	Meter	10.00	59.94	599.40
1	122	Glass strip 25-40mm wide	Meter	1,000.00	65.90	65,900.00
1	123	Providing Gola 75x75mm	Meter	8,000.00	190.07	1,520,560.00
1	124	Grading roof CC 1:2:4	Cubic meter	600.00	4,217.16	2,530,296.00
1	125	Grading roof 1:4	Cubic meter	20.00	8,303.55	166,071.00
1	126	Making khuras	each	20.00	179.22	3,584.40
1	127	Double scaffolding system	Square meter	800.00	226.18	180,944.00
1	128	MS fan clamp 16mm dia	each	10.00	372.63	3,726.30
1	129	P/F Grating square	each	20.00	88.06	1,761.20
1	130	Refixing spout pipe	each	100.00	302.87	30,287.00

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SIno.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
1	131	Applying polymer exclu chemical compound	Square meter	300.00	147.76	44,328.00
1	132	Extra WP excluding chemical compound	Bag	50.00	8.53	426.50
1	133	6mm th cement board	Square meter	30.00	623.39	18,701.70
1	134	Fixing of roof sheeting	Square meter	500.00	106.40	53,200.00
1	135	Fixing of Ridge	Meter	100.00	63.84	6,384.00
1	136	Self adhesive flash strip	Square meter	10.00	347.70	3,477.00
1	137	8mm dia GI J/L hook	each	1,500.00	14.07	21,105.00
1	138	EPDM washer 25mm OD	each	1,000.00	2.60	2,600.00
1	139	GI stitching with washer	each	100.00	1.76	176.00
1	140	Plain GI sheet 24 gauge	Kilogram	10.00	58.65	586.50
1	141	CGI sheet (TATA) make	Kilogram	300.00	65.68	19,704.00
1	142	FRP plastic sheet	Square meter	50.00	960.29	48,014.50
1	143	False ceiling	Square meter	100.00	1,084.65	108,465.00
1	144	Cleaning roof -D & TD type qtr	each	100.00	260.78	26,078.00
1	145	Cleaning roof -C & TC type qtr	each	100.00	165.18	16,518.00
1	146	Cleaning roof -B & TB type qtr	each	150.00	127.84	19,176.00
1	147	Cleaning roof -A & TA type qtr	each	200.00	108.95	21,790.00
1	148	Cleaning roof -Garage of all size	each	200.00	122.81	24,562.00
1	149	12mm thick cement plaster	Square meter	22,000.00	202.07	4,445,540.00
1	150	6mm thick cement plaster	Square meter	1,000.00	178.04	178,040.00
1	151	Neat cement punning	Square meter	20,000.00	42.26	845,200.00
1	152	Repair to plaster	Square meter	7,000.00	266.04	1,862,280.00
1	153	Repair of OHT 500-750ltr	each	100.00	719.62	71,962.00
1	154	Repair of OHT 1000-1200ltr	each	100.00	1,116.29	111,629.00
1	155	Repair of manhole	Square meter	200.00	270.18	54,036.00
1	156	P/f chicken wiremesh	Square meter	50.00	339.41	16,970.50

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SIno.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
1	157	Wall putty	Square meter	10,000.00	70.73	707,300.00
1	158	Drip course of (25x15) mm	Meter	500.00	50.80	25,400.00
1	159	Rule pointing on stone	Square meter	10.00	243.46	2,434.60
1	160	Applying of bitumen grade	Square meter	10.00	96.46	964.60
1	161	Removing white/colour wash	Square meter	1,000.00	12.47	12,470.00
1	162	Removing oil bound distemper	Square meter	7,000.00	15.98	111,860.00
1	163	White wash old work (1 coat)	Square meter	20,000.00	8.99	179,800.00
1	164	White wash old work (2 coat)	Square meter	8,000.00	14.70	117,600.00
1	165	Colour wash old work (1 coat)	Square meter	1,000.00	11.25	11,250.00
1	166	Colour wash old work (2 coat)	Square meter	100.00	22.50	2,250.00
1	167	Colour wash new work (2 coat)	Square meter	100.00	33.76	3,376.00
1	168	Acrylic Distemper (one coat)	Square meter	40,000.00	42.12	1,684,800.00
1	169	Acrylic Distemper (two coat)	Square meter	110,000.00	71.78	7,895,800.00
1	170	Plastic emulsion paint-one coat	Square meter	3,500.00	74.22	259,770.00
1	171	Plastic emulsion paint-two coat	Square meter	4,000.00	112.79	451,160.00
1	172	Red oxide zinc chromate primer	Square meter	2,000.00	44.45	88,900.00
1	173	Wood primer	Square meter	10,000.00	50.03	500,300.00
1	174	Synthetic enamel paint- one coat	Square meter	50,000.00	70.11	3,505,500.00
1	175	Synthetic enamel paint- two coat	Square meter	15,000.00	106.56	1,598,400.00
1	176	Epoxy paint (two or more coats)	Square meter	200.00	166.37	33,274.00
1	177	Aluminium paint- one coat	Square meter	50.00	64.24	3,212.00
1	178	Aluminium paint- two coat	Square meter	50.00	98.42	4,921.00
1	179	French sprit polishing- one coat	Square meter	100.00	155.04	15,504.00

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SIno.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
1	180	Black Japan paint- one coat	Square meter	200.00	63.54	12,708.00
1	181	Black Japan paint- two coat	Square meter	200.00	92.98	18,596.00
1	182	Writing of lettering (Per letter)	each	1,000.00	4.13	4,130.00
1	183	Writing name plate	each	30.00	600.00	18,000.00
1	184	Painting black boards	Square meter	500.00	70.11	35,055.00
1	185	Writing of house number	each	500.00	137.38	68,690.00
1	186	WP Cement paint - one coat	Square meter	500.00	52.05	26,025.00
1	187	WP Cement paint - two coat	Square meter	500.00	79.99	39,995.00
1	188	Weather /exterior paint - one coat	Square meter	4,000.00	58.72	234,880.00
1	189	Weather /exterior paint - two coat	Square meter	5,000.00	85.71	428,550.00
1	190	Textured exterior paint	Square meter	100.00	147.98	14,798.00
1	191	Water thinnable cement primer	Square meter	5,000.00	52.63	263,150.00
1	192	Dismantling of Brick work in sub.str	Cubic meter	400.00	837.73	335,092.00
1	193	Dismantling of Brick work in sup.str	Cubic meter	50.00	1,288.82	64,441.00
1	194	Dismantling of PCC	Cubic meter	450.00	1,523.42	685,539.00
1	195	Dismantling of RCC	Cubic meter	100.00	2,222.47	222,247.00
1	196	Dismantling of RR masonry	Cubic meter	5.00	1,538.16	7,690.80
1	197	Dismantling of brick tile	Square meter	20.00	69.78	1,395.60
1	198	Dismantling of mud phoska	Cubic meter	100.00	571.94	57,194.00
1	199	Dismantling of C.P/Skirting	Square meter	8,000.00	34.20	273,600.00
1	200	Dismantling of CC floor	Square meter	3,000.00	85.31	255,930.00
1	201	Dismantling of tile work	Square meter	250.00	48.10	12,025.00
1	202	Removing mortar from brick	each	40,000.00	1.91	76,400.00
1	203	Dismantling of damaged RCC OHT	each	5.00	869.28	4,346.40
1	204	Hacking of CC floor	Square meter	14,000.00	2.20	30,800.00
1	205	Cutting hole 7.5x 7.5 cm	each	200.00	109.89	21,978.00

ANNEXURE-II

Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SIno.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
1	206	Cutting hole 15x15cm	each	500.00	243.55	121,775.00
1	207	Making Hole 20x20	each	600.00	129.92	77,952.00
1	208	Cutting Hole 30x30	each	300.00	216.68	65,004.00
1	209	Making chess/Groove	Meter	1,000.00	107.00	107,000.00
1	210	Drilling of holes	each	10.00	117.23	1,172.30
1	211	Dismantling ceiling board	Square meter	50.00	36.82	1,841.00
1	212	Cutting of reinforcement bar	each	3,000.00	2.95	8,850.00
1	213	Dismant. CI/AC/PVC RW pipe	Meter	2,000.00	48.80	97,600.00
1	214	Dismantling of GI/UPVC pipe	Meter	10,000.00	8.41	84,100.00
1	215	Removing of high level cistern	each	200.00	169.70	33,940.00
1	216	Dismantling & refixing of WB/Sink	each	200.00	135.76	27,152.00
1	217	Dismantling of structural steel	Kilogram	1,300.00	3.65	4,745.00
1	218	Dismantling roofing (CGI/AC/Translucent	Square meter	1,100.00	106.87	117,557.00
1	219	Dismant.RCC/MS fencing post	each	50.00	160.11	8,005.50
1	220	Dismant.old barbed wire	Kilogram	100.00	23.04	2,304.00
1	221	Removing of old tarfelting	Square meter	100.00	10.58	1,058.00
1	222	Dismant.door>window- 3sqm	each	2,000.00	240.66	481,320.00
1	223	Dismant.door>window- 3sqm above	each	15.00	329.37	4,940.55
1	224	Dismant WBM road	Square meter	200.00	268.85	53,770.00
1	225	Taking out door win -area 3Sqm & below	each	3,300.00	93.40	308,220.00
1	226	Taking out door win-area beyond 3Sqm	each	30.00	123.35	3,700.50
1	227	Repair of wooden door & window	Square meter	2,000.00	226.27	452,540.00
1	228	Repairing of Choukath	each	50.00	63.00	3,150.00
1	229	Lab. easing of door/ window shutter	each	1,700.00	36.15	61,455.00
1	230	Greasing of steel window hinges	each	10.00	33.94	339.40
1	231	Fixing of choukath	each	20.00	170.06	3,401.20
1	232	Making the opening	Square meter	10.00	809.91	8,099.10

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
1	233	Fixing of wiremesh	Square meter	30.00	276.92	8,307.60
1	234	Fixing door closer/mortice lock	each	10.00	86.92	869.20
1	235	Fixing Door stopper/TB/Handle/Knob	each	12,000.00	19.94	239,280.00
1	236	Fixing Sliding door bolt	each	200.00	43.45	8,690.00
1	237	Fixing Piano hinges	Meter	150.00	86.92	13,038.00
1	238	Fixing of wooden Door per leaf	each	1,500.00	102.85	154,275.00
1	239	Fixing of wooden Window per leaf	each	2,500.00	72.00	180,000.00
1	240	Extra for carriage of door,	each	50.00	92.57	4,628.50
1	241	Fixing of wooden Door frame	each	50.00	1,145.72	57,286.00
1	242	Fixing of wooden Window frame	each	15.00	718.88	10,783.20
1	243	Fixing of wooden Clerestory window frame	each	10.00	554.97	5,549.70
1	244	Fixing MS grill	Square meter	1,000.00	157.39	157,390.00
1	245	P/F ply board 4mm th BWP	Square meter	5.00	846.67	4,233.35
1	246	P/F ply board 6mm th BWP	Square meter	10.00	750.00	7,500.00
1	247	P/F ply board 9mm th BWP	Square meter	10.00	950.00	9,500.00
1	248	P/F ply board 12mm th BWP	Square meter	300.00	1,050.00	315,000.00
1	249	P/F ply board 18mm th BWP	Square meter	800.00	1,410.00	1,128,000.00
1	250	12mm prelaminated particle board	Square meter	10.00	846.66	8,466.60
1	251	18mm prelaminate particle board	Square meter	5.00	994.77	4,973.85
1	252	6mm Bison panel cement bonded plain	Square meter	5.00	608.48	3,042.40
1	253	16mm Bison panel cement bonded lam	Square meter	5.00	1,738.55	8,692.75
1	254	Renewal of old putty	Square meter	500.00	289.40	144,700.00
1	255	Renewing Glass panes (pin head) 4mm	Square meter	250.00	748.22	187,055.00
1	256	Renewing Glass panes	Square	15.00	768.22	11,523.30

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SIno.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
		(float glass) 4mm t	meter			
1	257	Renewing Glass panes (float glass) 5.5mm	Square meter	20.00	1,026.40	20,528.00
1	258	Black glass panes (float glass) 5.5mm th	Square meter	50.00	1,096.40	54,820.00
1	259	Toughen plain / black glass panes 5.5mm	Square meter	10.00	1,200.00	12,000.00
1	260	Renewing glass pan pin head 3-4mm GF	Square meter	200.00	751.32	150,264.00
1	261	Extra lab. charge of glass in First fl	Square meter	200.00	113.14	22,628.00
1	262	Extra lab. charge glass in S/F and abo	Square meter	100.00	226.27	22,627.00
1	263	Sliding arrangement in racks	each	50.00	12.89	644.50
1	264	Al channel section in rack	Meter	50.00	122.19	6,109.50
1	265	Expanded metal gauge	Square meter	10.00	1,102.63	11,026.30
1	266	MS wire gauge	Square meter	2,000.00	631.62	1,263,240.00
1	267	Stainless wire mesh	Square meter	50.00	807.57	40,378.50
1	268	Magnetic catcher	each	10.00	34.25	342.50
1	269	Receiving attending the complains	Shift	600.00	977.37	586,422.00
1	270	P/F wash basin 550x400mm	each	300.00	1,204.23	361,269.00
1	271	P/F Wash basin counter sunk type	each	5.00	2,500.00	12,500.00
1	272	P/F Kitchen sink 600x450x250mm	each	40.00	5,173.08	206,923.20
1	273	P/F half stall urinal 580x380x350	each	10.00	1,993.43	19,934.30
1	274	P/F Squatting plate urinal	each	10.00	1,573.50	15,735.00
1	275	P/F Urinal channel 300x150mm	each	5.00	521.56	2,607.80
1	276	P/F WC pan Orissa 580x440mm	each	700.00	2,231.05	1,561,735.00
1	277	P/F European WC pan	each	50.00	1,996.43	99,821.50
1	278	P/F Draining board 600x450x25	each	100.00	2,580.60	258,060.00
1	279	Stone slab 18mm (Urinal parition)	Square meter	5.00	2,820.64	14,103.20
1	280	Fixing SS sink 610x460mm	each	200.00	659.39	131,878.00
1	281	P/F SS sink 610x460mm	each	5.00	3,184.15	15,920.75
1	282	PTMT 50mm waste for steel	each	10.00	120.00	1,200.00

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
		sink				
1	283	P/F CI bracket (incl cost)	each	350.00	139.07	48,674.50
1	284	P/F CI bracket (excl cost)	each	250.00	86.92	21,730.00
1	285	P/F Glass shelf 600x120x5mm	each	50.00	738.08	36,904.00
1	286	P/F PVC flushing Cistern	each	10.00	876.78	8,767.80
1	287	P/F PVC long flush bend 40mm	each	500.00	101.81	50,905.00
1	288	P/F plastic seat with lid	each	20.00	500.67	10,013.40
1	289	P/F MS bat clamp 100mm pipe	each	5.00	42.22	211.10
1	290	P/F MS bat clamp 75mm pipe	each	5.00	38.00	190.00
1	291	P/F mirror 600x450	each	800.00	1,006.01	804,808.00
1	292	Teak frame for mirror 50/20	Square meter	5.00	1,566.45	7,832.25
1	293	Fix.PVC pipe 75mm dia	Meter	250.00	87.34	21,835.00
1	294	Fix.PVC pipe 110mm dia	Meter	1,000.00	105.97	105,970.00
1	295	Fix.PVC moulded fitting 75mm	each	50.00	25.24	1,262.00
1	296	Fix.PVC moulded fitting 110mm	each	100.00	31.60	3,160.00
1	297	Fix.PVC floor/gully trap 75/110mm	each	120.00	115.61	13,873.20
1	298	P/F CPVC pipe external 15mm OD	Meter	70.00	177.85	12,449.50
1	299	P/F CPVC pipe external 20mm OD	Meter	600.00	222.46	133,476.00
1	300	P/F CPVC pipe external 25mm OD	Meter	300.00	286.41	85,923.00
1	301	P/F CPVC pipe external 32mm OD	Meter	500.00	362.74	181,370.00
1	302	P/F CPVC pipe external 40mm OD	Meter	350.00	470.64	164,724.00
1	303	P/F CPVC pipe external 50mm OD	Meter	10.00	694.14	6,941.40
1	304	P/F CPVC pipe internal 15mm OD	Meter	25.00	211.77	5,294.25
1	305	P/F CPVC pipe internal 20mm OD	Meter	800.00	269.12	215,296.00
1	306	P/F CPVC pipe internal 25mm OD	Meter	280.00	323.72	90,641.60
1	307	P/F CPVC pipe internal 32mm OD	Meter	100.00	421.33	42,133.00

ANNEXURE-II

Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SIno.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
1	308	P/F CPVC pipe internal 40mm OD	Meter	20.00	568.70	11,374.00
1	309	P/F CPVC pipe internal 50mm OD	Meter	10.00	792.20	7,922.00
1	310	Lab. CPVC pipe 15-20mm	Meter	10,000.00	11.35	113,500.00
1	311	Lab. CPVC pipe 25-32mm	Meter	1,300.00	17.45	22,685.00
1	312	Lab. CPVC pipe 40-50mm	Meter	70.00	23.12	1,618.40
1	313	Lab. GI pipe 15-20mm	Meter	200.00	11.35	2,270.00
1	314	Lab. GI pipe 25-32mm	Meter	15.00	17.45	261.75
1	315	Lab. GI pipe 40-50mm	Meter	15.00	23.12	346.80
1	316	Making connection GI pipe	each	10.00	590.47	5,904.70
1	317	Lab.for GM valve upto 25mm	each	40.00	139.07	5,562.80
1	318	Lab.for GM valve above 25mm	each	10.00	199.93	1,999.30
1	319	Lab. union in pipe upto 25mm	each	240.00	165.58	39,739.20
1	320	Lab. union in pipe above 25mm	each	10.00	167.24	1,672.40
1	321	Labour bib and pillar cock	each	300.00	17.39	5,217.00
1	322	Lab. for fixing of float valve	each	80.00	52.16	4,172.80
1	323	P/F GM gate valve 25mm	each	5.00	435.91	2,179.55
1	324	P/F GM gate valve 32mm	each	5.00	509.65	2,548.25
1	325	P/F GM gate valve 40mm	each	5.00	594.81	2,974.05
1	326	P/F GM gate valve 50mm	each	5.00	762.11	3,810.55
1	327	P/F GM ball valve 15mm	each	5.00	296.99	1,484.95
1	328	P/F GM ball valve 20mm	each	5.00	338.82	1,694.10
1	329	P/F CI spun upto 300mm	Kilogram	45.00	130.00	5,850.00
1	330	P/F CI spun over 300mm	Kilogram	45.00	140.00	6,300.00
1	331	CI double flanged SV 100mm	each	5.00	3,853.46	19,267.30
1	332	CI double flanged SV 150mm	each	5.00	5,608.29	28,041.45
1	333	CI double flanged SV 200mm	each	5.00	11,638.95	58,194.75
1	334	CI double flanged SV 250mm	each	5.00	18,725.61	93,628.05
1	335	CI double flanged SV 300mm	each	5.00	23,368.63	116,843.15
1	336	Titan rubber ring 80mm	each	30.00	80.36	2,410.80
1	337	Titan rubber ring 100mm	each	30.00	80.36	2,410.80
1	338	Titan rubber ring 150mm	each	30.00	131.38	3,941.40
1	339	Titan rubber ring 200mm	each	30.00	192.77	5,783.10

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SIno.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
1	340	Titan rubber ring 300mm	each	30.00	307.33	9,219.90
1	341	MS flange for CI pipe 80mm	each	20.00	148.33	2,966.60
1	342	MS flange for CI pipe 100mm	each	20.00	232.34	4,646.80
1	343	MS flange for CI pipe 150mm	each	20.00	287.09	5,741.80
1	344	MS flange for CI pipe 200mm	each	20.00	311.72	6,234.40
1	345	MS flange for CI pipe 250mm	each	20.00	424.73	8,494.60
1	346	MS flange for CI pipe 300mm	each	20.00	430.87	8,617.40
1	347	MS flange for CI pipe 400mm	each	20.00	794.39	15,887.80
1	348	Sup.Gasket flang/valve 300x300mm	Kilogram	30.00	86.92	2,607.60
1	349	Sup.Nut 7 bolt with washer	Kilogram	30.00	208.62	6,258.60
1	350	Sup.Grease	Kilogram	30.00	260.78	7,823.40
1	351	Sup.Gland packing	Kilogram	30.00	260.78	7,823.40
1	352	P/F brass ferrule 20mm	each	10.00	298.41	2,984.10
1	353	P/F body seat ring	each	10.00	208.62	2,086.20
1	354	P/F wedge facing ring	each	10.00	260.78	2,607.80
1	355	P/F wedge nut	each	10.00	86.92	869.20
1	356	P/F hand wheel	each	10.00	173.85	1,738.50
1	357	Receiving job orders- semi skilled	Shift	1,800.00	977.37	1,759,266.00
1	358	Receiving job orders- unskilled	Shift	1,800.00	802.62	1,444,716.00
1	359	Dismt of CI pipe 80mm	Meter	5.00	85.73	428.65
1	360	Dismt of CI pipe 100mm	Meter	5.00	96.09	480.45
1	361	Dismt of CI pipe 150mm	Meter	5.00	121.08	605.40
1	362	Dismt of CI pipe 200mm	Meter	5.00	144.69	723.45
1	363	Dismt of CI pipe 250mm	Meter	5.00	168.95	844.75
1	364	Dismt of CI pipe 300mm	Meter	10.00	210.39	2,103.90
1	365	Dismt of CI pipe 400mm	Meter	5.00	239.10	1,195.50
1	366	Lab.cutting CI pipe 80mm	each	5.00	95.48	477.40
1	367	Lab.cutting CI pipe 100mm	each	5.00	128.03	640.15
1	368	Lab.cutting CI pipe 150mm	each	5.00	240.56	1,202.80
1	369	Lab.cutting CI pipe 200mm	each	5.00	320.85	1,604.25
1	370	Lab.cutting CI pipe 250mm	each	5.00	399.00	1,995.00
1	371	Lab.cutting CI pipe 300mm	each	5.00	479.30	2,396.50
1	372	Lab.cutting CI pipe 400mm	each	5.00	637.42	3,187.10

ANNEXURE-II

Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SIno.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
1	373	Removal sluice valve 80-150mm	each	5.00	449.03	2,245.15
1	374	Removal sluice valve 200-400mm	each	5.00	1,069.66	5,348.30
1	375	Repair sluice valve 80-150mm	each	5.00	449.03	2,245.15
1	376	Repair sluice valve 200-400mm	each	5.00	1,069.66	5,348.30
1	377	Lab.laying of CI pipe 80mm	Meter	5.00	52.32	261.60
1	378	Lab.laying of CI pipe 100mm	Meter	10.00	52.32	523.20
1	379	Lab. laying of CI pipe 150mm	Meter	5.00	85.08	425.40
1	380	Lab. laying of CI pipe 200mm	Meter	5.00	124.46	622.30
1	381	Lab. laying of CI pipe 250mm	Meter	5.00	167.78	838.90
1	382	Lab. laying of CI pipe 300mm	Meter	15.00	216.57	3,248.55
1	383	Lab.lead caulking joint 80mm	each	5.00	328.57	1,642.85
1	384	Lab.lead caulking joint 100mm	each	5.00	328.57	1,642.85
1	385	Lab.lead caulking joint 150mm	each	5.00	493.32	2,466.60
1	386	Lab.lead caulking joint 200mm	each	5.00	655.54	3,277.70
1	387	Lab.lead caulking joint 250mm	each	5.00	819.38	4,096.90
1	388	Lab.lead caulking joint 300mm	each	5.00	985.54	4,927.70
1	389	Lab.lead caulking joint 400mm	each	5.00	1,320.29	6,601.45
1	390	Lab. flange joint 80mm	each	5.00	148.33	741.65
1	391	Lab. flange joint 100mm	each	75.00	232.34	17,425.50
1	392	Lab. flange joint 150mm	each	5.00	287.09	1,435.45
1	393	Lab. flange joint 200mm	each	5.00	311.72	1,558.60
1	394	Lab. flange joint 250mm	each	5.00	425.00	2,125.00
1	395	Lab. flange joint 300mm	each	5.00	430.87	2,154.35
1	396	Lab. flange joint 400mm	each	5.00	794.39	3,971.95
1	397	Lab. fixing ferrule CI pipe	each	20.00	384.36	7,687.20
1	398	Disconnection of water	each	5.00	43.45	217.25
1	399	Greasing of CI valve 150mm	each	300.00	312.93	93,879.00
1	400	Greasing of CI valve 200mm	each	170.00	417.24	70,930.80

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SIno.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
1	401	Greasing of CI valve 250mm	each	10.00	521.56	5,215.60
1	402	Greasing of CI valve 300mm	each	70.00	695.42	48,679.40
1	403	Greasing of CI valve 400mm	each	70.00	869.28	60,849.60
1	404	Replacing rubber gasket 80-150mm	each	10.00	156.47	1,564.70
1	405	Replacing rubber gasket 200-300mm	each	25.00	434.63	10,865.75
1	406	Replacing rubber gasket 400mm	each	5.00	608.48	3,042.40
1	407	Removal of existing ferrule	each	50.00	150.00	7,500.00
1	408	Taking delivery OHT cover 600mm	each	10.00	86.92	869.20
1	409	WP Gelix in OHT 1000ltr cap.	each	10.00	113.00	1,130.00
1	410	WP Gelix in OHT 500ltr cap.	each	10.00	99.10	991.00
1	411	WP Gelix in OHT 270ltr cap.	each	10.00	86.92	869.20
1	412	Sup. Gelix WP proof	Liter	10.00	365.09	3,650.90
1	413	Cleaning of OHT	each	800.00	190.30	152,240.00
1	414	Operating valve of drinking water	each	600.00	977.37	586,422.00
1	415	P/F 100mm dia glazed SW pipe	Meter	10.00	277.55	2,775.50
1	416	RCC NP2 pipe 150mm dia	Meter	50.00	405.23	20,261.50
1	417	RCC NP2 pipe 250mm dia	Meter	60.00	656.28	39,376.80
1	418	RCC NP2 pipe 300mm dia	Meter	200.00	750.88	150,176.00
1	419	RCC NP2 pipe 450mm dia	Meter	10.00	1,207.30	12,073.00
1	420	RCC NP2 pipe 500mm dia	Meter	10.00	1,452.41	14,524.10
1	421	RCC NP2 pipe 600mm dia	Meter	10.00	1,718.71	17,187.10
1	422	Extra for collar 150mm dia	each	20.00	42.58	851.60
1	423	Extra for collar 250mm dia	each	40.00	79.09	3,163.60
1	424	Extra for collar 300mm dia	each	100.00	85.18	8,518.00
1	425	Extra for collar 450mm dia	each	5.00	126.91	634.55
1	426	Extra for collar 500mm dia	each	5.00	147.33	736.65
1	427	Extra for collar 600mm dia	each	5.00	185.58	927.90
1	428	P/F M.S Grating	each	5.00	56.57	282.85
1	429	P/F Gully trap chamber	each	500.00	723.33	361,665.00
1	430	Dismnt. MH upto 750x750mm	each	125.00	1,539.35	192,418.75
1	431	Dismnt. MH upto 900x800mm	each	15.00	1,811.14	27,167.10
1	432	Dismnt. MH upto 1200x900mm	each	5.00	3,191.61	15,958.05
1	433	Dismnt. extra depth MH	Meter	15.00	1,240.00	18,600.00

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
		750x750mm				
1	434	Dismnt. extra depth MH 900x800mm	Meter	5.00	1,458.84	7,294.20
1	435	Dismnt. extra depth MH 1200x900mm	Meter	5.00	1,738.12	8,690.60
1	436	Refixing of IC manhole cover slab	each	120.00	170.15	20,418.00
1	437	Removing & refixing R.C.C. top slab	each	20.00	863.31	17,266.20
1	438	Mak. Conn. Drain 100 to 230mm dia	each	10.00	565.79	5,657.90
1	439	Mak. Conn. Drain 250 to 300mm dia	each	10.00	659.40	6,594.00
1	440	Mak. Conn. Drain 350 to 600mm dia	each	5.00	958.81	4,794.05
1	441	Cleaning of gully/ floor/ WC trap	each	300.00	68.76	20,628.00
1	442	Cleaning of manhole	each	150.00	208.62	31,293.00
1	443	Cleaning of waste pipe line	each	200.00	104.31	20,862.00
1	444	Cleaning of sewerage pipe line	Meter	2,500.00	17.38	43,450.00
1	445	Cleaning of road side catch drain pit	each	20.00	135.76	2,715.20
1	446	L/F serv. AC/SC/CI pipe 50-150	Meter	15.00	52.16	782.40
1	447	L/F serv. AC/CI pipe fitting	each	10.00	43.45	434.50
1	448	L/F serv. RCC pipe 150-200mm	Meter	10.00	52.16	521.60
1	449	L/F serv. RCC pipe 300-450mm	Meter	40.00	104.31	4,172.40
1	450	L/F serv. RCC pipe 500-600mm	Meter	10.00	173.86	1,738.60
1	451	L/F serv. RCC collar 150-200mm	each	10.00	26.08	260.80
1	452	L/F serv. RCC collar 300-450mm	each	10.00	34.76	347.60
1	453	L/F serv. RCC collar 500-600mm	each	10.00	52.16	521.60
1	454	L/F serv. SCI/CI floor trap	each	10.00	86.92	869.20
1	455	Taking MH cover with frame 500mm	each	10.00	217.31	2,173.10
1	456	Taking MH cover with frame 560mm	each	10.00	226.01	2,260.10
1	457	Taking MH cover w/o frame	each	10.00	173.86	1,738.60

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SIno.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
		500mm				
1	458	Taking MH cover w/o frame 560mm	each	10.00	182.55	1,825.50
1	459	Dismantling of 100mm old SW pipe	Meter	20.00	55.64	1,112.80
1	460	Dismantling RCC pipe 150-300mmm	Meter	100.00	371.35	37,135.00
1	461	Dismantling RCC pipe Above 350-600mm	Meter	10.00	478.50	4,785.00
1	462	Dismantling of gully trap	each	500.00	110.78	55,390.00
1	463	Repair of gully trap chamber	each	200.00	157.31	31,462.00
1	464	MS Butt hinges 125x65x2.12	each	100.00	15.25	1,525.00
1	465	MS Butt hinges 100x58x1.90	each	1,300.00	10.60	13,780.00
1	466	MS Butt hinges 75x47x1.70	each	3,300.00	7.40	24,420.00
1	467	MS Butt hinges 50x37x1.50	each	70.00	6.20	434.00
1	468	MS Piano hinges 35mmx1.0mmm	Meter	150.00	51.60	7,740.00
1	469	MS Cup hinges for steel window	each	50.00	36.00	1,800.00
1	470	MS Hooks & eye 200mm	each	10.00	32.24	322.40
1	471	MS Hooks & eye 150mm	each	40.00	23.38	935.20
1	472	MS Hooks & eye 100mm	each	10.00	16.17	161.70
1	473	MS Handle 125mm	each	100.00	23.50	2,350.00
1	474	MS Handle 100mm	each	200.00	17.60	3,520.00
1	475	MS Handle 75mm	each	200.00	14.00	2,800.00
1	476	MS Sliding door bolt 300x16mm	each	40.00	109.10	4,364.00
1	477	MS Sliding door bolt 250x16mm	each	30.00	98.50	2,955.00
1	478	MS Tower bolt 250x10mm	each	10.00	50.40	504.00
1	479	MS Tower bolt 150x10mm	each	1,000.00	34.00	34,000.00
1	480	MS Hasp & staple 115mm	each	200.00	12.70	2,540.00
1	481	MS hasp & staple 90mm	each	200.00	9.90	1,980.00
1	482	MS casement stay 300mm	each	50.00	41.00	2,050.00
1	483	MS casement stay 250mm	each	10.00	35.20	352.00
1	484	MS casement stay 200mm	each	10.00	29.30	293.00
1	485	MS socket for TB 10mm dia	each	20.00	8.69	173.80
1	486	MS bracket for SDB 16mm dia	each	20.00	26.08	521.60
1	487	MS screw 15mm	Box	10.00	33.03	330.30
1	488	MS screw 20mm	Box	100.00	37.50	3,750.00

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SIno.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
1	489	MS screw 25mm	Box	10.00	42.20	422.00
1	490	MS screw 30mm	Box	10.00	57.50	575.00
1	491	MS screw 40mm	Box	70.00	72.70	5,089.00
1	492	MS screw 50mm	Box	10.00	89.15	891.50
1	493	Stainless steel full thread screw 12	Box	10.00	101.82	1,018.20
1	494	Stainless steel full thread screw 20	Box	10.00	146.64	1,466.40
1	495	Stainless steel full thread screw 30	Box	10.00	222.90	2,229.00
1	496	Stainless steel full thread screw 40	Box	10.00	252.20	2,522.00
1	497	Panel pin nail 20- 25mm	Kilogram	10.00	173.86	1,738.60
1	498	Wire nail 25- 50mm	Kilogram	10.00	104.31	1,043.10
1	499	Knob for cupboard nickel plated	each	700.00	26.08	18,256.00
1	500	Sup hydraulic door closure	each	10.00	656.90	6,569.00
1	501	Sup. PVC sleeves for 20-75 screw	each	20.00	92.96	1,859.20
1	502	Sup. Al. butt hinges 125	each	100.00	65.70	6,570.00
1	503	Sup. Al. butt hinges 100	each	100.00	31.70	3,170.00
1	504	Sup. Al. handle 125mm	each	1,000.00	38.00	38,000.00
1	505	Sup. Al. handle 100mm	each	2,000.00	32.30	64,600.00
1	506	Sup. Al. handle 75mm	each	25.00	27.10	677.50
1	507	Sup. Al. SDB 300x16mm	each	80.00	172.40	13,792.00
1	508	Sup. Al. SDB 250x16mm	each	80.00	150.10	12,008.00
1	509	Sup. Al. Tower bolt 250x10mm	each	100.00	56.40	5,640.00
1	510	Sup. Al. Tower bolt 150x10mm	each	1,700.00	35.70	60,690.00
1	511	Sup. Al. Tower bolt 100x10mm	each	2,500.00	26.50	66,250.00
1	512	Aluminium floor door stopper	each	80.00	31.30	2,504.00
1	513	Roller for sliding arrangement	each	140.00	10.60	1,484.00
1	514	40mm cupboard lock 6 lever	each	10.00	87.11	871.10
1	515	MS nickel plated curtain rod	Meter	30.00	84.50	2,535.00
1	516	MS nickel plated MS bracket	each	40.00	8.20	328.00
1	517	Wooden fillet 12x12mm	Meter	1,500.00	9.99	14,985.00
1	518	Teak wood lipping 20x6mm	Meter	150.00	3.96	594.00
1	519	Teak wood lipping 25x6mm	Meter	100.00	44.33	4,433.00
1	520	Favicol S.H	Liter	10.00	308.81	3,088.10

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SIno.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
1	521	Seasoned hard wood plant 50x30mm	Meter	10.00	78.24	782.40
1	522	Seasoned hard wood plant 50x35mm	Meter	500.00	86.92	43,460.00
1	523	Seasoned hard wood plant 75x30mm	Meter	150.00	113.00	16,950.00
1	524	Seasoned hard wood plant 75x35mm	Meter	2,500.00	121.47	303,675.00
1	525	Seasoned hard wood plant 100x35mm	Meter	1,800.00	156.47	281,646.00
1	526	Seasoned hard wood plant 150x35mm	Meter	200.00	226.01	45,202.00
1	527	Seasoned hard wood plant 200x35mm	Meter	400.00	304.24	121,696.00
1	528	S/A Water proofing liquid	Liter	100.00	170.00	17,000.00
1	529	Dr. Fixit new coat	Liter	20.00	495.48	9,909.60
1	530	Dr. Fixit crack X paste	Kilogram	10.00	521.56	5,215.60
1	531	Gelix XP water proof	Liter	10.00	372.05	3,720.50
1	532	Brushbond of Fosroc	Liter	10.00	56.57	565.70
1	533	Sika multy seal (Roll)	Role	10.00	521.56	5,215.60
1	534	Recron 3S fibre	each	10.00	78.24	782.40
1	535	Supply of white cement	Kilogram	30.00	35.00	1,050.00
1	536	Sup.PTMT waste coupling 31/32mm	each	100.00	39.90	3,990.00
1	537	Sup.PTMT waste coupling 38/40mm	each	50.00	56.30	2,815.00
1	538	Sup.PTMT waste coupling 31mm urinal	each	10.00	113.00	1,130.00
1	539	Sup.PTMT grating 100mm doom WO hole	each	10.00	23.50	235.00
1	540	Sup.PTMT grating 125mm doom WO hole	each	10.00	35.20	352.00
1	541	Sup.PTMT grating 125mm doom with hole	each	10.00	35.20	352.00
1	542	Sup.PTMT 15mm bib cock-standard	each	10.00	83.30	833.00
1	543	Sup.PTMT 15mm bib cock-nozzle	each	10.00	181.20	1,812.00
1	544	Sup.PTMT 15mm bib cock-long body	each	10.00	136.00	1,360.00
1	545	Sup.PTMT extension nipple 15mmm	each	10.00	35.20	352.00
1	546	Sup.PTMT 15mm pillar cock- fancy	each	10.00	161.90	1,619.00

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SIno.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
1	547	Sup.PTMT 15mm push cock	each	10.00	72.70	727.00
1	548	Sup.PTMT urinal cock	each	10.00	124.90	1,249.00
1	549	Sup.PTMT urinal spreader	each	50.00	89.15	4,457.50
1	550	Sup.PTMT 15mm stop cock	each	10.00	83.30	833.00
1	551	Sup.PTMT 20mm stop cock	each	10.00	113.80	1,138.00
1	552	Sup.PTMT 15mm angular stop cock	each	50.00	117.30	5,865.00
1	553	Sup.PTMT 15mm concealed stop cock	each	10.00	156.60	1,566.00
1	554	Sup.PTMT 20mm concealed stop cock	each	10.00	295.54	2,955.40
1	555	Sup.PTMT 15mm float valve	each	10.00	117.30	1,173.00
1	556	Sup.PTMT 20mm float valve	each	30.00	158.40	4,752.00
1	557	Sup.PTMT 25mm float valve	each	10.00	340.20	3,402.00
1	558	Sup.PTMT 40mm float valve	each	10.00	563.10	5,631.00
1	559	Sup.PTMT 15mm float valve WO ball	each	10.00	134.36	1,343.60
1	560	Sup.PTMT 20mm float valve WO ball	each	40.00	214.51	8,580.40
1	561	Sup.PTMT 25mm float valve WO ball	each	10.00	337.20	3,372.00
1	562	Sup.PTMT float ball cock	each	10.00	41.73	417.30
1	563	Sup.PTMT tank nipple 15mm	each	10.00	35.20	352.00
1	564	Sup.PTMT tank nipple 20mm	each	10.00	63.30	633.00
1	565	Sup.PTMT tank nipple 25mm	each	60.00	91.50	5,490.00
1	566	Sup.PTMT shower 95x65mm	each	10.00	82.10	821.00
1	567	Sup.PTMT shower arm 225mm	each	10.00	105.11	1,051.10
1	568	Sup.PTMT health faucet	each	10.00	470.43	4,704.30
1	569	Sup.PTMT the shelf	each	20.00	234.60	4,692.00
1	570	Sup.PTMT towel ring	each	10.00	152.50	1,525.00
1	571	Sup.PTMT soap dish/ holder	each	10.00	98.50	985.00
1	572	Sup.PTMT connection pipe 450mm	each	60.00	66.90	4,014.00
1	573	Sup.PTMT connection pipe 600mm	each	10.00	78.84	788.40
1	574	Sup.PTMT waste pipe 32mm 800mm	each	100.00	41.00	4,100.00
1	575	Sup.PTMT waste pipe	each	40.00	41.00	1,640.00

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
		40mm 800mm				
1	576	Sup.PTMT waste pipe 32mm 1150mm	each	10.00	93.88	938.80
1	577	Sup.PTMT waste pipe 40mm 1150mm	each	20.00	104.31	2,086.20
1	578	Sup.CP pillar cock 15mm	each	10.00	792.77	7,927.70
1	579	Sup.CP pillar cock long nose 15mm	each	10.00	945.77	9,457.70
1	580	Sup.CP pillar/bib cock elbow	each	10.00	1,328.24	13,282.40
1	581	Sup.CP bib cock	each	10.00	340.20	3,402.00
1	582	Sup.CP bib cock long body	each	10.00	451.65	4,516.50
1	583	Sup.CP stop cock 15mm	each	10.00	439.90	4,399.00
1	584	Sup.CP stop cock 20mm	each	10.00	799.73	7,997.30
1	585	Sup.CP concealed stop cock 15mm	each	10.00	504.40	5,044.00
1	586	Sup.CP concealed stop cock 20mm	each	20.00	1,053.55	21,071.00
1	587	Sup.CP angle stop cock	each	20.00	620.66	12,413.20
1	588	Sup.CP shower connection pipe	each	10.00	1,258.71	12,587.10
1	589	Sup.CP Telephonic shower	each	5.00	4,089.05	20,445.25
1	590	Sup.CP concealed flush cock 25mm	each	5.00	1,705.51	8,527.55
1	591	Sup.CP tumbler holder	each	5.00	688.46	3,442.30
1	592	Sup.CP coat hook	each	5.00	373.79	1,868.95
1	593	Sup. CP towel rail	each	5.00	678.81	3,394.05
1	594	Sup. CP spreader	each	5.00	394.22	1,971.10
1	595	Sup.CP health faucet	each	10.00	1,270.87	12,708.70
1	596	Sup.CP grating	each	5.00	90.51	452.55
1	597	Sup.CP geyser connection	each	10.00	197.10	1,971.00
1	598	Sup. glass pan 600x120mm	each	10.00	86.92	869.20
1	599	Sup. Rubber washer for porcelain cistern	each	20.00	72.27	1,445.40
1	600	Sup. PVC cistern handle/knob	each	170.00	91.98	15,636.60
1	601	Sup. PVC Cistern syphon	each	5.00	236.53	1,182.65
1	602	Sup. PVC Cistern ball cock	each	10.00	119.95	1,199.50
1	603	Sup. Cistern plunger washer	each	820.00	45.99	37,711.80
1	604	Sup. EWC cover hinges	each	10.00	59.13	591.30
1	605	Sup. CP pillar cock spindle heavy	each	10.00	118.26	1,182.60
1	606	Sup. CP pillar cock spindle	each	5.00	111.68	558.40

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SIno.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
		medium				
1	607	Sup.rubber washer for cock	Box	40.00	131.41	5,256.40
1	608	Sup.GI pipe MS clamp	each	300.00	18.27	5,481.00
1	609	Sup.Teflon tape	Role	40.00	26.28	1,051.20
1	610	Sup.M-seal	each	200.00	26.28	5,256.00
1	611	Sup.White paint (holdlite)	each	10.00	59.13	591.30
1	612	Sup.Platic bib cock	each	10.00	91.98	919.80
1	613	Sup.CP extension piece	each	20.00	91.98	1,839.60
1	614	Sup.CP knob/cap for stop cock	each	5.00	229.96	1,149.80
1	615	Sup.CP knob for pillar cock	each	5.00	229.96	1,149.80
1	616	Sup.CP flange for stop/bib cock	each	20.00	26.28	525.60
1	617	Sup. rubber lubricant UPVC	Liter	5.00	223.39	1,116.95
1	618	Sup. solvent cement UPVC	Liter	5.00	1,193.06	5,965.30
1	619	Sup. Solvent cement for CPVC	Liter	20.00	1,431.67	28,633.40
1	620	Sup. Rubber Seal for WC 110mm	each	10.00	26.28	262.80
1	621	Sup. Rubber Seal ring UPVC pipe 75mm	each	10.00	9.40	94.00
1	622	Sup. Rubber Seal ring UPVC pipe 110mm	each	10.00	12.90	129.00
1	623	Sup.UPVC pipe type-A 50mm	Meter	10.00	91.98	919.80
1	624	Sup.UPVC pipe type-A 75mm	Meter	400.00	120.89	48,356.00
1	625	Sup.UPVC pipe type-A 110mm	Meter	1,000.00	247.05	247,050.00
1	626	Sup.PVC pipe clip 75mm	each	50.00	17.60	880.00
1	627	Sup.PVC pipe clip 110mm	each	300.00	16.40	4,920.00
1	628	Sup.Coupler 75mm dia	each	5.00	21.10	105.50
1	629	Sup.Coupler 110mm dia	each	10.00	37.50	375.00
1	630	Sup.Reducer 110x75mm	each	80.00	89.35	7,148.00
1	631	Sup.Single tee 75mm dia	each	10.00	54.00	540.00
1	632	Sup.Single tee 110mm dia	each	10.00	95.00	950.00
1	633	Sup.Single tee with door 75mm dia	each	30.00	69.20	2,076.00
1	634	Sup.Single tee with door 110mm dia	each	30.00	107.90	3,237.00
1	635	Sup.Reducing tee 110x75mm	each	25.00	136.66	3,416.50
1	636	Sup.Cross tee 75mm dia	each	10.00	155.06	1,550.60

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SIno.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
1	637	Sup.Cross tee 110mm dia	each	10.00	210.25	2,102.50
1	638	Sup.Cross tee with door 75mm dia	each	10.00	224.70	2,247.00
1	639	Sup.Cross tee with door 110mm dia	each	10.00	275.38	2,753.80
1	640	Sup.Bend 87.5 deg 75mm	each	100.00	41.06	4,106.00
1	641	Sup.Bend 87.5 deg 110mm	each	150.00	69.21	10,381.50
1	642	Sup.Door bend (TS/RS./LS) 75mm dia	each	30.00	97.24	2,917.20
1	643	Sup.Door bend (TS/RS./LS) 110mm dia	each	40.00	164.25	6,570.00
1	644	Sup.Vent cowl 75mm dia	each	5.00	23.65	118.25
1	645	Sup.Vent cowl 110mm dia	each	5.00	34.05	170.25
1	646	Sup.Shoe 75mm	each	10.00	31.67	316.70
1	647	Sup.Shoe 110mm	each	50.00	55.13	2,756.50
1	648	Sup.WC connector 125x110mm dia,	each	10.00	197.10	1,971.00
1	649	Sup.P- trap 125x110mm W/O WC ring	each	10.00	299.60	2,996.00
1	650	Sup.P- trap 125x110mm with WC ring	each	150.00	321.94	48,291.00
1	651	Sup.Q- trap 125x110mm with WC ring	each	5.00	328.51	1,642.55
1	652	Sup.S- trap 125x110mm with WC ring	each	10.00	328.51	3,285.10
1	653	Sup.Nahani trap without jali 75mm	each	10.00	105.12	1,051.20
1	654	Sup.Nahani trap without jali 110mm	each	20.00	105.12	2,102.40
1	655	Sup.Nahani trap with jali 75mm	each	10.00	113.00	1,130.00
1	656	Sup.Nahani trap with jali 110mm	each	15.00	113.00	1,695.00
1	657	Sup.PVC gully trap	each	15.00	226.27	3,394.05
1	658	Sup. CPVC pipe 15mm	Meter	100.00	62.65	6,265.00
1	659	Sup. CPVC pipe 20mm	Meter	12,000.00	100.39	1,204,680.00
1	660	Sup. CPVC pipe 25mm	Meter	1,000.00	146.59	146,590.00
1	661	Sup. CPVC pipe 32mm	Meter	400.00	211.17	84,468.00
1	662	Sup. CPVC pipe 40mm	Meter	50.00	295.12	14,756.00
1	663	Sup. CPVC coupler 15mm	each	10.00	12.22	122.20
1	664	Sup. CPVC coupler 20mm	each	2,000.00	17.74	35,480.00
1	665	Sup. CPVC coupler 25mm	each	250.00	30.47	7,617.50
1	666	Sup. CPVC coupler 32mm	each	30.00	52.95	1,588.50

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
1	667	Sup. CPVC coupler 40mm	each	10.00	97.24	972.40
1	668	Sup. CPVC elbow 15mm	each	30.00	16.43	492.90
1	669	Sup. CPVC elbow 20mm	each	4,500.00	21.41	96,345.00
1	670	Sup. CPVC elbow 25mm	each	300.00	45.99	13,797.00
1	671	Sup. CPVC elbow 32mm	each	200.00	86.72	17,344.00
1	672	Sup. CPVC elbow 40mm	each	80.00	164.25	13,140.00
1	673	Sup. CPVC equal tee 15mm	each	10.00	22.33	223.30
1	674	Sup. CPVC equal tee 20mm	each	800.00	36.79	29,432.00
1	675	Sup. CPVC equal tee 25mm	each	100.00	59.13	5,913.00
1	676	Sup. CPVC equal tee 32mm	each	50.00	111.68	5,584.00
1	677	Sup. CPVC equal tee 40mm	each	20.00	201.04	4,020.80
1	678	Sup. CPVC union 15mm	each	10.00	61.76	617.60
1	679	Sup. CPVC union 20mm	each	150.00	113.00	16,950.00
1	680	Sup. CPVC union 25mm	each	40.00	159.00	6,360.00
1	681	Sup. CPVC union 32mm	each	10.00	189.22	1,892.20
1	682	Sup. CPVC union 40mm	each	10.00	311.43	3,114.30
1	683	Sup. CPVC end cap 15mm	each	10.00	9.19	91.90
1	684	Sup. CPVC end cap 20mm	each	40.00	15.76	630.40
1	685	Sup. CPVC end cap 25mm	each	5.00	24.96	124.80
1	686	Sup. CPVC end cap 32mm	each	5.00	45.99	229.95
1	687	Sup. CPVC end cap 40mm	each	5.00	68.32	341.60
1	688	Sup. CPVC reducing bush 20x15mm	each	50.00	11.83	591.50
1	689	Sup. CPVC reducing bush 25x15mm	each	10.00	27.59	275.90
1	690	Sup. CPVC reducing bush 25x20mm	each	200.00	19.71	3,942.00
1	691	Sup. CPVC reducing bush 32x25mm	each	10.00	31.53	315.30
1	692	Sup. CPVC reducing bush 40x25mm	each	10.00	59.13	591.30
1	693	Sup. CPVC reducing bush 40x32mm	each	5.00	68.32	341.60
1	694	Sup. CPVC reducer tee 20x15mm	each	150.00	52.57	7,885.50
1	695	Sup. CPVC reducer tee 25x15mm	each	5.00	82.78	413.90
1	696	Sup. CPVC reducer tee 25x20mm	each	40.00	92.96	3,718.40
1	697	Sup. CPVC reducer tee 32x25mm	each	10.00	144.55	1,445.50
1	698	Sup. CPVC FTA metal 15mm	each	70.00	162.93	11,405.10

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SIno.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
1	699	Sup.CPVC FTA metal 20mm	each	400.00	210.25	84,100.00
1	700	Sup.CPVC FTA metal 25mm	each	250.00	325.89	81,472.50
1	701	Sup.CPVC FTA metal 32mm	each	20.00	691.18	13,823.60
1	702	Sup.CPVC FTA metal 40mm	each	10.00	775.29	7,752.90
1	703	Sup.CPVC MTA metal 15mm	each	5.00	166.88	834.40
1	704	Sup.CPVC MTA metal 20mm	each	50.00	208.93	10,446.50
1	705	Sup.CPVC MTA metal 25mm	each	10.00	329.82	3,298.20
1	706	Sup.CPVC MTA metal 32mm	each	10.00	680.68	6,806.80
1	707	Sup.CPVC MTA metal 40mm	each	10.00	846.25	8,462.50
1	708	Sup.CPVC FTA plastic-15mm	each	10.00	21.02	210.20
1	709	Sup.CPVC FTA plastic-20mm	each	1,500.00	34.17	51,255.00
1	710	Sup.CPVC FTA plastic-25mm	each	200.00	51.24	10,248.00
1	711	Sup.CPVC FTA plastic-32mm	each	10.00	118.26	1,182.60
1	712	Sup.CPVC FTA plastic-40mm	each	5.00	156.36	781.80
1	713	Sup.CPVC MTA plastic-15mm	each	5.00	15.77	78.85
1	714	Sup.CPVC MTA plastic-20mm	each	2,000.00	26.28	52,560.00
1	715	Sup.CPVC MTA plastic-25mm	each	300.00	39.41	11,823.00
1	716	Sup.CPVC MTA plastic-32mm	each	10.00	60.44	604.40
1	717	Sup.CPVC MTA plastic-40mm	each	10.00	89.36	893.60
1	718	Sup. CPVC FT tee metal 15mm	each	250.00	99.87	24,967.50
1	719	Sup. CPVC FT elbow metal 15mm	each	400.00	84.09	33,636.00
1	720	Sup.CPVC pipe clip (plastic)-15-20mm	each	100.00	6.56	656.00
1	721	Sup. CPVC pipe clamp	each	1,400.00	15.77	22,078.00

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
		15-20mm				
1	722	Sup. CPVC pipe clamp 25-32mm	each	70.00	19.71	1,379.70
1	723	Sup. CPVC ball valve 15mm	each	5.00	106.35	531.75
1	724	Sup. CPVC ball valve 20mm	each	60.00	182.64	10,958.40
1	725	Sup. CPVC ball valve 25mm	each	20.00	339.02	6,780.40
1	726	Sup. CPVC ball valve 32mm	each	10.00	607.09	6,070.90
1	727	Sup. CPVC ball valve 40mm	each	10.00	965.83	9,658.30
1	728	Sup. CPVC ball valve 50mm	each	10.00	1,074.78	10,747.80
1	729	Sup.GI pipe 15mm	Meter	50.00	106.75	5,337.50
1	730	Sup.GI pipe 20mm	Meter	20.00	140.77	2,815.40
1	731	Sup.GI pipe 25mm	Meter	10.00	200.60	2,006.00
1	732	Sup.GI pipe 32mm	Meter	5.00	252.21	1,261.05
1	733	Sup.GI pipe 40mm	Meter	10.00	293.27	2,932.70
1	734	Sup.GI elbow 15mm	each	200.00	19.05	3,810.00
1	735	Sup.GI elbow 20mm	each	50.00	31.53	1,576.50
1	736	Sup.GI elbow 25mm	each	40.00	45.99	1,839.60
1	737	Sup.GI elbow 32mm	each	10.00	74.90	749.00
1	738	Sup.GI elbow 40mm	each	10.00	98.55	985.50
1	739	Sup.GI elbow 50mm	each	10.00	151.12	1,511.20
1	740	Sup.GI plug 15mm	each	100.00	7.88	788.00
1	741	Sup.GI plug 20mm	each	50.00	13.13	656.50
1	742	Sup.GI plug 25mm	each	10.00	15.76	157.60
1	743	Sup.GI plug 32mm	each	10.00	26.28	262.80
1	744	Sup.GI plug 40mm	each	5.00	32.84	164.20
1	745	Sup.GI plug 50mm	each	5.00	52.57	262.85
1	746	Sup.GI socket 15mm	each	400.00	17.40	6,960.00
1	747	Sup.GI socket 20mm	each	200.00	28.25	5,650.00
1	748	Sup.GI socket 25mm	each	100.00	34.81	3,481.00
1	749	Sup.GI socket 32mm	each	5.00	51.24	256.20
1	750	Sup.GI socket 40mm	each	5.00	64.38	321.90
1	751	Sup.GI socket 50mm	each	5.00	111.68	558.40
1	752	Sup.GI Tee 15mm	each	100.00	31.53	3,153.00
1	753	Sup.GI Tee 20mm	each	50.00	52.56	2,628.00
1	754	Sup.GI Tee 25mm	each	20.00	58.65	1,173.00
1	755	Sup.GI Tee 32mm	each	5.00	97.24	486.20
1	756	Sup.GI Tee 40mm	each	5.00	124.83	624.15
1	757	Sup.GI Tee 50mm	each	5.00	191.10	955.50
1	758	Sup.GI SP 15mm	each	1,000.00	26.28	26,280.00
1	759	Sup.GI SP 20mm	each	200.00	36.79	7,358.00
1	760	Sup.GI SP 25mm	each	100.00	45.99	4,599.00

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SIno.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
1	761	Sup.GI SP 32mm	each	15.00	52.57	788.55
1	762	Sup.GI SP 40mm	each	10.00	63.08	630.80
1	763	Sup.GI SP 50mm	each	50.00	91.98	4,599.00
1	764	Sup.GI union 15mm	each	30.00	35.19	1,055.70
1	765	Sup.GI union 20mm	each	40.00	57.48	2,299.20
1	766	Sup.GI union 25mm	each	20.00	126.69	2,533.80
1	767	Sup.GI union 32mm	each	10.00	165.40	1,654.00
1	768	Sup.GI union 40mm	each	10.00	225.23	2,252.30
1	769	Sup.GI union 50mm	each	10.00	292.10	2,921.00
1	770	Sup.GI RS 20-15mm	each	200.00	31.53	6,306.00
1	771	Sup.GI RS 25mm	each	100.00	42.63	4,263.00
1	772	Sup.GI RS 32mm	each	15.00	57.70	865.50
1	773	Sup.GI RS 40mm	each	10.00	70.96	709.60
1	774	Sup.GI RS 50mm	each	10.00	122.20	1,222.00
1	775	Sup.GM valve 15mm	each	10.00	396.38	3,963.80
1	776	Sup.GM valve 20mm	each	15.00	605.02	9,075.30
1	777	Sup.GM valve 25mm	each	10.00	730.18	7,301.80
1	778	Sup.GM valve 32mm	each	10.00	1,220.46	12,204.60
1	779	Sup.GM valve 40mm	each	5.00	1,582.07	7,910.35
1	780	Sup.GM valve 50mm	each	5.00	2,190.56	10,952.80
1	781	Sup.GM ball valve 15mm	each	10.00	394.22	3,942.20
1	782	Sup.GM ball valve 20mm	each	10.00	558.47	5,584.70
1	783	Sup.GM ball valve 25mm	each	5.00	788.44	3,942.20
1	784	Sup.Pillar cock 15mm (Jaquar)	each	5.00	985.54	4,927.70
1	785	Sup.Pillar cock 15mm long (Jaquar)	each	5.00	1,314.06	6,570.30
1	786	Sup.Bib cock 15mm (Jaquar)	each	5.00	985.54	4,927.70
1	787	Sup.Angular stop cock 15mm (Jaquar)	each	5.00	985.54	4,927.70
1	788	Sup.Concealed stop cock (Jaquar)	each	5.00	1,379.76	6,898.80
1	789	Sup.Long body bib cock (Jaquar)	each	5.00	1,314.06	6,570.30
1	790	Sup.Central hole basin mixer (Jaquar)	each	5.00	3,285.16	16,425.80
1	791	Sup.Wall mixer tele. shower (Jaqua)	each	5.00	3,942.19	19,710.95
1	792	Sup.Wall mixer WM tel.shower(Jaquar)	each	5.00	4,336.41	21,682.05
1	793	Sup.Hand shower (Jaquar)	each	5.00	2,693.83	13,469.15

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SIno.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
1	794	Sup.Flush cock (Jaquar)	each	5.00	2,431.01	12,155.05
1	795	Sup.CP towel rail 18" (Jaquar)	each	5.00	1,445.47	7,227.35
1	796	Sup.Towel ring (Jaquar)	each	5.00	1,084.09	5,420.45
1	797	Sup.Soap dish (Jaquar)	each	5.00	689.88	3,449.40
1	798	Sup.Toilet paper holder (Jaquar)	each	5.00	755.59	3,777.95
1	799	Sup.Double coat hook (Jaquar)	each	5.00	591.33	2,956.65
1	800	Sup.Glass shelf (Jaquar)	each	5.00	1,445.47	7,227.35
1	801	Sup.Corner glass shelf (Jaquar)	each	5.00	1,445.47	7,227.35
1	802	Sup.Towel rack 18" (Jaquar)	each	5.00	3,129.09	15,645.45
1	803	Sup. Wall mixer spindle	each	5.00	657.04	3,285.20
1	804	Sub. Hand drier jaguar	each	5.00	10,118.29	50,591.45
1	805	Water storage tank 1000ltr	Liter	50,000.00	11.31	565,500.00
1	806	RCC Water tank 1200ltr	each	2.00	5,386.13	10,772.26
1	807	Carry out the work -Semi-skilled labour	each	600.00	977.37	586,422.00
1	808	Carry out the work -Semi-skilled labour	each	600.00	977.37	586,422.00
1	809	Carry out the work -skilled labour	each	600.00	1,149.27	689,562.00
1	810	Supply of un-skilled labour	each	600.00	802.62	481,572.00
1	811	Cleaning of mosaic floor	Square meter	50.00	69.54	3,477.00
1	812	Cleaning of wooden floor	Square meter	50.00	69.54	3,477.00
1	813	Cleaning of glass door window	Square meter	50.00	17.38	869.00
1	814	Welding of MS but hinges	each	900.00	43.45	39,105.00
1	815	Welding of piano hinges	Meter	10.00	434.63	4,346.30
1	816	Welding by elect. MS/GI pipe	Centimeter	2,000.00	2.30	4,600.00
1	817	Cutting by gas MS/GI/CI pipe	Centimeter	100.00	2.86	286.00
1	818	Minor repair of trap	each	10.00	51.43	514.30
1	819	Refixing floor trap	each	850.00	162.08	137,768.00
1	820	Flooring for WC	Square meter	500.00	744.93	372,465.00
1	821	Repair RW pipe mouth	each	1,000.00	122.09	122,090.00
1	822	Rain water shoe	each	100.00	117.77	11,777.00
1	823	Cleaning & washing of	Square	50.00	4.34	217.00

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SIno.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
		mosquito proof wir	meter			
1	824	Repair of pot hole	Kilogram	20,000.00	5.66	113,200.00
1	825	Premix carpet	Cubic meter	50.00	3,637.29	181,864.50
1	826	Concertina coil fencing	Meter	100.00	354.11	35,411.00
1	827	Cleaning of vacant qtr -A & TA type	each	300.00	282.84	84,852.00
1	828	Cleaning of vacant qtr -B,TB & TBT type	each	500.00	339.41	169,705.00
1	829	Cleaning of vacant qtr -C & TC type	each	100.00	452.54	45,254.00
1	830	Cleaning of vacant qtr -D & TD type	each	50.00	565.68	28,284.00
1	831	Cleaning of vacant qtr -non-res building	each	3,000.00	6.79	20,370.00
1	832	Cleaning of vacant qtr -hostel	each	200.00	169.70	33,940.00
1	833	Attending for water supply main CI pipe	each	20.00	1,234.20	24,684.00
1	834	2.5mm thick of road marking paint	Square meter	2,000.00	532.48	1,064,960.00
1	835	Supply of WPC flush door 30mm thick	Square meter	50.00	2,398.61	119,930.50
1	836	Supply of WPC flush door 35mm thick	Square meter	50.00	2,798.38	139,919.00
1	837	Supply of WPC door frame 90x45mm	Meter	150.00	696.67	104,500.50
1	838	Supply of WPC door frame 125x65mm	Meter	150.00	967.60	145,140.00
1	839	P/F UPVC casement window small series	Square meter	10.00	7,643.02	76,430.20
1	840	P/F UPVC casement window big series	Square meter	5.00	8,474.55	42,372.75
1	841	P/F UPVC window/ventilator	Square meter	10.00	5,680.62	56,806.20
1	842	P/F UPVC casement cum fixed door	Square meter	5.00	8,006.53	40,032.65
1	843	P/F UPVC slding window 2 track 2 panels	Square meter	10.00	5,883.04	58,830.40
1	844	P/F UPVC slding window 3 track 3 panels	Square meter	5.00	7,851.10	39,255.50
1	845	P/F UPVC slding door two track	Square meter	5.00	5,265.21	26,326.05
1	846	P/F Armstrong false ceiling	Square meter	200.00	1,623.00	324,600.00

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Service Description	UOM	Quantity	Rate in Rs.	Amount in Rs.
[1]	[2]	[3]	[4]	[5]	[6]	[7 = 5 x 6]
1	847	P/F GRG false ceiling	Square meter	200.00	1,379.10	275,820.00
1	848	Second class teak wood frame	Square meter	10.00	114,145.83	1,141,458.30
1	849	Second class teak wood 35mm shutter	Square meter	10.00	3,168.20	31,682.00
1	850	Second class teak wood 30mm shutter	Square meter	10.00	2,867.03	28,670.30
1	851	Panelled 2nd class teak wood 12mm shutte	Square meter	10.00	2,579.81	25,798.10
1	852	Glass mosaaic tiles	Square meter	10.00	2,849.94	28,499.40
1	853	Providing of new 1.0HP pump	each	2.00	17,175.95	34,351.90
1	854	Providing of new 1.5HP pump	each	2.00	19,387.23	38,774.46
1	855	Control panel board 1.0HP	each	2.00	3,291.20	6,582.40
1	856	Control panel board 1.5HP	each	2.00	3,908.30	7,816.60
1	857	Fixing of pump upto 2.0HP	each	10.00	1,542.75	15,427.50
1	858	Repair & refixing of pump upto 2.0HP	each	10.00	4,628.25	46,282.50
1		SubTotal for Item:00001				96,120,494.71
TOTAL in Rs.						96,120,494.71

i) The total estimated value of tender excluding GST @ 18% is Rs.9,61,20,494.71 (Rupees Nine Crore Sixty One Lakh Twenty Thousand Four Hundred Ninety Four and Seventy One Paise only).

ii) The estimated rates & amounts reflected/indicated in Annexure-II are exclusive of GST @ 18%.

GST shall be payable extra as applicable.

iii) Bidders have to quote their price in price bid format (Annexure-B4 i.e. MS-EXCEL format as available in the CPP Portal) in the form of overall "EXCESS" or "DISCOUNT" in percentage over total estimated amount for this work. The overall excess/discount percentage quoted by the bidder in the online price bid format including the discounted amount during Reverse-Auction shall be applicable over the Rates & Amounts for each & every items of BOQ & SOR as available at Annexure-II of NIT.

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
1		Service
1		
1	1	Earth work in excavation
Earth work in excavation in all kind of soil including soft rock by mechanical means (Hydraulic excavator) / manual means in foundations, drain, trenches, pavements, manholes, wall footings, pipe lines, cable trenches, pits and over area cuttings etc. for all kinds of works including dressing of sides and ramming of bottoms lift up to 1.5m including getting out the excavated soil and disposal or stacking of surplus excavated materials within a lead up to 50 mtrs, disposed earth to be leveled and neatly dressed as directed with all cost complete as per drawing, specification and direction of Manager-in-charge.		
1	2	Surface dressing
Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15cm deep and disposal of rubbish lead up to 50m and lift up to 1.5m in all kinds of soil.		
1	3	Filling earth Lead up to 50M
Filling of available excavated earth (excluding rock) in trenches, plinth side of foundation etc. in layers not exceeding 200mm in depth compacting each deposited layers by ramming and watering and lift up to 1.5M as directed by MIC.- Lead up to 50M		
1	4	Filling earth lead up to 1.0KM
Filling of available excavated earth (excluding rock) in trenches, plinth side of foundation etc. in layers not exceeding 200mm in depth compacting each deposited layers by ramming and watering and lift up to 1.5M as directed by MIC.- Within lead up to 1.0KM		
1	5	Sand filling
Supplying and filling of sand in layers of loose thickness not exceeding 200mm including watering, ramming, compacting, leveling, dressing etc. complete as per drawings, specifications and direction of Manager-in-Charge.		
1	6	Crusher dust
Supplying and filling of crusher dust in layers of loose thickness not exceeding 200mm including watering, ramming, compacting, leveling, dressing etc. complete as per drawings, specifications and direction of Manager-in-charge.		
1	7	Transporting and disposing
Transporting and disposing the surplus earth, debris and soft rock including shrubs and vegetations from construction area beyond the initial lead of 50m including re-excavating the deposited soil excavated earlier, transportation, loading, unloading, laying at all depths and heights, stacking, levelling and dressing both the area (viz. from where the earth is transported and where it is deposited) to required levels and slopes complete with all lifts as directed by MIC. For carting on the basis of truck/ tractor measurement and lead up to 3.0 km.		
1	8	Transp-full truck (Trip)
Collection, segregation and transportation of all types of material such as brick, boulder, debris, sand, stone aggregate, refractory material, steel, scraps, MS pipe, furnitures etc. by mechanical means including the cost of loading and unloading, tools and tackles etc. all complete within a lead of 5.0KM as per direction of MIC.- Full truck loaded, volume up to 6.00Cum		
1	9	Transp-full tractor (Trip)
Collection, segregation and transportation of all types of material such as brick, boulder, debris, sand, stone aggregate, refractory material, steel, scraps, MS pipe, furnitures etc. by mechanical means including the cost of loading and unloading, tools and tackles etc. all complete within a lead of 5.0KM as per direction of MIC.- Full tractor loaded, volume up to 3.00Cum		
1	10	Clearing of grass,
Clearing of debris, grass, vegetation, plants growth etc over hard surface like chajja, roof, over head tank bottom, rain water mouth or from ground		

ANNEXURE-II

Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
		etc. and removal of rubbish out side the periphery of the area cleared up to a lead of 3.0KM as per the direction of Manager-in-charge.
1	11	Felling tree upto 30cm
		Felling trees of the girth (measured at a height of 1.0m above ground level) including cutting of trunks and branches removing the roots at all heights and levels on ground or on building upto 15 mtr above ground level and stacking of serviceable material and disposal of unserviceable material within a lead of 3.0 KM. Repairing plaster/ brick work etc. shall be paid in respective items.- upto 30cm girth.
1	12	Felling tree upto 60cm
		Felling trees of the girth (measured at a height of 1.0m above ground level) including cutting of trunks and branches removing the roots at all heights and levels upto 15 mtr above ground level and stacking of serviceable material and disposal of unserviceable material within a lead of 3.0 KM. Repairing of plaster/ brick work etc. shall be paid in respective items.-Beyond 30cm girth up to and including 60cm girth
1	13	Chemical herbicide for killing of plant
		Supply of chemical herbicide for killing of plant
1	14	Injecting the chemical to trees
		Injecting the chemical to trees at any height and level above the ground.
1	15	Hire charges - JCB
		Hire charges for supply of construction equipment for miscellaneous work including cost of operator, fuel etc all complete.- J.C.B Excavator (Payment shall be made for effective working hour basis and no payment shall be made for marching time of machine.)
1	16	Hire charges - Hydra
		Hire charges for supply of construction equipment for miscellaneous work including cost of operator, fuel etc all complete. Hydra (Payment shall be made for effective working hour basis and no payment shall be made for marching time of machine.)
1	17	Hire charges - Dozer
		Hire charges for supply of construction equipment for miscellaneous work including cost of operator, fuel etc all complete. Dozer D-80-A-12 (Payment shall be made for effective working hour basis and no payment shall be made for marching time of machine.)
1	18	Hire charges - tipper
		Hire charges for supply of construction equipment for miscellaneous work including cost of operator, fuel etc all complete. Tipper for transportation of lead up to 5.0KM
1	19	Hire charges - roller
		Hire charges for supply of construction equipment for miscellaneous work including cost of operator, fuel etc all complete.-Roller
1	20	Excavation in hard rocks
		Excavation in hard rocks below ground level for all kinds of foundation including trenches, pavements, manholes, wall footings, cable trenches etc. by chiseling. For a depth of 1.5m including all labour materials including dressing and trimming of sides, leveling and grading of bottoms and stacking surplus excavated material within a lead of 50m. etc. complete as directed by Manager-in-charge.
1	21	Extra Earth work
		Extra over respective item-1 for every additional lift of 1.5mtr or part their of in - All kind of soils
1	22	Extra E/W in hard rock
		Extra over respective item -19 for every additional lift of 1.5mtr or part their of in - Ordinary / Hard rock

ANNEXURE-II

Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
1	23	P/L gravel stone
Providing and laying of gravel stone of size 80mm to 20mm for filter media.		
1	24	Excavating trench 80mm
Excavation trenches of required width for pipes, cables, etc. including excavation for pockets, and dressing of sides, ramming of bottoms, de-watering of accumulated water from any source, removal of slush and keeping the surface dry for subsequent work is any depth up to 1.5m including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20cm in-depth including consolidating each deposited layer by ramming, watering etc. and disposing of surplus excavated soil as directed with a lead of 50m. In all kinds of soil (except hard rock)- For pipe, cable etc. not exceeding 80mm dia		
1	25	Excavating trench 300mm
Excavation trenches of required width for pipes, cables, etc. including excavation for pockets, and dressing of sides, ramming of bottoms, de-watering of accumulated water from any source, removal of slush and keeping the surface dry for subsequent work is any depth up to 1.5m including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20cm in-depth including consolidating each deposited layer by ramming, watering etc. and disposing of surplus excavated soil as directed with a lead of 50m. In all kinds of soil (except hard rock)- For pipe, cables etc. exceeding 80mm dia but not exceeding 300mm dia		
1	26	Dewatering
Dewatering of foundation, trenches, drains, low laying areas, sumps, water reservoirs, man-hole chambers, valve chambers using 2HP / 4000 litre per hour pump sets including cost of supply, transportation erection charges of pumps with all accessories and tools and tackles etc. and cost of labour operating with fuel, lubricant etc. all complete and as directed by MIC.		
1	27	Cleaning drain - 0.25sqm
Cleaning of open brick drains of trapezoidal section/any other section, pipe drain of any dia meter and culverts of any section of road including removal of vegetation, slushy soil, garbage, loose boulder, earth, construction rubbishes etc. and stacked the desalted materials at convenient places (preferably 30 M away from the drain or any other suitable places) where it can be easily loaded on the truck/cortege and thereafter disposal of the same within a lead of 1 KM by mechanical means/ any other means at NALCO acquired low laying area earmarked for disposal and as per the direction of Manager-in-charge. Note:i)Rate shall include cost of all tools, tackles, rehandling and disposal of such materials at area earmarked and dressing the area. ii) The measurement shall be taken only after disposal of desalted materials at earmarked places. - Cross-sectional area up to 0.25sqm.		
1	28	Cleaning drain - 0.50sqm
Cleaning of open brick drains of trapezoidal section/any other section, pipe drain of any dia meter and culverts of any section of road including removal of vegetation, slushy soil, garbage, loose boulder, earth, construction rubbishes etc. and stacked the desalted materials at convenient places (preferably 30 M away from the drain or any other suitable places) where it can be easily loaded on the truck/cortege and thereafter disposal of the same within a lead of 1 KM by mechanical means/ any other means at NALCO acquired low laying area earmarked for disposal and as per the direction of Manager-in-charge. Note:i)Rate shall include cost of all tools, tackles, rehandling and disposal of such materials at area earmarked and dressing the area. ii) The measurement shall be taken only after disposal of desalted materials at earmarked places. - Cross-sectional area up to 0.50 sqm.		
1	29	Cleaning drain - 1.00sqm
Cleaning of open brick drains of trapezoidal section/any other section, pipe drain of any dia meter and culverts of any section of road including removal of vegetation, slushy soil, garbage, loose boulder, earth, construction rubbishes etc. and stacked the desalted materials at convenient places (preferably 30 M away from the drain or any other suitable places) where it can be easily loaded on the truck/cortege and thereafter disposal of the same within a lead of 1 KM by mechanical means/ any other means at NALCO acquired low laying area earmarked for disposal and as per the direction of Manager-in-charge. Note:i)Rate shall include cost of all tools, tackles, rehandling and disposal of such materials at area earmarked and dressing the area. ii) The measurement shall be taken only after disposal of desalted materials at earmarked places. - Cross-sectional area up to 1.00 sqm.		

ANNEXURE-II

Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
1	30	Transporting of any kind of materials
Transporting of any kind of materials like AC sheet, ridges, GI pipes, CI pipes, bleaching powder etc. any kind of materials within a lead of 4-5 KM as directed by the Manager-in-charge including loading and unloading of materials.		
1	31	Extra over item no. 30
Extra over item no.30 for movement of materials from smelter store inside plant to township civil office store / township pump house.(Truck load)		
1	32	Berm dressing avg 15cm
Earth work in road berm dressing in all kinds of soil including removing of vegetation, derrises and in equalities, by cutting and filling earth, making specified slope not exceeding average 15cm deep and disposal of earth and rubbish up to lead of 3.00 KM as directed by MIC.		
1	33	Surface excavation upto 30cm
Earth work in surface excavation in all kinds of soil including removing of vegetation, derrises and in equalities, by cutting and filling earth, making specified slope, above thickness 15cm upto 30cm deep and disposal of earth and rubbish up to lead of 3.00 KM as directed by MIC. (pre level and post level to be jointly recorded)		
1	34	Stacking of red moorum
Supplying and stacking of red moorum of approved quality in measureable stack, as directed by Manager #in-charge including all cost complete.		
1	35	Spreading of red moorum
Spreading of red moorum of required thickness including levelling, watering and rolling complete including preparation of the surface and rolling as directed by Manager #in-charge (payment for red moorum to be made separately.		
1	36	PCC 1:5:10
Providing and laying plain cement concrete of specified grade excluding the cost of centering, shuttering for all works at all depth and heights complete as directed by Manager #in-charge. (Cement free issue)-1:5:10 Using 40mm & down size stone aggregate.		
1	37	PCC-1:3:6
Providing and laying plain cement concrete of specified grade excluding the cost of centering, shuttering for all works at all depth and heights complete as directed by Manager #in-charge. (Cement free issue)-1:3:6 Using 20mm & down size stone aggregate.		
1	38	PCC-1:2:4
Providing and laying plain cement concrete of specified grade excluding the cost of centering, shuttering for all works at all depth and heights complete as directed by Manager #in-charge. (Cement free issue)-1:2:4 Using 20mm & down size stone aggregate		
1	39	RCC 1:2:4 in foundation
Providing and laying in position reinforced cement concrete of proportion 1:2:4 (1 cement : 2 coarse of sand: 4 graded stone aggregate of 20mm nominal size) excluding the cost of centering, shuttering, finishing and reinforcement as per specification, drawing and direction of MIC (Cement free issue)- For all works in sub structure below plinth level		
1	40	RCC 1:1.5:3 in foundation
Providing and laying in position reinforced cement concrete of proportion 1:1.5:3 (1 cement :1.5 coarse of sand: 3 graded stone aggregate of 20mm nominal size) excluding the cost of centering, shuttering, finishing and reinforcement as per specification, drawing and direction of MIC (Cement free issue)-For all works in sub structure below plinth level		
1	41	RCC 1:1.5:3 in sup. structure

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Line Item No	Activity SNo.	Description
		Providing and laying in position reinforced cement concrete of proportion 1:1.5:3 (1 cement :1.5 coarse of sand: 3 graded stone aggregate of 20mm nominal size) excluding the cost of centering, shuttering, finishing and reinforcement as per specification, drawing and direction of MIC (Cement free issue)- For column, lintel, beam, roof slab, sunshade, wall etc. at all works in super structure above plinth level
1	42	Precast RCC slab 1:1.5:3
		Manufacturing, transporting and fixing in position pre-cast RCC slab of mix 1:1.5:3 (1 cement: 1.5 sand: 3 graded stone aggregate 12mm nominal size) of all shape & size, thickness at all depth & height & level including finishing the slab, cost of form work, cutting grooves in wall, fixing of slab and making good the wall but excluding the cost of reinforcement etc. all complete as per drawing specification and direction of Manager-in-charge. (Cement free issue) Each unit up to 500Kg (for slab, bench, bed block, lintel, beam etc.
1	43	Cent. & shut-below plinth
		Centering and shuttering including strutting, bracing, propping etc., keeping the same in position during concreting and removal of the same after specified period etc. all complete and as specified and directed by Manager #in-charge . For all concrete and RCC work. For all depths below plinth level
1	44	Cent. & shut-above plinth
		Centering and shuttering including strutting, bracing, propping etc., keeping the same in position during concreting and removal of the same after specified period etc. all complete and as specified and directed by Manager #in-charge . For all concrete and RCC work. For all heights above plinth level
1	45	Cent. & shut- extra add.height
		Extra for additional height in centering and shuttering where ever required with adequate bracing, propping etc. including cost of de-shuttering and decentering at all level over a height of 3.5mtr for every additional height of 1.0m or part thereof as directed by Manager #in-charge (plan area to be measured)
1	46	Reinforcement- tor steel
		Taking delivery at NALCO store, transporting, cutting, placing, fixing in position tor/plain steel reinforcement of all diameters for reinforced concrete and precast reinforced concrete works including cutting , bending, cranking, binding, tack welding, providing & tying with binding wire and cover blocks as per drawings, specifications and direction of M-I-C including straightening & decoiling wherever necessary, all materials, tools, plant & labour complete .
1	47	Precast concrete jali 40mm
		Providing and fixing 40mm thick pre-cast cement concrete jali of approved designed, good quality from approved manufacturer and finishing in cement mortar 1:3 (1 cement: 3 fine sand) etc. complete as per direction of MIC excluding plastering of the jambs, sills and soffits (cement shall be issued free of cost for fixing only)
1	48	Precast RCC posts
		Providing precast RCC posts and struts at site of standard size with 1:1.5:3 (1 cement :1.5 sand :3 graded stone aggregate 12.5 nominal size) with wooden plug or 6mm bar nibs wherever required as per direction of MIC including fixing (Cost of earth work in excavation, reinforcement and concrete work in foundation to be paid separately.) Cement and reinforcement steel free issue
1	49	FRP KB brick- fdn & plinth
		Providing and laying brick masonry work with FPS kiln burnt bricks of class 50B/ locally available good quality fly ash bricks with cement mortar 1:6 (1 cement :6 sand) in foundation and plinth including cost of scaffolding, raking out joints, curing etc. at all depths and height complete as per drawing, specification and direction of Manager-in-charge. (Cement free issue) In foundation and plinth for all depth below plinth level.
1	50	FRP KB brick- sup.structure
		Providing and laying brick masonry work with FPS kiln burnt bricks of class 50B/ locally available good quality fly ash bricks with cement mortar 1:6 (1 cement :6 sand) in foundation and plinth including cost of scaffolding, raking out joints, curing etc. at all depths and height complete as per drawing,

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Line Item No	Activity SNo.	Description
specification and direction of Manager-in-charge. (Cement free issue) In superstructure above plinth level		
1	51	Half BW in KB in foundation
Providing and laying half brick masonry with FPS kiln burnt brick of class 50B/ locally available good quality fly ash bricks with cement mortar 1:4 (1 cement : 4 sand) in any shape, including the cost of materials, labour, scaffolding/staging, sampling and testing, soaking of bricks, cutting and laying of bricks, providing openings of any shape and size, raking out the joints, curing etc. all complete as per specification. (Cement free issue) -In foundation and plinth for all depth below plinth level.		
1	52	Half BW in KB in sup.structure
Providing and laying half brick masonry with FPS kiln burnt brick class 50B/ locally available good quality fly ash bricks with cement mortar 1:4 (1 cement : 4 sand) in any shape, including the cost of materials, labour, scaffolding/staging, sampling and testing, soaking of bricks, cutting and laying of bricks, providing openings of any shape and size, raking out the joints, curing etc. all complete as per specification. (Cement free issue) - In superstructure above plinth level up to floor V level		
1	53	FPS Brick work in 7cm
Brick work 7cm thick FPS brick of class 50B in cement mortar 1:3 (1 cement: 3 coarse sand) in super structure (cement free issue)		
1	54	FPS Brick edging
Bricks edging 7cm wide 11.4cm deep to plinth protection with brick of class designation 75 including grouting with cement mortar 1:4 including all cost complete. (Cement free issue)		
1	55	Fly ash brick work- foundation
Providing and laying brick masonry work with modular fly ash bricks in cement mortar 1:6 (1 cement :6 sand) etc complete as per specification and direction of MIC. Fly ash brick shall be issued from Nalco CPP plant. (Fly ash brick and Cement free issue) (In case of non availability of fly ash brick as FIM by Nalco the work shall be executed against supply of fly ash bricks by the contractor and will be paid extra for supply of bricks under relevant item)-In foundation and plinth for all depth below plinth level.		
1	56	Fly ash BW for MH/IC (For repair work)
Providing and laying brick masonry work with modular fly ash bricks in cement mortar 1:6 (1 cement :6 sand) etc complete as per specification and direction of MIC. Fly ash brick shall be issued from Nalco CPP plant. (Fly ash brick and Cement free issue) (In case of non availability of fly ash brick as FIM by Nalco the work shall be executed against supply of fly ash bricks by the contractor and will be paid extra for supply of bricks under relevant item)-for manhole/inspection chamber.		
1	57	Fly ash brick work- sup. Structure
Providing and laying brick masonry work with modular fly ash bricks in cement mortar 1:6 (1 cement :6 sand) etc complete as per specification and direction of MIC. Fly ash brick shall be issued from Nalco CPP plant. (Fly ash brick and Cement free issue) (In case of non availability of fly ash brick as FIM by Nalco the work shall be executed against supply of fly ash bricks by the contractor and will be paid extra for supply of bricks under relevant item)-In superstructure at all height above plinth level		
1	58	Fly ash half brick in fdn
Providing and laying half brick masonry work with modular fly ash bricks in cement mortar 1:4 (1 cement :4 sand) as per specification with all cost complete as per specification and direction of MIC. Fly ash brick shall be issued from Nalco CPP plant. (Fly ash brick and Cement free issue) (In case of non availability of fly ash brick as FIM by Nalco the work shall be executed against supply of fly ash bricks by the contractor and will be paid extra for supply of bricks under relevant item)-In foundation and plinth for all depth below plinth level.		
1	59	Fly ash half brick in sup. str
Providing and laying half brick masonry work with modular fly ash bricks in cement mortar 1:4 (1 cement :4 sand) as per specification with all cost complete as per specification and direction of MIC. Fly ash brick shall be issued from Nalco CPP plant. (Fly ash brick and Cement free issue) (In case		

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Line Item No	Activity SNo.	Description
of non availability of fly ash brick as FIM by Nalco the work shall be executed against supply of fly ash bricks by the contractor and will be paid extra for supply of bricks under relevant item)-In superstructure above plinth level		
1	60	Fly ash Brick work in 7cm
Brick work 7cm thick with modular fly ash bricks in cement mortar 1:3 (1 cement: 3 coarse sand) in super structure. Fly ash brick shall be issued from Nalco CPP plant. (Fly ash brick and Cement free issue)		
1	61	Fly ash edging
Bricks edging 7cm wide 11.4cm deep to plinth protection with modular fly ash bricks including grouting with cement mortar 1:4 including all cost complete. Fly ash brick shall be issued from Nalco CPP plant. (Fly ash brick and Cement free issue)		
1	62	Brick work with dismantled brick
Providing and laying brick masonry work with dismantled brick salvaged from work with cement mortar 1:6 (1 cement :6 sand) as per specification with all cost complete as per drawing and direction of Manager-in-charge. (Cement free issue) In foundation and super structure upto 2.0 mtr height above plinth level.		
1	63	RR masonry 1:6 - F&P
Providing and laying random rubble masonry in foundation and plinth in Cement mortar 1:6 (1 cement:6 sand) including leveling with cement concrete 1:6:12 (1 cement:6 coarse sand: 12 stone aggregate 20mm nominal size) and providing recesses, opening, scaffolding, racking out joints, curing etc. complete for all depth and height.		
1	64	Dry stone pitching
Providing and laying dry stone pitching 22.50cm thick with hard stone laid in courses and required profile with hammer dressed stones having no side less than 15cm with minimum depth of 20cm including repairing the bedding surface etc. all complete		
1	65	Wood work in D/W frame- sal
Providing sal wood work in frames of doors, windows, clerestory window & other frames work etc. wrought framed & fixed in position.		
1	66	Wood work in frame- Non sal
Providing Non-sal wood work in frames of door/ window false ceiling, partitions etc. sawn and put up in position		
1	67	35mm th. hollock wood panel door
Providing and fixing kiln seasoned chemically treated hollock wood panelled or panelled and glazed/ wire mesh shutters for doors, windows and clerestory windows excluding panelling which will be paid for separately- 35mm thick shutter		
1	68	25mm Panelled shutter
Providing and fixing factory made 25mm thick panelled or panelled and glazed shutter for cupboard etc. (Second class teak wood including ISI marked anodised aluminium butt hinges with necessary screws)-Panelled shutter with 9mm thick BWP ply wood panelling		
1	69	Wire gauge shutter(Factory made)
Providing and fixing wire gauge / glazed shutters using galvanized M.S. wire gauge of average width of aperture 1.4 mm in both directions with wire of dia 0.63 mm/ using 4mm thick pin headed glass for doors, windows and clerestory windows with hinges and necessary screws : 35 mm thick shutters with ISI marked M.S. pressed butt hinges bright finished of required size-Kiln seasoned and chemically treated hollock wood.		
1	70	35mm th Flush door shutter
Providing and fixing factory made ISI marked flush door shutters, conforming to IS-2202 part-1 decorative type, solid core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneering on both faces of		

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Line Item No	Activity SNo.	Description
shutters including stainless steel butt hinges with necessary screws.- 35mm thick		
1	71	30mm th Flush door shutter
Providing and fixing factory made ISI marked flush door shutters, conforming to IS-2202 part-1 decorative type, solid core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneering on both faces of shutters including stainless steel butt hinges with necessary screws.- 30mm thick		
1	72	19mm th Block board door shutter
Providing and fixing factory made ISI marked 19 mm thick (min) block board shutter with 2nd class teak wood lipping of 25mm minimum depth on all edges of shutters by means of approved quality neoprene based adhesive and nailing @ 300mm maximum for shutters of cupboard including the cost of bright finished M.S piano hinges/ 5inch long-3nos heavy duty stainless steel hinges per shutter as directed by EIC.		
#		
1	73	Lipping with 2nd class teak wood
Extra for providing and fixing lipping with 2nd class teak wood/Hollock wood battens 25mm minimum depth on all edges of shutters by means of approved quality neoprene based adhesive and nailing @ 300mm maximum (over all area of door shutter to be measured) over the above item.		
1	74	Extra for cutting rebate
Extra for cutting rebate in flush door shutters/ ply board shutter for cupboard (Total area of the shutter to be measured)		
1	75	PVC door frame
Providing and fixing factory made PVC door frame manufactured by M/s Rajshri or equivalent of size 50x47mm with a wall thickness of 5mm, made out of extruded 5mm rigid PVC foam sheet mitered at corners and joined with 2nos of 150mm long brackets of 15x15mm MS square tube, the vertical door profiles to be reinforced with 19x19mm MS square tube of 19 gauge, EPDM rubber gasket weather seal to be provided through out the frame. The door frame to be fixed to the wall using MS screws of 65x100mm size complete as per manufacturers specification and direction of Manager-in-charge		
1	76	PVC door shutter
Providing and fixing 30mm thick factory made PVC rigid foam door shutter manufactured by M/s Rajshri of equivalent made from MS tube of 19 gauge thickness size 19x19mm for style and 15x15mm for top and bottom rail covered with heat moulded PVC "C" channel of size 30mm thick, 70mm wide out of which 50mm shall be flat and 20mm slab tapered in 45 deg angle on either side forming styles and 5mm thick, 95mm wide PVC sheets out of which 75mm shall be flat, 20mm shall be tapered in 45 deg in the inner side to form top and bottom rail and 115mm wide PVC sheet out of which 75mm shall be flat and 20mm shall be tapered on both side to form lock rail, top, bottom and lock rail shall be provided either side of the panel. 10mm (5mm x 2) thick, 20mm wide cross PVC sheet be provided as gap insert for top rail and bottom rail, panelling of 5mm thick PVC sheet fitted in the MS frame welded/ sealed to the styles and rails with 7mm (5mm + 2mm) thick x15mm wide PVC sheet beading on inner side and joined together with solvent cement adhesive and additional 5mm thick PVC strip of 20mm wide is to be stuck on the interior side of the "C" channel using PVC solvent cement adhesive etc. complete as per manufacturers specification and direction of MIC. Fixed to frames with 4nos MS powder coated butt hinges. (For WC & bath room shutters)		
1	77	P/F Al. door window
Providing and fixing aluminium work for doors, windows, ventilators and partitions including frame (for both openable, fixed & sliding) including openable shutter for doors and windows with extruded built up standard tubular, appropriate sections like Z/G/Y/H/F/U/A etc and other requisite sections of approved make conforming to IS: 733 and IS:1285, fixed with rawl plugs and screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required EPDM rubber/PVC /neoprene felt, rollers etc. aluminium sections shall be smooth, rust free, straight, mitered and jointed mechanically where ever required including cleat angle, Aluminium snap beading/taper clips for glazing/panelling, CP brass/ stainless steel screws, SS hinges of appropriate size etc all complete as per architectural drawings and the direction of MIC. (Glazing and panelling to be paid separately.- (anodized transparent or dyed to required shade according to IS: 1868. Minimum anodic coating of grade AC 15)The material of HINDALCO/JINDAL to be used(Test certificates from a govt laboratory to be supplied) (This item only be operated after obtaining apporval of MIC under specific circumstances.)		

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Line Item No	Activity SNo.	Description
1	78	Repairing of al. door and windows
Repairing of aluminium glazed door and windows including taking out of shutters and refixing in position after repair including providing necessary countersunk galvanized/ brass/ stainless steel screws, rawl plugs, fixing clip, aluminium angle cleat including removing and refixing of glass, beading, gasket, hinges, pivots, door spring/ closer, door fittings etc. where ever required and making good smooth operation of the shutter (excluding the cost of glass, panelling, gasket/ rubber lining, aluminium beading, tubular aluminium section, door spring, hinges/ pivots and door fittings) (This item only be operated after obtaining approval of MIC under specific circumstances.)		
1	79	C/E channel, tapper clip
Providing and fixing aluminium C/E channel, tapper clip (snap beading/ U beading) 20mm dia pipe' with necessary screws etc. complete as per direction of Manager #in-charge.(For repair works) (This item only be operated after obtaining approval of MIC under specific circumstances.)		
1	80	PVC/ Neoprene/ rubber gasket,
Providing and fixing PVC/ Neoprene/ rubber gasket, lining (T-rubber) for glazing and air tighting in aluminium shutter for repair works. (This item only be operated after obtaining approval of MIC under specific circumstances.)		
1	81	Fabricating & erecting
Fabrication & erection in position for all types of structural steel works in steel built up section, single sections, trusses, frame work Chequered plate etc. including cutting, welding reverting, bolting, hoisting, fixing in position and painting two coats of synthetic enamel paint over a primary coat of red oxide (Structural Steel free issue).		
1	82	Steel work
Steel work welded in built of sections/ framed work including cutting, hoisting, fixing in position and painting two coats of synthetic enamel paint of approved quality over a coat of zinc chromate red oxide primer etc. all complete. (Steel contractor supply)-In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works.		
1	83	P/F bolt including nut washer
Providing and fixing bolts including nuts and washers complete		
1	84	Angle iron frame
Providing and fixing angle iron frames for door, windows and ventilators made of MS angle ISA-35x35x5/6 or 40x40x5/6 joints mitred and welded with lugs made up of same angle section length 100mm embedded in cement concrete blocks 15x10x10cm of 1:3:6 (1 cement: 3 coarse sand: 6 graded stone aggregate 20mm nominal size) including necessary MS butt hinges and screws conforming to IS-1341, locking device as per drawing and specification including painting two coats of approved brand synthetic enamel paint over a priming coat of approved steel primer after pre-treatment of the surface as directed by Manager-in-charge. (Cement and MS angle free issue)		
1	85	Repair of door frame sides
Repair and finishing all sides of door frame sides with cement concrete (1:3:6) as per requirement of site, 12mm plastering for fixing of angle frame in place of wooden frame including dismantling/ chipping of wall side plaster, curing, applying cement primer on new plaster, disposal of debris upto 1.0 KM etc. complete as per direction of MIC.		
1	86	Repair of window frame 1200x1200
Repair and finishing all sides of window/ ventilator frame sides(Size of opening upto 1200mmx1200mm) with cement concrete (1:3:6) as per requirement of site, 12mm plastering for fixing of angle frame in place of wooden frame etc. including dismantling/ chipping of wall side plaster, curing, applying cement primer on new plaster, disposal of debris upto 1.0 KM etc. complete as per direction of MIC.		
1	87	Repair of window frame above 1200x1200
Repair and finishing all sides of window/ ventilator frame sides(Size of opening above 1200mmx1200mm) with cement concrete (1:3:6) as per requirement of site, 12mm plastering for fixing of angle frame in place of wooden frame etc. including dismantling/ chipping of wall side plaster,		

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Line Item No	Activity SNo.	Description
		curing, applying cement primer on new plaster, disposal of debris upto 1.0 KM etc. complete as per direction of MIC.
1	88	Profile-B (105x60)mm
		Providing and fixing pressed steel door frames confirming to IS:4351 manufactured from commercial mild steels sheet of 1.25mm thickness including hinges jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25mm, or base ties of 1.25mm pressed mild steel welded or rigidly fixed together by mechanical means, adjustable lugs with split end tall to Each jamb including steel butt hinges 2.5mm thick with mortar guards, lock strike-plate and shock absorbers as specified and painting two coats of approved brand synthetic enamel paint over a priming coat of approved steel primer after pre-treatment of the surface as directed by MIC.- Profile-B (size-105x60mm)
1	89	Profile-C (165x60)mm
		Providing and fixing pressed steel door frames confirming to IS:4351 manufactured from commercial mild steels sheet of 1.25mm thickness including hinges jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25mm, or base ties of 1.25mm pressed mild steel welded or rigidly fixed together by mechanical means, adjustable lugs with split end tall to Each jamb including steel butt hinges 2.5mm thick with mortar guards, lock strike-plate and shock absorbers as specified and painting two coats of approved brand synthetic enamel paint over a priming coat of approved steel primer after pre-treatment of the surface as directed by MIC.- Profile-C (size-165x60mm)
1	90	P/F MS grill
		Providing & fixing MS grill of required pattern in frames of windows etc. with MS flats, square or round bar including painting two coats of synthetic enamel paint of approved quality over a coat of zinc chromate red oxide primer etc. all complete. Fixed to steel windows by welding.
1	91	P/F MS door
		Providing and fixing in position MS door consisting of MS sheet 20/18 gauge (1.00mm to 1.25mm), MS angle, MS flat, MS plate, single walled hinged type fully sheeted shutter with MS angle in door frames including lugs, necessary bolting device, locking arrangements (aldrop & tower bolts), handles, threshold, eye hook for window and cleat for door, hinges etc. including painting with two coats of approved colour and quality of synthetic enamel paint over and including a priming coat etc. all cost complete as per drawing specification and direction of Manager-in-charge. (including the cost of door fittings)- Single leaf shutter
1	92	Flat brick soling
		Providing and laying flat brick soling/ dry brick on edge 70mm thick of fly ash brick/ fire brick on a bed of 12mm thick sand including filling with joints with fine sand with all cost complete (Fly ash brick / fire brick as free issue)
1	93	25mm tick CC pavement
		Providing & laying cement concrete pavement with 1:2:4 (1 cement: 2 sand: 4 graded stone aggregate of 12mm nominal size) including finishing of surface all complete in approach road, plinth protection, courtyard and as instructed by MIC.etc. (cement free)- 25mm thick
1	94	40mm tick CC pavement
		Providing & laying cement concrete pavement with 1:2:4 (1 cement: 2 sand: 4 graded stone aggregate of 12mm nominal size) including finishing of surface all complete etc. as per direction of MIC. (cement free)- 40mm thick
1	95	Extra marking chequers
		Extra for marking chequers of approved pattern on cement concrete floor, steps, landing, pavement etc.
1	96	25mm CC flooring
		Providing and laying cement concrete flooring 1:2:4 (1 cement:2 sand: 4 graded stone aggregate of 20/12.5mm nominal size) finished with floating coat of neat slurry rounding of edges, preparation of surface, hacking and making the surface rough for bonding of concrete cleaning the surface, applying cement slurry before laying of concrete, levelling, finishing, curing. etc as per specification and direction of MIC complete (Cement free issue)- 25mm thick

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Line Item No	Activity SNo.	Description
1	97	40mm CC flooring
Providing and laying cement concrete flooring 1:2:4 (1 cement:2 sand: 4 graded stone aggregate of 20/12.5mm nominal size) finished with floating coat of neat slurry rounding of edges, preparation of surface, cleaning the surface, applying cement slurry before laying of concrete, levelling, finishing, curing. etc as per specification and direction of MIC complete (Cement free issue)- 40mm thick		
1	98	Cement plaster skirting 18mm thick
Providing cement plaster skirting 18mm thick with cement mortar 1:3 i.e. finished with floating coat of neat cement including rounding of junction with floor etc. complete for all heights.(cement free issue)		
1	99	Ceramic wall tiles (Rs.35-40/Sqft)
Providing and fixing 1st quality ceramic glazed wall tiles of Orient, somany, nitco, kajaria, johnson, RAK make in all colours, shades of any size as approved by MIC in skirting, risers of steps and dados over 12mm thick bed of cement mortar 1:3 (1 cement :3 coarse sand) and jointing with grey cement slurry @ 3.3 Kg per Sqm including pointing in white cement mixed with pigment of matching shade complete. (Cement free issue) Glazed tile shall be selected by MIC from market and negotiated price with representatives of tile manufacturer shall be ranging from Rs.35.00-40.00 per Sqft.		
1	100	Ceramic wall tiles Tilofix (Rs.35-40/Sq
Providing and fixing 1st quality ceramic glazed wall tiles of Orient, somany, nitco, kajaria, johnson, RAK make in all colours, shades of any size as approved by MIC in skirting, risers of steps and dados with cement base high polymer modified quick setting adhesive water based (Tilo fix) in average 3 mm thick i.e @ 5Kg/Sqm including pointing in white cement mixed with pigment of matching shade complete. Glazed tile shall be selected by MIC from market and negotiated price with representatives of tile manufacturer shall be ranging from Rs.35.00-40.00 per Sqft.		
1	101	Ceramic floor tiles (Rs.35-40/Sqft)
Providing and laying ceramic glazed floor tiles of approved size and Orient, somany, nitco, kajaria, johnson, RAK make in all colours laid on 20mm thick cement mortar 1:6 (1 cement :6 coarse sand) including pointing the joints with white cement and matching pigment etc. complete. (Cement free issue) Glazed tile shall be selected by MIC from market and negotiated price with representatives of tile manufacturer shall be ranging from Rs.35.00-40.00 per Sqft.		
1	102	Ceramic floor tiles Tilofix (Rs.35-40/Sq
Providing and laying ceramic glazed floor tiles of approved size and Orient, somany, nitco, kajaria, johnson, RAK make in all colours laid with cement base high polymer modified quick setting adhesive water based (Tilo fix) in average 3 mm thick i.e @ 5Kg/Sqm including pointing the joints with white cement and matching pigment etc. complete. Glazed tile shall be selected by MIC from market and negotiated price with representatives of tile manufacturer of tile shall be ranging from Rs.35.00-40.00 per Sqft.		
1	103	Vitrified floor tiles (Rs. 60-70/Sqft.)
Providing and laying polished vitrified floor tiles in floor and skirting of 500x500mm / 600x600mm sizes (thickness to be specified by the manufacturer) with water absorption's less than 0.08% and conforming to IS:15622 of Orient, somany, nitco, kajaria, johnson, RAK make in all colours and shades, laid on 20mm thick bed of cement mortar 1:6 (1 cement :6 coarse sand) including grouting the joints with white cement and matching pigments etc. complete. (Cement free issue) Vitrified tile shall be selected by MIC from market and negotiated price with representatives of tile manufacturer shall be ranging from Rs. 60.00- 70.00 per Sqft.		
1	104	Vitrified floor tiles (Rs. 70-80/Sqft.)
Providing and laying polished vitrified floor tiles in floor and skirting of approved sizes 600x600mm (thickness to be specified by the manufacturer) with water absorption's less than 0.08% and conforming to IS:15622 of Orient, somany, nitco, kajaria, johnson, RAK make in all colours and shades, laid on 20mm thick bed of cement mortar 1:6 (1 cement :6 coarse sand) including grouting the joints with white cement and matching pigments etc. complete. (Cement free issue) Vitrified tile shall be selected by MIC from market and negotiated price with representatives of tile manufacturer shall be ranging from Rs. 70.00- 80.00 per Sqft.		
1	105	Vitrified floor tiles Tilo fix (Rs.60-70

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Line Item No	Activity SNo.	Description
		Providing and laying polished vitrified floor tiles in floor and skirting of approved sizes 600x600mm (thickness to be specified by the manufacturer) with water absorption's less than 0.08% and conforming to IS:15622 of Orient, somany, nitco, kajaria, johnson, RAK make in all colours and shades, fixed with cement base high polymer modified quick shade time adhesive (Tilo fix) (water based conforming to IS:15477 using 5Kg adhesive per Sqm of tile area in average 6mm thickness) including grouting the joints with white cement and matching pigments etc. complete. Vitrified tile shall be selected by MIC from market and negotiated price with representatives of tile manufacturer shall be ranging from Rs. 60.00- 70.00 per Sqft.
1	106	Vitrified floor tiles Tilo fix (Rs.70-80)
		Providing and laying polished vitrified floor tiles in floor and skirting of f approved sizes 600x600mm (thickness to be specified by the manufacturer) with water absorption's less than 0.08% and conforming to IS:15622 of Orient, somany, nitco, kajaria, johnson, RAK make in all colours and shades, fixed with cement base high polymer modified quick shade time adhesive (Tilo fix) (water based conforming to IS:15477 using 5Kg adhesive per Sqm of tile area in average 6mm thickness) including grouting the joints with white cement and matching pigments etc. complete. Vitrified tile shall be selected by MIC from market and negotiated price with representatives of tile manufacturer shall be ranging from Rs. 70.00- 80.00 per Sqft.
1	107	Matt finished vitrified tile
		Providing and laying matt finished vitrified tile of minimum size 400x400x10mm having water absorption less than 0.5% and conforming to IS: 15622 of approved make in all colours and shades in 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. (Cement free issue)
1	108	Granite stone flooring
		Providing and fixing 18mm thick granite mirror polished machine cut for kitchen platform, vanity counters, window sills, facias , steps of stair and similar location of required size of approved shade, colour and texture laid over 20mm (average) thick base of cement mortar 1:6 (1 cement : 6 coarse sand) and jointed with white cement mixed with matching pigment, epoxy touch ups, including rubbing, moulding and polishing to edge to give high gloss finish etc. . complete at all level .
1	109	Marble stone flooring
		Providing and fixing marble stone flooring with 18mm thick marble stone of Agaria white (sample of marble shall be approved by MIC) over 20mm (average) thick base of cement mortar 1:6 (1 cement : 6 coarse sand) laid and jointed with grey cement slurry including rubbing and polishing complete
1	110	Edge moulding 18 mm thick marble/ granit
		Providing edge moulding to 18 mm thick marble/ granite stone counters, Vanities etc., including machine polishing to edge to give high gloss finish etc. complete as per design approved by Manager-in-Charge.
1	111	20mm Kuddappa stone flooring
		Providing and fixing 20mm average thick Kuddappa stone flooring over a bed of 20 mm thick cement mortar 1:6 (1 cement: 6 sand) including preparation of base by dismantling/ removing of damaged floor, cutting, polishing etc. all cost complete as per direction of MIC. (Cement free issue)
1	112	20mm kota stone flooring
		Providing and fixing 20mm average thick Kota stone flooring over a bed of 25 mm thick cement mortar 1:6 (1 cement: 6 sand) including preparation of base by dismantling/ removing of damaged floor, cutting, polishing etc. all cost complete as per direction of MIC. (Cement free issue)
1	113	Pavement tile 25mm
		Providing and laying pavement tile (Pre-polished concrete tile 25mm thick) on floors, Treade and riser of steps, walkways etc of ultra tiles/zico tiles make laid on 20mm thick bed cement mortar 1:6 (1 cement :6 coarse sand) joints with neat cement slurry mixed with pigment to matched the shade of the tile including rubbing and polishing of tile etc. complete. (Cement free issue).
1	114	Pavement tile 40mm
		Providing and laying pavement tile (Pre-polished concrete tile 50 mm thick) on floors, walkways etc of ultra tiles/pavit India make laid on 50mm thick

ANNEXURE-II
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Line Item No	Activity SNo.	Description
		bed of clean sand in proper slope, design, level, rubbing and polishing of tile etc. complete as per direction of MIC.
#		
1	115	Chequered tile - light red shade
		Providing and laying factory made mechanically chequered pressed precast cement concrete paving tiles of approved make in pavements, foot path, court yard etc. jointed with neat cement slurry mixed with pigment to match the shade of tiles on 20mm thick bed of cement mortar 1:6 (1 cement: 6 coarse sand) including cost of all materials, tools and tackles, rubbing and cleaning etc. all complete as per specifications and directions of Manager-in-charge. (Cement free issue)- Chequered tile of approved pattern size 250x250x22mm in dark shade using ordinary cement. light red shade
1	116	10mm thick acid and alkali resistant tile
		Providing and fixing 10mm thick acid and alkali resistant tiles of approved make and colour in flooring on a bed of 10mm thick mortar using acid proof cement mortar bedding 1:6 (1 acid proof cement: 6 coarse sand) and joints filled with acid resisting cement as per IS-44577 complete as direction of MIC.
1	117	Extra for repair of floor/wall tile
		Extra for repair of floor/wall tile including removal of damaged tile, mortar, plaster and fixing of new tile in place of damaged tile area in proper line and level matching the existing surface with cement mortar/adhesive as per the site requirement. Payment towards fixing of tile shall be made in respective item.(For repair of tile area less than 1.0m2.)
1	118	Polyninyl chloride sheet flooring
		Providing and fixing 1.5mm thick homogeneous polyvinyl chloride sheet in flooring and skirting of approved colour and shade using rubber based adhesive of approved quality and manufacturer like Dunlop S-758, Fevicol SR 998 or equivalent etc. all complete as per direction of MIC.
1	119	Door sill concrete size (65x40)mm
		Providing and making of door sill size (65x40)mm with cement concrete 1:2:4 including chipping of concrete floor and finishing with cement punning etc. complete. (Cement free issue)
1	120	Door sill granite size (70x20)mm
		Providing and fixing of granite stone door sill of size (70x20)mm of required length including moulding finish of edges, making the floor rough for good bonding, cleaning, fixing with araldite as fixing gum etc. complete.
1	121	MS angle nosing with lugs
		Providing and fixing MS angle 25x25x5mm to act as nosing with lugs of 8mm dia MS rod 10cm long forked at end 60cm apart (minimum three lugs to be provided) including necessary welding and applying a priming coat of approved primer on exposed surface etc. complete. (Steel free issue)
1	122	Glass strip 25-40mm wide
		Providing and fixing glass strips in joints of cement concrete floors.- 25- 40mm wide and 4mm thick
1	123	Providing Gola 75x75mm
		Providing Gola 75x75mm in cement concrete 1:2:4 (1 cement:2 sand: 4 graded stone aggregate and down size) including finishing with cement mortar 1:3 (1 cement: 3 fine sand) as per standard design in 75x75mm deep chase including cutting groove,concreting,finishing with plater and punning etc. (cement free issue)
1	124	Grading roof CC 1:2:4
		Grading roof for water proofing treatment including finishing etc. all complete as per direction of MIC (cement free issue)- with Cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 grade stone aggregate 12mm nominal size)
1	125	Grading roof 1:4

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Line Item No	Activity SNo.	Description
		Grading roof with cement mortar for water proofing treatment including levelling, finishing, curing etc. all complete as per direction of EIC (cement free issue)- with cement mortar 1:4 (1 cement: 4 coarse sand)
1	126	Making khuras
		Making khurras 45x45cm in old RCC roof including cutting of mud phoska, chipping of RCC slab of minimum 5cm thickness and finished with cement concrete 1:2:4(1 cement: 2 coarse sand : 4 stone aggregate 10mm down gauge) and finished with cement plaster 1:2(1 cement: 2 coarse sand) and a coat of neat cement rounding the edges, mixing water proofing compound so as to make it leak proof and finishing the out let with all cost complete as per the direction of MIC excluding the cost of water proofing compound and cement. (cement free issue)
1	127	Double scaffolding system
		Providing and fixing double scaffolding system (cub lock type) on the exterior side up to 15 mtr high above ground floor with 40mm dia MS tube 1.5mtr CC horizontal and vertical tubes joining with cub and lock system with MS tube, Challies, MS clamps etc. in scaffolding for working platform etc. and removing it thereafter. The scaffolding system shall be stiffened with bracings, runners, connecting with building etc. where ever required with essential safety features of the workman etc. complete as per the direction of MIC. The elevational area of scaffolding shall be measured for payment purpose. The payment will be made once irrespective of duration of scaffolding. (Note: This item to be used for maintenance work only)
1	128	MS fan clamp 16mm dia
		Providing and fixing MS fan clamp 16mm dia of standard and size in exiting RCC slab including cutting chase and making good and painting the exposed portion of clamps complete. (16mm tor steel and cement free issue)
1	129	P/F Grating square
		Providing & fixing to the inlet mouth of rain water pipe PTMT (an Managering Thermoplastic) grating square (slit) 150mm square with a height of 8mm and weighing not less than 100gms.
1	130	Refixing spout pipe
		Refixing of balcony spout pipe with CC 1:2:4 after cutting the hole 100x100x125mm in the proper level including finishing the both side surface of the wall with cement plaster with CM (1:6), painting two or more coats with cement/colour/white wash and disposal of dismantled materials in this 50m lead etc. all complete.
1	131	Applying polymer exclu chemical compound
		Applying two coats of acrylic polymer base cementious surface ceiling compound, "BRUSHBOND" of FOSROC make or equivalent, evenly by brush, perfectly over masonry or concrete surface etc. for leak proof treatment etc. including preparation of surface and all cost complete as per manufacturer specification and direction of MIC. excluding cost of chemical compound
1	132	Extra WP excluding chemical compound
		Extra for mixing water proofing material of Sika/ Fosroc/ Dr Fixit in cement mortar / concrete work @ 1Kg (Powder) or 200ml (liquid) per bag of 50kg cement . Payment shall be made on basis of cement consumption (unit of rate in bag of 50kg cement)- excluding cost of chemical compound
1	133	6mm th cement board
		Providing and fixing plain multipurpose 6mm thick cement board (Bison panel conforming to IS: 14276-1995) or equivalent with suitable fibre cement screw in ceiling etc. complete (frame work to be paid separately)
1	134	Fixing of roof sheeting
		Fixing in position in roof sheeting/ wall side sheeting at a height upto 15 mtr with plain or corrugated aluminium / GI/PPGL sheet at all slope and height of roof / wall with roofing accessories such as self drilling /self tapping ss screws of size (5.5x 55 mm) with EPDM seal/ J/L hook, seam bolt, EPDM washer etc required, including carting of sheets, cutting to size if required, drilling holes for hooks and seam bolts etc. as per specification and direction of Manager-in-charge. (excluding the cost of roof sheet and roofing accessories which is paid separately.)

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Line Item No	Activity SNo.	Description
1	135	Fixing of Ridge
Fixing of Ridge made up of plain PPGL/GI/aluminium sheets in position including cutting, bending into shape, fixing with necessary hook/bolt required etc.(plain PPGL/GI/aluminium sheet as FIM will be issued from issue point at smelter store.)		
1	136	Self adhesive flash strip
Fixing of self adhesive flash strip "Lafarge/ STP/SIKA Multy seal" or equivalent over roof of AC/GI sheet etc. in position at the leakage point as directed excluding the cost of Flash strip. Payment shall be done based on consumption of flash strip.		
1	137	8mm dia GI J/L hook
Supplying of roof sheeting accessories of approved quality as per the direction of Manager-in-charge. 8mm dia GI J or L hook with nut and GI washer or self drilling /self tapping ss screws of size (5.5x 55 mm) with EPDM seal of required size.		
1	138	EPDM washer 25mm OD
Supplying of roof sheeting accessories of approved quality as per the direction of Manager-in-charge.- EPDM washer 25mm OD & 3mm thickness (30% minimum polymer contented)		
1	139	GI stitching with washer
Supplying of roof sheeting accessories of approved quality as per the direction of Manager-in-charge.- GI stitching bolt (25x6)mm with washer.		
1	140	Plain GI sheet 24 gauge
Supplying of roof sheeting accessories of approved quality as per the direction of Manager-in-charge.- Plain GI sheets		
1	141	CGI sheet (TATA) make
Supplying of roof sheet and accessories of approved quality as per the direction of Manager-in-charge.- CGI sheets (TATA) make		
1	142	FRP plastic sheet
Providing and fixing UV stabilized fiberglass reinforced plastic sheet roofing up to any pitch including fixing with polymer coated J or L hooks, bolts and nuts 8mm dia GI 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 stabilizer in resin system under approx 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 with 2mm thick corrugated (2.5" or 4.2" or 6") or step-down (2" or 3" or 6") as specified.		
1	143	False ceiling
Providing and fixing of gypsum board false ceiling at all height including providing and fixing of frame work made of special sections power pressed from MS sheet and galvanized in accordance with zinc coating of 350 as per IS: 277 and consisting of angle cleats of sizes 25mm wide x 1.5mm thick with flanges of 22mm and 37mm at 150mm centre to centre one flange fixed to the ceiling with dash fastener 12.5mm dia x 40mm long with 6mm dia bolts to the angle hangers of 25x25x0.55mm of required length and other end of angle hanger being fixed with nuts and bolts to GI channels 40x15x0.9mm running @ 1200mm C/C to which the ceiling section 0.5mm thick bottom wedge of 80mm with tapered flanges of 26mm each having clips of 10.5mm at 450mm C/C shall be fixed in a direction perpendicular to GI channel with connecting clips made out of 2.64mm dia x 230mm long GI wire at every junction including fixing the Gypsum board with ceiling section and perimeter channels 0.5mm thick 27mm high having flanges of 20mm and 30mm long, the perimeter of ceiling fixed to wall / partitions with help of rawl plugs at 450mm C/C with 25mm long drive-all screw @ 230mm interval including jointing and fixing to a flush finish of tapered and square edges of the boards with recommended filler, jointing tapes, finisher and two coats of primer suitable for board as per manufacturer specification and also including the cost of making opening for light fittings, grills, diffusers, cutout made with frame of perimeters channels suitably fixed all complete as per drawing, specification and direction of MIC but excluding the cost of painting with 12.5mm thick tapered edge gypsum board conforming to IS: 2095 based Parg-I.		
1	144	Cleaning roof -D & TD type qtr
Cleaning of roof and rain water pipe including removal of derrises within a lead of 1.0KM- D & TD type quarters including garage		

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Line Item No	Activity SNo.	Description
1	145	Cleaning roof -C & TC type qtr
Cleaning of roof and rain water pipe including removal of derrises within a lead of 1.0KM- C & TC type quarters		
1	146	Cleaning roof -B & TB type qtr
Cleaning of roof and rain water pipe including removal of derrises within a lead of 1.0KM- B & TB type quarters		
1	147	Cleaning roof -A & TA type qtr
Cleaning of roof and rain water pipe including removal of derrises within a lead of 1.0KM- A & TA type quarters		
1	148	Cleaning roof -Garage of all size
Cleaning of roof and rain water pipe with all tools and tackles including removal of debris within a lead of 1.0KM - Garages of all size excluding community garages.		
1	149	12mm thick cement plaster
Providing 12mm thick cement plaster with cement mortar 1:6 for all height including curing, scaffolding, tools, tackles, labour etc. complete.(cement free issue)		
1	150	6mm thick cement plaster
Providing 6mm thick cement plaster to ceiling with cement mortar 1:3 including curing and necessary scaffolding, tools, tackles, labours etc. complete. (cement free issue)		
1	151	Neat cement punning
Providing neat cement punning including watering, curing etc. all complete at all depth, height, and levels as per specification and direction of Manager-in-charge.(cement free issue)		
1	152	Repair to plaster
Repair to plaster of thickness 15mm on patches of area 2.5 Sqm and under with cement mortar 1:6 (1 cement: 6 coarse sand) including cutting the patch in proper shape, dismantling of old damaged plaster, raking out joints, preparing and plastering the surface of the walls at all height with all cost complete including disposal of rubbish to the dumping ground as per the direction of Manager-in-charge (scaffolding above 3.5M shall be paid extra.) (cement free issue)		
1	153	Repair of OHT 500-750ltr
Repair of over head water tank capacity upto 750 ltr with inside plastering and punning of tank base and wall including dismantling of damaged plaster, hacking, removal of debris, closing and opening of inlet and outlet pipelines, drainage of water, cleaning of tank inside, removal and refixing of tank cover, float valve etc. complete as per direction of MIC. (Grading concreting if any shall be paid extra)		
1	154	Repair of OHT 1000-1200ltr
Repair of over head water tank capacity from 1000 to 1200 ltr with inside plastering and punning of tank base and wall including dismantling of damaged plaster, hacking, removal of debris, closing and opening of inlet and outlet pipelines, drainage of water, cleaning of tank inside, removal and refixing of tank cover, float valve etc. complete as per direction of MIC. (Grading concreting if any shall be paid extra)		
1	155	Repair of manhole
Repair of manhole with inside plaster and punning of tank wall and bottom of the tank including dismantling of damaged plaster, hacking, removal of debris, closing and opening of inlet and outlet, etc. complete as per direction of MIC.		
1	156	P/f chicken wiremesh

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Line Item No	Activity SNo.	Description
		Providing and fixing of chicken wire mesh over concrete and masonry joint with M.S nails @ 150mm spacing, making fit with the wall, straightening, leveling etc. complete as per direction of MIC.
1	157	Wall putty
		Providing and applying wall putty upto 1mm thickness over plastered surface to prepare the surface even and smooth complete.- Birla putty #
1	158	Drip course of (25x15) mm
		Drip course of (25x15) mm size at various elevation to chajja/ slab etc. in cement mortar 1:4 including chipping old plaster as per the direction of Manager-in-charge.(cement free issue)
1	159	Rule pointing on stone
		Providing pointing on stone masonry work with cement mortar 1:3 (1 cement: 3 sand) (cement free issue)- Ruled pointing
1	160	Applying of bitumen grade
		Supplying and applying a coat of bitumen grade VG-10 using 1.7Kg/Sqm including cleaning surface with brush and finally with a piece of cloth lightly soaked in kerosene oil including cost of materials.
1	161	Removing white/colour wash
		Removing white or colour wash by machine scrapper and sand papering and preparing the surface smooth including necessary repairs to scratches with putty , scaffolding etc complete as per specification and instruction of Manager-in-charge.
1	162	Removing oil bound distemper
		Removing dry or oil bound distemper by machine scrapper and sand papering and preparing the surface smooth including necessary repairs to scratches with putty, scaffolding etc complete as per specification and instruction of Manager-in-charge.
1	163	White wash old work (1 coat)
		Providing and applying of white wash (with fat lime slaked at site, thinned with water and gum, ultramarine blue added to it) to give a smooth and even shade including cleaning and preparation of surface etc at all heights and locations with all bye works complete as per specification and instruction of Manager-in-charge.- Old work (one or more coats)
1	164	White wash old work (2 coat)
		Providing and applying of white wash (with fat lime slaked at site, thinned with water and gum, ultramarine blue added to it) to give a smooth and even shade including cleaning and preparation of surface etc at all heights and locations with all bye works complete as per specification and instruction of Manager-in-charge.- Old work (two or more coats) over removed colour wash/ distempered surface.
1	165	Colour wash old work (1 coat)
		Providing and applying colour wash (with basic white wash solution) of approved shade at all heights and location to give an even shade including cleaning and preparation of surfaces with all bye works complete as per specification and instruction of Manager-in-charge.'- Old work (one or more coats)
1	166	Colour wash old work (2 coat)
		Providing and applying colour wash (with basic white wash solution) of approved shade at all heights and location to give an even shade including cleaning and preparation of surfaces with all bye works complete as per specification and instruction of Manager-in-charge.'- Old work (two or more coats)
1	167	Colour wash new work (2 coat)
		Providing and applying colour wash (with basic white wash solution) of approved shade at all heights and location to give an even shade including cleaning and preparation of surfaces with all bye works complete as per specification and instruction of Manager-in-charge.'- New work (two or more coats)

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Line Item No	Activity SNo.	Description
		coats) with a base course of white washing
1	168	Acrylic Distemper (one coat)
		Distempering with 1st quality acrylic washable distemper (ready made) of approved manufacturer and of required shade and colour including cleaning and preparation of surface with all bye works complete as per manufacturer's specification.- Old work (one or more coats)
1	169	Acrylic Distemper (two coat)
		Distempering with 1st quality acrylic washable distemper (ready made) of approved manufacturer and of required shade and colour including cleaning and preparation of surface with all bye works complete as per manufacturer's specification.- New work (two or more coats)
1	170	Plastic emulsion paint-one coat
		Painting with plastic emulsion paint of approved brand and manufacturer to give an even shade in wall, ceiling of any kinds including cleaning and preparation of surface with all bye works as per instruction of MIC.- Old work (one or more coats)
1	171	Plastic emulsion paint-two coat
		Painting with plastic emulsion paint of approved brand and manufacturer to give an even shade in wall, ceiling of any kinds including cleaning and preparation of surface with all bye works as per instruction of MIC.- New work (two or more coats)
1	172	Red oxide zinc chromate primer
		Providing and applying one priming coat of red oxide zinc chromate primer of approved brand and manufacture confirming to IS:2074 on old steel work including cleaning of rust, scales, dust etc. all complete as per instruction of MIC.
1	173	Wood primer
		Providing and applying priming coat with ready mix pink or grey wood primer of approved brand and manufacture on wood work (hard and soft wood) all complete as per instruction of MIC.
1	174	Synthetic enamel paint- one coat
		Providing & applying high gloss synthetic enamel paint of approved brand of required colour of approved brand to give an even shade on wall / floor/ road/ steel or wood work including cleaning and preparation of surface with all bye works as per instruction of MIC.. - Old work (one or more coats)
1	175	Synthetic enamel paint- two coat
		Providing & applying high gloss synthetic enamel paint of approved brand of required colour of approved brand to give an even shade on wall / floor/ road/ steel or wood work including cleaning and preparation of surface with all bye works as per instruction of MIC.. - New work / old work (two or more coats)
1	176	Epoxy paint (two or more coats)
		Providing and applying with Epoxy paint (two or more coats) of approved brand and required colour to give an even shade on steel structures/road etc. all height and depth over prepared surface and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete as directed by Manager-in-charge.
1	177	Aluminium paint- one coat
		Painting with aluminium paint of approved brand and manufacturer to given an even shade. - One or more coat on old work
1	178	Aluminium paint- two coat
		Painting with aluminium paint of approved brand and manufacturer to given an even shade. - Two or more coat on new work
1	179	French sprit polishing- one coat
		French spirit polishing - Old work one or more coat

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Line Item No	Activity SNo.	Description
1	180	Black Japan paint- one coat
Providing and painting with black Japan paint of approved brand and manufacture conforming to IS-341 to give an even shade for base painting of lettering on wall at all height with all complete.- Old work one or more coat		
1	181	Black Japan paint- two coat
Providing and painting with black Japan paint of approved brand and manufacture conforming to IS-341 to give an even shade for base painting of lettering on wall at all height with all complete.- New work/ old work two or more coats		
1	182	Writing of lettering (Per letter)
Writing of lettering with approved white synthetic enamel paint (Unit of measurement is per letter per CM height).		
1	183	Writing name plate
Writing name plate with name, designation, unit name etc in one plate area upto 1.0m ² in front of quarters with coloured stickers on glass surface including back side film if required complete as per the direction of MIC.		
1	184	Painting black boards
Painting black-boards with Asian paint three mangos or equivalent suitable for black board painting one or more coat as per the direction of MIC.		
1	185	Writing of house number
Writing of house number white synthetic enamel paint of Asian/Berger brand over and including a circular base painting of size 250mm dia with black Japan / synthetic enamel paint at all heights as per the direction of MIC. (Two or more coats)		
1	186	WP Cement paint - one coat
Providing and applying water proofing cement paint of Berger or equivalent exterior masonry paint Portland cement base in powder form, (consisting white cement organic copolymer, pigments, fillers, additives etc.) of required shade including cleaning preparation of surface at all height and location with all bye work complete as per specification and direction of Manager-in-charge.- Old work (one or more coats)		
1	187	WP Cement paint - two coat
Providing and applying water proofing cement paint of Berger or equivalent exterior masonry paint Portland cement base in powder form, (consisting white cement organic copolymer, pigments, fillers, additives etc.) of required shade including cleaning preparation of surface at all height and location with all bye work complete as per specification and direction of Manager-in-charge.- New work / old work (two or more coats)		
1	188	Weather /exterior paint - one coat
Providing and applying with premium acrylic smooth exterior paint of approved brand i.e. "Berger Weather coat Long life/ Asian Apex Ultima/ Nerolac Excel Total /Dulux Weather Shield Max" of required shade applied @ 0.83 Ltr/ 10 Sqm including cleaning preparation of surface at all height and location with all bye work complete as per specification and direction of MIC. to give an even shade.- Old work (one or more coats)		
1	189	Weather /exterior paint - two coat
Providing and applying with premium acrylic smooth exterior paint of approved brand i.e. "Berger Weather coat Long life/ Asian Apex Ultima/ Nerolac Excel Total /Dulux Weather Shield Max" of required shade applied @ 0.83 Ltr/ 10 Sqm including cleaning preparation of surface at all height and location with all bye work complete as per specification and direction of MIC. to give an even shade.- New work/ old work (two or more coats) over @ 1.43 Ltr/ 10 Sqm over existing paint surface		
1	190	Textured exterior paint
Finishing walls with textured exterior paint of required shade :- Old work (Two or more coats on existing cement paint surface applied @ 3.28 ltr/10 sqm. including cleaning of existing surface by mechanical means, surface preparation, watering, arrangement and scaffolding etc. complete. Approved		

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Line Item No	Activity SNo.	Description
brand is Asian, Berger.		
1	191	Water thinnable cement primer
Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface :		
1	192	Dismantling of Brick work in sub.str
Dismantling/ demolishing of Brick work in sub structure like foundation, plinth, drain etc. including stacking of serviceable material and disposal of unserviceable material within a lead of 100mtr.		
1	193	Dismantling of Brick work in sup.str
Dismantling/ demolishing of Brick work with cement mortar in super structure of all heights above plinth including stacking of serviceable material and disposal of unserviceable material within a lead of 100mtr.		
1	194	Dismantling of PCC
Dismantling/ demolishing of Plain cement concrete(roof grading, pavement, flooring, gola etc. out side the building) including stacking of serviceable material and disposal of unserviceable material within a lead of 100mtr.		
1	195	Dismantling of RCC
Dismantling/ demolishing of RCC work including stacking of serviceable material and disposal of unserviceable material within a lead of 100mtr including cutting and straightening of reinforcement.		
1	196	Dismantling of RR masonry
Dismantling/ demolishing of RR masonry including stacking of serviceable material and disposal of unserviceable material within a lead of 100mtr.		
1	197	Dismantling of brick tile
Dismantling/ demolishing of Brick tile covering terracing including stacking of serviceable material and disposal of unserviceable material within a lead of 100mtr.		
1	198	Dismantling of mud phoska
Dismantling/ demolishing of Mud phoska in terracing 100- 150mm thick. including stacking of serviceable material and disposal of unserviceable material within a lead of 100mtr.		
1	199	Dismantling of C.P/Skirting
Dismantling/ demolishing of Cement plaster/ Skirting including racking out of joints. including stacking of serviceable material and disposal of unserviceable material within a lead of 100mtr.		
1	200	Dismantling of CC floor
Dismantling/ demolishing of Concrete floor 25/40mm thick (CC/mosaic/ IPS) inside the building including stacking of serviceable material and disposal of unserviceable material within a lead of 100mtr.		
1	201	Dismantling of tile work
Dismantling/ demolishing of Tile work in floor/roof/wall.(10mm to 25mm thickness) including stacking of serviceable material and disposal of unserviceable material within a lead of 100mtr.		
1	202	Removing mortar from brick
Dismantling/ demolishing of removing mortar from bricks and cleaning bricks including stacking within a lead of 50M from brick works in cement mortar (stacks of cleaned bricks shall be measured) including stacking of serviceable material and disposal of unserviceable material within a lead of 100mtr.		

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Line Item No	Activity SNo.	Description
1	203	Dismantling of damaged RCC OHT
Dismantling of damaged RCC OHT of capacity 270 to 1000 ltr capacity and disposal of debris upto a lead of 3.0 KM.		
1	204	Hacking of CC floor
Hacking of concrete floor /pavements/ plinth protection etc at a spacing of 50mm chisel, hammer etc. carefully for bonding of new work with old work as per the direction of Manager-in-charge.		
1	205	Cutting hole 7.5x 7.5 cm
Cutting of hole up to 7.5x7.5cm in RCC floor and roofs for passing pipes etc. and repairing the hole after insertion of drain pipes etc. with cement concrete 1:2:4 including finishing complete so as to make it leak proof. Through opening size shall be considered as hole size. (Cement free issue)		
1	206	Cutting hole 15x15cm
Cutting of hole up to 15x15cm and above in RCC floor and roofs for passing drain pipes etc. and repairing the hole after insertion of drain pipes etc. with cement concrete 1:2:4 including finishing complete so as to make it leak proof. (Cement free issue)		
1	207	Making Hole 20x20
Making holes up to 20x20cm and embedding pipe up to 150mmdia in masonry wall and filling with CC 1:2:4 including all cost complete as per direction of MIC (Cement free issue)		
1	208	Cutting Hole 30x30
Cutting of holes up to (30x30)cm in walls including making good the same with fly ash bricks. (Cement and fly ash brick free issue)		
1	209	Making chess/Groove
Making chase/ grooves up to 7.5cm in wall for concealing pipe including making good with CC 1:3:6, plastering etc. after housing pipe etc. complete (Cement free issue)		
1	210	Drilling of holes
Drilling of holes in RCC cooking platform for L.P.G. rubber pipes with all tools, tackles, labour etc. complete as per direction of Manager-in-charge		
1	211	Dismantling ceiling board
Dismantling Cement asbestos/ other hard board ceiling of partition walls including stacking of serviceable materials and disposal of unserviceable material within 50Mtr lead		
1	212	Cutting of reinforcement bar
Cutting of reinforcement bar up to 12mm dia on chajja, parapet, slab or any type of RCC work by gas or hacksaw as per direction of Manager-in-charge.		
1	213	Dismant. CI/AC/PVC RW pipe
Dismantling of CI/AC/PVC rain water pipe/ waste pipe Up to 150mm dia pipe with fittings, clamps and stacking at owner's store / Nalco scrap yard as directed by MIC.		
1	214	Dismantling of GI/UPVC pipe
Dismantling of GI/UPVC pipe including stacking at owner store / Nalco scrap yard as directed by MIC (with all fittings in the line) up to 40mm nominal bore- Excavation and refilling shall be paid in relevant items)		
1	215	Removing of high level cistern

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Line Item No	Activity SNo.	Description
		Removing of high level cistern including dismantling of brackets, flush pipe etc. complete and return to civil store / Nalco scrap yard as directed by MIC. #
1	216	Dismantling & refixing of WB/Sink
		Dismantling and refixing of wash basin / sink with relocation of existing brackets, finishing, making good the patches with cement mortar etc.
1	217	Dismantling of structural steel
		Dismantling of all type of structural steel works from all heights and location and returning to NALCO stores / Nalco scrap yard as directed by MIC. with all cost complete. #
1	218	Dismantling roofing (CGI/AC/Translucent
		Dismantling roofing (CGI /AC/ Translucent sheets) including ridges, hips, varies and gutters etc. and stacking the materials at departmental store / Nalco scrap yard as directed by MIC including transportation etc. all complete as directed for all heights. #
1	219	Dismant.RCC/MS fencing post
		Dismantling and stacking within 1KM lead as directed of RCC/MS fencing post or struts including all earth work and dismantling of concrete etc. in the base with all tools, tackles, labours etc. complete as per direction of Manager-in-charge.
1	220	Dismant.old barbed wire
		Dismantling of old barbed wire in fencing including making workable rolls and hand over the materials to department store / Nalco scrap yard as directed by MIC. #
1	221	Removing of old tarfelting
		Removing of old tarfelting from roof and wall and disposal of same within a lead of 50 M.
1	222	Dismant.door>window- 3sqm
		Dismantling doors, windows and clerestory windows (steel or wooden) shutter including chokaths, hold fast etc. complete and stacking the material at the department store / Nalco scrap yard as directed by MIC including transporting as directed.- Of area 3Sqm and below #
1	223	Dismant.door>window- 3sqm above
		Dismantling doors, windows and clerestory windows (steel or wooden) shutter including chokaths, hold fast etc. complete and stacking the material at the department store / Nalco scrap yard as directed by MIC including transporting as directed.- Of area beyond 3 Sqm and above #
1	224	Dismant WBM road
		Dismantling of WBM / bituminous road by manually/ mechanical means up to 300mm depth including stacking of serviceable material and disposing unserviceable material within 50mtr lead as per direction of Manager #in-charge.
1	225	Taking out door win -area 3Sqm & below
		Taking out of door and window shutters/ grill (steel or wooden/ grill) from existing door, window, ventilator, cupboard etc. with all bye works and stacking at department store including transporting as directed. - Of area 3 Sqm and below
1	226	Taking out door win-area beyond 3Sqm
		Taking out of door and window shutters/ grill (steel or wooden/ grill) from existing door, window, ventilator, cupboard etc. with all bye works and stacking at department store including transporting as directed. - Of area beyond 3 Sqm
1	227	Repair of wooden door & window
		Repair of wooden panel door & window shutter by renewing the damaged stiles/ rails/paneling including removing and refixing of panel and old/new fittings with all cost of labour, jointing materials, T&P, carriage of shutter etc. complete as directed. New wood , board and fittings shall be paid extra

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Line Item No	Activity SNo.	Description
separately. (Full area of shutter shall be measured for payment)		
#		
1	228	Repairing of Choukath
Repairing of Choukath (wooden) including fixing of wooden piece with nail and screws etc. (use of wood shall be paid in separate item)		
1	229	Lab. easing of door/ window shutter
Labour charges for easing of door/ window shutter		
1	230	Greasing of steel window hinges
Greasing of steel window hinges and making it free for operation of window leaf including cleaning of scaling, dust etc.		
1	231	Fixing of choukath
Fixing PVC/FRP choukath in existing opening in brick / RCC wall with dash fasteners of appropriate size / chemical fasteners (3nos on Each vertical member of door choukath and 2nos on vertical member of window 1.2mtr height as per COWED specification including cost of dash fastener. / chemical fastener.		
1	232	Making the opening
Making the opening in brick masonry including dismantling in floor or wall by cutting masonry and making good the damages to walls flooring and jams complete to match existing surface including disposal of rubbish - For door/window/ventilator		
1	233	Fixing of wiremesh
Fixing of wire mesh with wooden fillate/beading,nail,clips etc. in panel doors and windows excluding the cost of wire mesh.		
1	234	Fixing door closer/mortice lock
Fixing of wooden door and window fittings with necessary screws as directed, including removing of existing old / damaged one if any. (excluding cost of fittings.)- Door closer/ mortise lock		
1	235	Fixing Door stopper/TB/Handle/Knob
Fixing of wooden door and window fittings with necessary screws as directed, including removing of existing old / damaged one if any. (excluding cost of fittings.)- Door stopper/ tower bolt/ handle/ ward robe knob/ wooden cleat/ hasp and staple/ hooks and eye/ hinges		
1	236	Fixing Sliding door bolt
Fixing of wooden door and window fittings with necessary screws as directed, including removing of existing old / damaged one if any. (excluding cost of fittings.)- Sliding door bolt		
1	237	Fixing Piano hinges
Fixing of wooden door and window fittings with necessary screws as directed, including removing of existing old / damaged one if any. (excluding cost of fittings.)- Piano hinges		
1	238	Fixing of wooden Door per leaf
Fixing of wooden shutter (door, window, ventilator) in position with necessary screw,nail etc. but excluding cost of fittings as directed. (Labour cost only) - Door per leaf		
1	239	Fixing of wooden Window per leaf
Fixing of wooden shutter (door, window, ventilator) in position with necessary screw,nail etc. but excluding cost of fittings as directed. (Labour cost only) - Window/ ventilator per leaf		
1	240	Extra for carriage of door,

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Line Item No	Activity SNo.	Description
Extra for carriage of door, window, ventilator etc. From department store for fixing in township quarters		
1	241	Fixing of wooden Door frame
Fixing of wooden doors, windows, ventilator chokath in existing opening including chipping if necessary and embedding chowkhats in floors or walls, cutting masonry for hold fasts embedding hold fasts in cement concrete blocks of size 15x10x10cm with cement concrete 1:3:6 (1 cement: 3 coarse sand: 6 graded stone aggregate 20mm nominal size) or by welding to steel frame or by both and making good the damages to wall, floor, plaster as required with all bye works and disposal of rubbish to dumping ground.(Cement free issue)- Door frame		
1	242	Fixing of wooden Window frame
Fixing of wooden doors, windows, ventilator chokath in existing opening including chipping if necessary and embedding chowkhats in floors or walls, cutting masonry for hold fasts embedding hold fasts in cement concrete blocks of size 15x10x10cm with cement concrete 1:3:6 (1 cement: 3 coarse sand: 6 graded stone aggregate 20mm nominal size) or by welding to steel frame or by both and making good the damages to wall, floor, plaster as required with all bye works and disposal of rubbish to dumping ground.(Cement free issue)- Window frame		
1	243	Fixing of wooden Clerestory window frame
Fixing of wooden doors, windows, ventilator chokath in existing opening including chipping if necessary and embedding chowkhats in floors or walls, cutting masonry for hold fasts embedding hold fasts in cement concrete blocks of size 15x10x10cm with cement concrete 1:3:6 (1 cement: 3 coarse sand: 6 graded stone aggregate 20mm nominal size) or by welding to steel frame or by both and making good the damages to wall, floor, plaster as required with all bye works and disposal of rubbish to dumping ground.(Cement free issue)- Clerestory window frame		
1	244	Fixing MS grill
Fixing of MS grill in wooden chokath/ steel frame with necessary screw and / or welding as per the requirement at site.		
1	245	P/F ply board 4mm th BWP
Providing & fixing of ply board of Century, Kitply, Green ply, Mayur brand and of required size with necessary screw and nails as directed (in door, window, cupboard, partition etc.).- 4mm th. Teak ply IS-303		
1	246	P/F ply board 6mm th BWP
Providing & fixing of ply board of Century, Kitply, Green ply, Mayur brand and of required size with necessary screw and nails as directed (in door, window, cupboard, partition etc.).-6mm th. BWP ply IS: 303		
1	247	P/F ply board 9mm th BWP
Providing & fixing of ply board of Century, Kitply, Green ply, Mayur brand and of required size with necessary screw and nails as directed (in door, window, cupboard, partition etc.).-9mm th. BWP ply IS: 303		
1	248	P/F ply board 12mm th BWP
Providing & fixing of ply board of Century, Kitply, Green ply, Mayur brand and of required size with necessary screw and nails as directed (in door, window, cupboard, partition etc.).-12mm th. BWP ply IS: 303		
1	249	P/F ply board 18mm th BWP
Providing & fixing of ply board of Century, Kitply, Green ply, Mayur brand and of required size with necessary screw and nails as directed (in door, window, cupboard, partition etc.).-18mm th. BWP ply IS: 303		
1	250	12mm prelaminated particle board
Providing & fixing of ply board of required size with necessary screw and nails as directed (in door, window, cupboard, partition etc.).-12mm prelaminated particle board (one side decorative)		

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Line Item No	Activity SNo.	Description
1	251	18mm prelaminate particle board
Providing & fixing of ply board of required size with necessary screw and nails as directed (in door, window, cupboard, partition etc.).-18mm thick prelaminate particle board with decorative lamination on one side and balancing lamination on other side grade-1 type -II IS : 12823 marked.		
1	252	6mm Bison panel cement bonded plain
Providing & fixing of ply board of required size with necessary screw and nails as directed (in door, window, cupboard, partition etc.).-6mm Bison panel cement bonded plain		
1	253	16mm Bison panel cement bonded lam
Providing & fixing of ply board of required size with necessary screw and nails as directed (in door, window, cupboard, partition etc.).-16mm Bison panel cement bonded lam		
1	254	Renewal of old putty
Renewal of old putty or refixing of old glass panes at all heights up to 10Mtr EL with sash putty of approved brand (Superfix) and necessary clip and nails including removing of old putty, cleaning of glass panes, staging and scaffolding, painting one coat of synthetic enamel paints over the putty lining surface and all bye works etc. all cost complete as per specification and direction of Manager-in-charge.		
1	255	Renewing Glass panes (pin head) 4mm
Renewing glass panes in windows / ventilators/doors including supplying and fixing special metal sash putty of approved brand and manufacture confirming to IS-419 and necessary glazing clips / nails for ground floor, removing and disposing of broken glass and old putty to identified place as directed including staging, scaffolding and all bye works etc. all cost complete as per specification and direction of Manager-in-charge.- Glass panes (pin head) 4mm thick		
1	256	Renewing Glass panes (float glass) 4mm t
Renewing glass panes in windows / ventilators/doors including supplying and fixing special metal sash putty of approved brand and manufacture confirming to IS-419 and necessary glazing clips / nails for ground floor, removing and disposing of broken glass and old putty to identified place as directed including staging, scaffolding and all bye works etc. all cost complete as per specification and direction of Manager-in-charge.- Glass panes (float glass) 4mm thick		
1	257	Renewing Glass panes (float glass) 5.5mm
Renewing glass panes in windows / ventilators/doors including supplying and fixing special metal sash putty of approved brand and manufacture confirming to IS-419 and necessary glazing clips / nails for ground floor, removing and disposing of broken glass and old putty to identified place as directed including staging, scaffolding and all bye works etc. all cost complete as per specification and direction of Manager-in-charge.- Glass panes (float glass) 5mm thick		
1	258	Black glass panes (float glass) 5.5mm th
Renewing glass panes in windows / ventilators/doors including supplying and fixing special metal sash putty of approved brand and manufacture confirming to IS-419 and necessary glazing clips / nails for ground floor, removing and disposing of broken glass and old putty to identified place as directed including staging, scaffolding and all bye works etc. all cost complete as per specification and direction of Manager-in-charge.- Black glass panes (float glass) 5mm thick		
1	259	Toughen plain / black glass panes 5.5mm
Renewing glass panes in windows / ventilators/doors including supplying and fixing special metal sash putty of approved brand and manufacture confirming to IS-419 and necessary glazing clips / nails for ground floor, removing and disposing of broken glass and old putty to identified place as directed including staging, scaffolding and all bye works etc. all cost complete as per specification and direction of Manager-in-charge.- Toughen plain / black glass panes 5mm thick		
1	260	Renewing glass pan pin head 3-4mm GF
Renewing glass panes (pin head) 3mm to 4mm thick and refixing of existing wooden fillets in wooden windows / ventilators/ doors including nails, screws and new wooden fillets wherever necessary for all heights of building including removing of old glass panes and wooden fillets disposing of broken glass to identified place as directed including staging, scaffolding and all bye works etc. all cost complete as per specification and direction of		

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Line Item No	Activity SNo.	Description
Manager-in-charge- for Ground floor		
1	261	Extra lab. charge of glass in First fl
Extra labour charge for fixing of glass in First floor (all type of glass)		
1	262	Extra lab. charge glass in S/F and abo
Extra labour charge for fixing of glass in Second floor and above.(all type of glass)		
1	263	Sliding arrangement in racks
Providing and fixing sliding arrangement in racks/ cupboards/ cabinets shutters by stainless roller to run inside C or E aluminium channel section.(The payment of C or E channel shall be made separately)		
1	264	Al channel section in rack
Providing and fixing C or E aluminium channel section in racks/ cupboard/ cabinet shutters as per direction of Manager #in-charge.		
1	265	Expanded metal gauge
Providing & fixing expanded metal gauge of size 20x60mm & strands 3.25mm wide 1.6mm thick weighing 3.64 kg/Sqm for window etc.		
1	266	MS wire gauge
Providing and fixing fly proof galvanized MS wire gauge to windows, ventilator, door etc. using galvanized MS wire gauge with average width of aperture 1.4mm in both direction with wire of dia 0.63mm.- With beading, nail, screw etc as required all cost complete. (Wooden beading if required shall be paid in the respective item)		
1	267	Stainless wire mesh
Do- stainless steel wire mesh of aperture 1.5mm with wire of dia 0.63mm with wooden fillet and necessary nails.Wooden beading shall be paid in respective items. (Restricted item shall be operated with due permission.)		
1	268	Magnetic catcher
Providing and fixing magnetic catcher in cupboard- Triple strip vertical type		
1	269	Receiving attending the complains
Receiving order from civil maintenance office and attending the complains i.e inspecting the defects, attending the minor and emergency carpentry work by taking the fittings and materials from department store and getting the signature of occupants, listing out the details of materials and job requirement for solving the major defects and giving the feed back to civil department by engaging one semiskilled worker per shift basis.		
1	270	P/F wash basin 550x400mm
Providing and fixing of following white vitreous china (porcelain) sanitary fitting (Hindware/ Perryware/ Neycer/ Cera make) including making all connections but excluding the cost of other fitting as per direction of MIC including replacing by removing/ dismantling of damaged material and stacking or disposal of debris to identified area within a lead of 1.0KM where ever required etc. complete.- Flat back wash basin size 550x400mm (Cement free issue)		
1	271	P/F Wash basin counter sunk type
Providing and fixing of following white vitreous china (porcelain) sanitary fitting (Hindware/ Perryware/ Neycer/ Cera make) including making all connections but excluding the cost of other fitting as per direction of MIC including replacing by removing/ dismantling of damaged material and stacking or disposal of debris to identified area within a lead of 1.0KM where ever required etc. complete.- Wash basin counter sunk type for non-residential building (Cement free issue)		

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Line Item No	Activity SNo.	Description
1	272	P/F Kitchen sink 600x450x250mm
Providing and fixing of following white vitreous china (porcelain) sanitary fitting (Hindware/ Perryware/ Neycer/ Cera make) including making all connections but excluding the cost of other fitting as per direction of MIC including replacing by removing/ dismantling of damaged material and stacking or disposal of debris to identified area within a lead of 1.0KM where ever required etc. complete.- Kitchen sink size 600x450x250mm (Cement free issue)		
1	273	P/F half stall urinal 580x380x350
Providing and fixing of following white vitreous china (porcelain) sanitary fitting (Hindware/ Perryware/ Neycer/ Cera make) including making all connections but excluding the cost of other fitting as per direction of MIC including replacing by removing/ dismantling of damaged material and stacking or disposal of debris to identified area within a lead of 1.0KM where ever required etc. complete.- Flat back half stall urinal of standard size (580x380x350mm) with 32mm waste and waste pipe.		
1	274	P/F Squatting plate urinal
Providing and fixing of following white vitreous china (porcelain) sanitary fitting (Hindware/ Perryware/ Neycer/ Cera make) including making all connections but excluding the cost of other fitting as per direction of MIC including replacing by removing/ dismantling of damaged material and stacking or disposal of debris to identified area within a lead of 1.0KM where ever required etc. complete.- Vitreous china squatting plate urinal with all fittings.		
1	275	P/F Urinal channel 300x150mm
Providing and fixing of following white vitreous china (porcelain) sanitary fitting (Hindware/ Perryware/ Neycer/ Cera make) including making all connections but excluding the cost of other fitting as per direction of MIC including replacing by removing/ dismantling of damaged material and stacking or disposal of debris to identified area within a lead of 1.0KM where ever required etc. complete.- Urinal channel 300x150mm		
1	276	P/F WC pan Orissa 580x440mm
Providing and fixing of following white vitreous china (porcelain) sanitary fitting (Hindware/ Perryware/ Neycer/ Cera make) including making all connections but excluding the cost of other fitting as per direction of MIC including replacing by removing/ dismantling of damaged material and stacking or disposal of debris to identified area within a lead of 1.0KM where ever required etc. complete.- Indian type Orissa pattern WC pan of size 580x440mm excluding the cost of dismantling/ cutting of floor (Cement free issue)		
1	277	P/F European WC pan
Providing and fixing of following white vitreous china (porcelain) sanitary fitting (Hindware/ Perryware/ Neycer/ Cera make) including making all connections but excluding the cost of other fitting as per direction of MIC including replacing by removing/ dismantling of damaged material and stacking or disposal of debris to identified area within a lead of 1.0KM where ever required etc. complete.- Pedestal type WC pan (European type/ Wash down type) (Cement free issue)		
1	278	P/F Draining board 600x450x25
Providing and fixing of following white vitreous china (porcelain) sanitary fitting (Hindware/ Perryware/ Neycer/ Cera make) including making all connections but excluding the cost of other fitting as per direction of MIC including replacing by removing/ dismantling of damaged material and stacking or disposal of debris to identified area within a lead of 1.0KM where ever required etc. complete.- Draining board size 600x450x25mm (Cement free issue)		
1	279	Stone slab 18mm (Urinal parition)
Providing and fixing stone slab 18mm thick with table rubbed, edges rounded and polished, of required size fixed as urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6 mm nominal size) as per direction of Manager-in-charge and finished smooth.-White Agaria Marble Stone		
1	280	Fixing SS sink 610x460mm
Fixing of stainless steel kitchen sink of overal size 610x 460mm in place of mosaic sink in the existing space of different quarters at all heights with dismantling of existing sink, necessary relocation of existing bracket if required complete with all labour, tool and tackles etc. If necessary, cutting of existing Kuddappa stone / concrete slab on kitchen platform and cutting/ chipping of wall surface and any other bye work like finishing with white cement etc. and making good the surfaces with all cost complete including disposal of debris within 100m lead as per direction of MIC. (The stainless steel sink and waste coupling will be supplied by Nalco at its store as free issue materials) (cement free issue)		
1	281	P/F SS sink 610x460mm
Providing and fixing of stainless steel kitchen sink of overal size 610x 460mm in the existing space of different quarters at all heights with dismantling of		

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Line Item No	Activity SNo.	Description
		existing sink, necessary relocation of existing bracket if required complete with all labour, tool and tackles etc. If necessary, cutting of existing Kuddappa stone / concrete slab on kitchen platform and cutting/ chipping of wall surface and any other bye work like finishing with white cement etc. and making good the surfaces with all cost complete including disposal of debris within 100m lead as per direction of MIC. on basis of separate approval (cement free issue)
1	282	PTMT 50mm waste for steel sink
		Providing and fixing of PTMT 50mm waste for stainless steel sink /porcelene sink
1	283	P/F CI bracket (incl cost)
		Providing and fixing of CI/MS brackets for wash basin/ sink (grouting type) grouted in wall with cement concrete and making the wall good and including painting of brackets (cement free issue)- Including cost of CI brackets.
1	284	P/F CI bracket (excl cost)
		Providing and fixing of CI/MS brackets for wash basin/ sink (grouting type) grouted in wall with cement concrete and making the wall good and including painting of brackets (cement free issue)- EXcluding cost of CI brackets.
1	285	P/F Glass shelf 600x120x5mm
		Providing and fixing 600x120x5mm glass shelf with edges round of supported on anodized aluminium angle frame with CP brass, brackets and guard rail complete fixed with 40mm long screws, rawl plugs etc. complete.
1	286	P/F PVC flushing Cistern
		Providing and fixing 10 lit. capacity low level PVC flushing cistern with manually control device (handle lever) conforming to IS-7231 of (Parry ware/ Hindware / Seabird/ Orient Coral) make with all integral fittings 40mm flush bend CI/MS bracket and fixtures complete including removing the old one where ever required. (flush pipe for Indian type WC shall be paid extra)
1	287	P/F PVC long flush bend 40mm
		Extra for providing and fixing 40mm dia long flush bend pipe connection for Indian type WC low level cistern including cutting of floor, jointing, grouting with CC 1:2:4 and making good the floor finished smooth etc complete including removing the existing damaged one where ever required. (cement free issue)
1	288	P/F plastic seat with lid
		Providing and fixing white solid plastic seat with lid for pedestal type WC pan complete
1	289	P/F MS bat clamp 100mm pipe
		Providing and fixing MS holder bat clamps of approved design to CI/ PVC pipe including drilling MS screw 75mm length and PVC clips etc. including cutting hole and racking gap all bye works complete 100mm dia pipe
1	290	P/F MS bat clamp 75mm pipe
		Providing and fixing MS holder bat clamps of approved design to CI/ PVC pipe including drilling MS screw 75mm length and PVC clips etc. including cutting hole and racking gap all bye works complete -75mm dia pipe
1	291	P/F mirror 600x450
		Providing and fixing 600x450mm size Beveled edge mirror superior glass of approved quality complete with 6mm hard board / AC sheet ground fixed to wooden cleat with CP brass screw and washers complete including removing, dismantling of existing damaged mirror and disposal if required.
1	292	Teak frame for mirror 50/20
		Providing and fixing Mirror of superior glass (of approved quality) of required shape and size with 6mm thick hard board backing.- Required size teak

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Line Item No	Activity SNo.	Description
wood moulded designer frame of 50x20mm including painting / polishing of required size.		
1	293	Fix.PVC pipe 75mm dia
Labour charges for fixing PVC rain water pipe on wall surface, waste water sewerage line etc including jointing with seal ring ,carriage, tools and tackles, scaffolding etc. all bye works etc all elevation - 50/75mm dia		
1	294	Fix.PVC pipe 110mm dia
Labour charges for fixing PVC rain water pipe on wall surface, waste water sewerage line etc including jointing with seal ring ,carriage, tools and tackles, scaffolding etc. all bye works etc all elevation - 110mm dia		
1	295	Fix.PVC moulded fitting 75mm
Labour charges for fixing PVC moulded fittings / accessories for UPVC rain water and sewerage waste pipe line including jointing with seal ring, carriage, tools and tackles, scaffolding etc. all bye works etc all elevation - 75 mm dia (coupler, single and cross tee, plain and door bend, shoe, cowl, WC connector)		
1	296	Fix.PVC moulded fitting 110mm
Labour charges for fixing PVC moulded fittings / accessories for UPVC rain water and sewerage waste pipe line including jointing with seal ring, carriage, tools and tackles, scaffolding etc. all bye works etc all elevation - 110 mm dia (coupler, single and cross tee, plain and door bend, shoe, cowl, WC connector)		
1	297	Fix.PVC floor/gully trap 75/110mm
Labour charges for fixing PVC floor trap/gully trap for UPVC sewerage waste pipe line including jointing with seal ring , carriage, tools and tackles, scaffolding etc. all bye works etc all elevation - 75/110 mm inlet and outlet (Floor trap, nahani trap, WC trap)		
1	298	P/F CPVC pipe external 15mm OD
Providing and fixing chlorinated polyvinyl chloride (CPVC) pipes of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp , having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings. This includes jointing of pipes and fittings with one step CPVC solvent cement, trenching, refilling and testing of joints complete as per direction of MIC. (External work) for new connection- 15mm nominal outer dia pipes		
1	299	P/F CPVC pipe external 20mm OD
Providing and fixing chlorinated polyvinyl chloride (CPVC) pipes of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp , having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings. This includes jointing of pipes and fittings with one step CPVC solvent cement, trenching, refilling and testing of joints complete as per direction of MIC. (External work) for new connection- 20mm nominal outer dia pipes		
1	300	P/F CPVC pipe external 25mm OD
Providing and fixing chlorinated polyvinyl chloride (CPVC) pipes of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp , having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings. This includes jointing of pipes and fittings with one step CPVC solvent cement, trenching, refilling and testing of joints complete as per direction of MIC. (External work) for new connection- 25mm nominal outer dia pipes		
1	301	P/F CPVC pipe external 32mm OD
Providing and fixing chlorinated polyvinyl chloride (CPVC) pipes of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp , having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings. This includes jointing of pipes and fittings with one step CPVC solvent cement, trenching, refilling and testing of joints complete as per direction of MIC. (External work) for new connection- 32mm nominal outer dia pipes		

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
1	302	P/F CPVC pipe external 40mm OD
Providing and fixing chlorinated polyvinyl chloride (CPVC) pipes of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp , having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings. This includes jointing of pipes and fittings with one step CPVC solvent cement, trenching, refilling and testing of joints complete as per direction of MIC. (External work) for new connection- 40mm nominal outer dia pipes		
1	303	P/F CPVC pipe external 50mm OD
Providing and fixing chlorinated polyvinyl chloride (CPVC) pipes of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp , having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings. This includes jointing of pipes and fittings with one step CPVC solvent cement, trenching, refilling and testing of joints complete as per direction of MIC. (External work) for new connection- 50mm nominal outer dia pipes		
1	304	P/F CPVC pipe internal 15mm OD
Providing and fixing chlorinated polyvinyl chloride (CPVC) pipes of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp ,having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings. This includes jointing of pipes and fittings with one step CPVC solvent cement, trenching, refilling and testing of joints, fixing the pipe with clamps @ 1.0 mtr spacing, applying white cement wherever required complete as per direction of MIC. (Internal work- exposed on wall) for new connection- 15mm nominal outer dia pipes		
1	305	P/F CPVC pipe internal 20mm OD
Providing and fixing chlorinated polyvinyl chloride (CPVC) pipes of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp ,having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings. This includes jointing of pipes and fittings with one step CPVC solvent cement, trenching, refilling and testing of joints, fixing the pipe with clamps @ 1.0 mtr spacing, applying white cement wherever required complete as per direction of MIC. (Internal work- exposed on wall) for new connection- 20mm nominal outer dia pipes		
1	306	P/F CPVC pipe internal 25mm OD
Providing and fixing chlorinated polyvinyl chloride (CPVC) pipes of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp ,having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings. This includes jointing of pipes and fittings with one step CPVC solvent cement, trenching, refilling and testing of joints, fixing the pipe with clamps @ 1.0 mtr spacing, applying white cement wherever required complete as per direction of MIC. (Internal work- exposed on wall) for new connection- 25mm nominal outer dia pipes		
1	307	P/F CPVC pipe internal 32mm OD
Providing and fixing chlorinated polyvinyl chloride (CPVC) pipes of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp ,having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings. This includes jointing of pipes and fittings with one step CPVC solvent cement, trenching, refilling and testing of joints, fixing the pipe with clamps @ 1.0 mtr spacing, applying white cement wherever required complete as per direction of MIC. (Internal work- exposed on wall) for new connection- 32mm nominal outer dia pipes		
1	308	P/F CPVC pipe internal 40mm OD
Providing and fixing chlorinated polyvinyl chloride (CPVC) pipes of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp ,having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings. This includes jointing of pipes and fittings with one step CPVC solvent cement, trenching, refilling and testing of joints, fixing the pipe with clamps @ 1.0 mtr spacing, applying white cement wherever required complete as per direction of MIC. (Internal work- exposed on wall) for new connection- 40mm nominal outer dia pipes		
1	309	P/F CPVC pipe internal 50mm OD
Providing and fixing chlorinated polyvinyl chloride (CPVC) pipes of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR		

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
		13.5 and working pressure of 2.18MPa at normal temp ,having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings. This includes jointing of pipes and fittings with one step CPVC solvent cement, trenching, refilling and testing of joints, fixing the pipe with clamps @ 1.0 mtr spacing, applying white cement wherever required complete as per direction of MIC. (Internal work- exposed on wall) for new connection- 50mm nominal outer dia pipes
1	310	Lab. CPVC pipe 15-20mm
		Labour charges for laying, fixing of CPVC pipe including jointing of pipe and fittings with CPVC solvent cement and clamp as per direction of Manager #in-charge.-15mm to 20mm nominal outer dia pipes
1	311	Lab. CPVC pipe 25-32mm
		Labour charges for laying, fixing of CPVC pipe including jointing of pipe and fittings with CPVC solvent cement and clamp as per direction of Manager #in-charge.-25mm to 32mm nominal outer dia pipes
1	312	Lab. CPVC pipe 40-50mm
		Labour charges for laying, fixing of CPVC pipe including jointing of pipe and fittings with CPVC solvent cement and clamp as per direction of Manager #in-charge.-40mm to 50mm nominal outer dia pipes
1	313	Lab. GI pipe 15-20mm
		Labour charges for laying, fixing of GI pipe including jointing GI fittings and clamp as per direction of Manager #in-charge.- 15mm nominal bore to 20mm nominal bore
1	314	Lab. GI pipe 25-32mm
		Labour charges for laying, fixing of GI pipe including jointing GI fittings and clamp as per direction of Manager #in-charge.- 25mm nominal bore to 32mm nominal bore
1	315	Lab. GI pipe 40-50mm
		Labour charges for laying, fixing of GI pipe including jointing GI fittings and clamp as per direction of Manager #in-charge.- 40mm nominal bore to 50mm nominal bore
1	316	Making connection GI pipe
		Making connection of GI distribution branch with GI main 25mm to 40mm nominal bore by fixing Tee, including cutting and threading the pipe etc. complete. (excluding the cost of fittings)
1	317	Lab.for GM valve upto 25mm
		Labour charges for fixing of GM valve in pipe line - up to 25mm dia
1	318	Lab.for GM valve above 25mm
		Labour charges for fixing of GM valve in pipe line - above 25mm dia to 50mm
1	319	Lab. union in pipe upto 25mm
		Labour charges for fixing union in pipe line including cutting threading-jointing etc complete.- up to 25mm dia
1	320	Lab. union in pipe above 25mm
		Labour charges for fixing union in pipe line including cutting threading-jointing etc complete.- above 25mm dia to 50mm
1	321	Labour bib and pillar cock
		Labour charges for fixing of bib cock and pillar cock

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Line Item No	Activity SNo.	Description
1	322	Lab. for fixing of float valve Labour charges for fixing of float valve in OHT (15 to 25mm dia)
1	323	P/F GM gate valve 25mm Providing and fixing Gun metal gate valve with CI wheel of approved quality (ISI marked)-25mm nominal bore
1	324	P/F GM gate valve 32mm Providing and fixing Gun metal gate valve with CI wheel of approved quality (ISI marked)-32mm nominal bore
1	325	P/F GM gate valve 40mm Providing and fixing Gun metal gate valve with CI wheel of approved quality (ISI marked)-40mm nominal bore
1	326	P/F GM gate valve 50mm Providing and fixing Gun metal gate valve with CI wheel of approved quality (ISI marked)-50mm nominal bore
1	327	P/F GM ball valve 15mm Providing and fixing Gun metal Ball valve with handle of approved quality - 15mm nominal bore
1	328	P/F GM ball valve 20mm Providing and fixing Gun metal Ball valve with handle of approved quality - 20mm nominal bore
1	329	P/F CI spun upto 300mm Providing CI Spun specials (such as tees, plugs, bends, collars, tappers, cans etc. (heavy class).- up to 300mm dia.
1	330	P/F CI spun over 300mm Providing CI Spun specials (such as tees, plugs, bends, collars, tappers, cans etc. (heavy class).- over 300mm dia.
1	331	CI double flanged SV 100mm Providing double flanged CI sluice valve confirming to IS:780 (1980) class-1I with all bolts, nuts, rubber insertion caps, gaskets, hand wheel etc. all as specified including testing to pressure.- 100mm dia
1	332	CI double flanged SV 150mm Providing double flanged CI sluice valve confirming to IS:780 (1980) class-1I with all bolts, nuts, rubber insertion caps, gaskets, hand wheel etc. all as specified including testing to pressure.- 150mm dia
1	333	CI double flanged SV 200mm Providing double flanged CI sluice valve confirming to IS:780 (1980) class-1I with all bolts, nuts, rubber insertion caps, gaskets, hand wheel etc. all as specified including testing to pressure.- 200mm dia
1	334	CI double flanged SV 250mm Providing double flanged CI sluice valve confirming to IS:780 (1980) class-1I with all bolts, nuts, rubber insertion caps, gaskets, hand wheel etc. all as specified including testing to pressure.- 250mm dia
1	335	CI double flanged SV 300mm Providing double flanged CI sluice valve confirming to IS:780 (1980) class-1I with all bolts, nuts, rubber insertion caps, gaskets, hand wheel etc. all as specified including testing to pressure.- 300mm dia

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Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
		as specified including testing to pressure.- 300mm dia
1	336	Titan rubber ring 80mm
		Providing titan rubber rings of approved quality.- 80mm dia.
1	337	Titan rubber ring 100mm
		Providing titan rubber rings of approved quality.- 100mm dia.
1	338	Titan rubber ring 150mm
		Providing titan rubber rings of approved quality.- 150mm dia.
1	339	Titan rubber ring 200mm
		Providing titan rubber rings of approved quality.- 200mm dia.
1	340	Titan rubber ring 300mm
		Providing titan rubber rings of approved quality.- 300mm dia.
1	341	MS flange for CI pipe 80mm
		Providing of MS flange for CI pipe and specials- 80mm dia
1	342	MS flange for CI pipe 100mm
		Providing of MS flange for CI pipe and specials- 100mm dia
1	343	MS flange for CI pipe 150mm
		Providing of MS flange for CI pipe and specials- 150mm dia
1	344	MS flange for CI pipe 200mm
		Providing of MS flange for CI pipe and specials- 200mm dia
1	345	MS flange for CI pipe 250mm
		Providing of MS flange for CI pipe and specials- 250mm dia
1	346	MS flange for CI pipe 300mm
		Providing of MS flange for CI pipe and specials- 300mm dia
1	347	MS flange for CI pipe 400mm
		Providing of MS flange for CI pipe and specials- 400mm dia
1	348	Sup.Gasket flang/valve 300x300mm
		Supplying the following materials for repairing works for CI pipe .- Gasket for flange /valve joint Size (300x300mm)
1	349	Sup.Nut 7 bolt with washer
		Supplying the following materials for repairing works for CI pipe .- Nuts and bolt of required size (with washers).
1	350	Sup.Grease
		Supplying the following materials for repairing works for CI pipe .- Grease

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Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
1	351	Sup.Gland packing
Supplying the following materials for repairing works for CI pipe .- Gland packing		
1	352	P/F brass ferrule 20mm
Providing and fixing brass ferrule CI mouth with followings including boring and tapping the main.- 20/ 25 mm dia.		
1	353	P/F body seat ring
Providing of following spare parts for sluice valves - Body seat ring		
1	354	P/F wedge facing ring
Providing of following spare parts for sluice valves - Wedge facing ring		
1	355	P/F wedge nut
Providing of following spare parts for sluice valves - Wedge nut		
1	356	P/F hand wheel
Providing of following spare parts for sluice valves - Hand wheel		
1	357	Receiving job orders- semi skilled
Receiving the job orders from the Civil Engg. deptt (Township Maintenance) to attendance emergency maintenance work and minor repair maintenance water supply, sanitary and miscellaneous civil works as and when required with plumbing tools and tackles kits, ladder, electrical hand drilling machine, on daily basis. (supplying one semi skilled manpower)		
1	358	Receiving job orders- unskilled
Receiving the job orders from the Civil Engg. deptt (Township Maintenance) to attendance emergency maintenance work and minor repair maintenance water supply, sanitary and miscellaneous civil works as and when required with plumbing tools and tackles kits, ladder, electrical hand drilling machine, on daily basis. (supplying one unskilled manpower)		
1	359	Dismt of CI pipe 80mm
Dismantling and removing of old CI pipe line including CI special, taking out the pipes, breaking lead caulked joint, melting of lead and making into blocks including transportation and stacking of CI pipes and led from site to department store with all tools and tackles excluding the cost of excavation.-80mm dia		
1	360	Dismt of CI pipe 100mm
Dismantling and removing of old CI pipe line including CI special, taking out the pipes, breaking lead caulked joint, melting of lead and making into blocks including transportation and stacking of CI pipes and led from site to department store with all tools and tackles excluding the cost of excavation.-100mm dia		
1	361	Dismt of CI pipe 150mm
Dismantling and removing of old CI pipe line including CI special, taking out the pipes, breaking lead caulked joint, melting of lead and making into blocks including transportation and stacking of CI pipes and led from site to department store with all tools and tackles excluding the cost of excavation.-150mm dia		
1	362	Dismt of CI pipe 200mm
Dismantling and removing of old CI pipe line including CI special, taking out the pipes, breaking lead caulked joint, melting of lead and making into blocks including transportation and stacking of CI pipes and led from site to department store with all tools and tackles excluding the cost of excavation.-200mm dia		
1	363	Dismt of CI pipe 250mm

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Line Item No	Activity SNo.	Description
Dismantling and removing of old CI pipe line including CI special, taking out the pipes, breaking lead caulked joint, melting of lead and making into blocks including transportation and stacking of CI pipes and led from site to department store with all tools and tackles excluding the cost of excavation.-250mm dia		
1	364	Dismt of CI pipe 300mm
Dismantling and removing of old CI pipe line including CI special, taking out the pipes, breaking lead caulked joint, melting of lead and making into blocks including transportation and stacking of CI pipes and led from site to department store with all tools and tackles excluding the cost of excavation.-300mm dia		
1	365	Dismt of CI pipe 400mm
Dismantling and removing of old CI pipe line including CI special, taking out the pipes, breaking lead caulked joint, melting of lead and making into blocks including transportation and stacking of CI pipes and led from site to department store with all tools and tackles excluding the cost of excavation.-400mm dia		
1	366	Lab.cutting CI pipe 80mm
Labour for cutting CI pipe with steel saw- 80mm dia		
1	367	Lab.cutting CI pipe 100mm
Labour for cutting CI pipe with steel saw- 100mm dia		
1	368	Lab.cutting CI pipe 150mm
Labour for cutting CI pipe with steel saw- 150mm dia		
1	369	Lab.cutting CI pipe 200mm
Labour for cutting CI pipe with steel saw- 200mm dia		
1	370	Lab.cutting CI pipe 250mm
Labour for cutting CI pipe with steel saw- 250mm dia		
1	371	Lab.cutting CI pipe 300mm
Labour for cutting CI pipe with steel saw- 300mm dia		
1	372	Lab.cutting CI pipe 400mm
Labour for cutting CI pipe with steel saw- 400mm dia		
1	373	Removal sluice valve 80-150mm
Removal of sluice valve including cutting of bolts etc. complete.- 80mm to 150mm dia		
1	374	Removal sluice valve 200-400mm
Removal of sluice valve including cutting of bolts etc. complete.- 200mm to 400mm dia		
1	375	Repair sluice valve 80-150mm
Repair of sluice valve by replacing various worn-out components and reassembling and fixing the same in position testing joint to pressure etc. all complete. (Spare parts shall be paid extra)- 80mm to 150mm dia		
1	376	Repair sluice valve 200-400mm
Repair of sluice valve by replacing various worn-out components and reassembling and fixing the same in position testing joint to pressure etc. all		

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Line Item No	Activity SNo.	Description
complete. (Spare parts shall be paid extra)- 200mm to 400mm dia		
1	377	Lab.laying of CI pipe 80mm
Labour for laying of CI pipes including CI specials and transportation from store to site excluding the cost of pipe and special.- 80mm dia pipe (about 5 meter length)		
1	378	Lab.laying of CI pipe 100mm
Labour for laying of CI pipes including CI specials and transportation from store to site excluding the cost of pipe and special.- 100mm dia pipe (about 5 meter length)		
1	379	Lab. laying of CI pipe 150mm
Labour for laying of CI pipes including CI specials and transportation from store to site excluding the cost of pipe and special.- 150mm dia pipe (about 5 meter length)		
1	380	Lab. laying of CI pipe 200mm
Labour for laying of CI pipes including CI specials and transportation from store to site excluding the cost of pipe and special.- 200mm dia pipe (about 5 meter length)		
1	381	Lab. laying of CI pipe 250mm
Labour for laying of CI pipes including CI specials and transportation from store to site excluding the cost of pipe and special.- 250mm dia pipe (about 5 meter length)		
1	382	Lab. laying of CI pipe 300mm
Labour for laying of CI pipes including CI specials and transportation from store to site excluding the cost of pipe and special.- 300mm dia pipe (about 5 meter length)		
1	383	Lab.lead caulking joint 80mm
Labour charges for lead caulking joint to spun iron or CI pipe and specials including testing joints but excluding the cost of pig lead.80mm dia		
1	384	Lab.lead caulking joint 100mm
Labour charges for lead caulking joint to spun iron or CI pipe and specials including testing joints but excluding the cost of pig lead.100mm dia		
1	385	Lab.lead caulking joint 150mm
Labour charges for lead caulking joint to spun iron or CI pipe and specials including testing joints but excluding the cost of pig lead. 150mm dia		
1	386	Lab.lead caulking joint 200mm
Labour charges for lead caulking joint to spun iron or CI pipe and specials including testing joints but excluding the cost of pig lead. 200mm dia		
1	387	Lab.lead caulking joint 250mm
Labour charges for lead caulking joint to spun iron or CI pipe and specials including testing joints but excluding the cost of pig lead. 250mm dia		
1	388	Lab.lead caulking joint 300mm
Labour charges for lead caulking joint to spun iron or CI pipe and specials including testing joints but excluding the cost of pig lead. 300mm dia		
1	389	Lab.lead caulking joint 400mm
Labour charges for lead caulking joint to spun iron or CI pipe and specials including testing joints but excluding the cost of pig lead. 400mm dia		

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Line Item No	Activity SNo.	Description
1	390	Lab. flange joint 80mm
Labour charges for flange joints to double flanged CI pipes and special including testing of joints excluding the cost of flanged bolts and nuts and gasket etc.- 80 mm dia		
1	391	Lab. flange joint 100mm
Labour charges for flange joints to double flanged CI pipes and special including testing of joints excluding the cost of flanged bolts and nuts and gasket etc.- 100 mm dia		
1	392	Lab. flange joint 150mm
Labour charges for flange joints to double flanged CI pipes and special including testing of joints excluding the cost of flanged bolts and nuts and gasket etc.- 150 mm dia		
1	393	Lab. flange joint 200mm
Labour charges for flange joints to double flanged CI pipes and special including testing of joints excluding the cost of flanged bolts and nuts and gasket etc.- 200 mm dia		
1	394	Lab. flange joint 250mm
Labour charges for flange joints to double flanged CI pipes and special including testing of joints excluding the cost of flanged bolts and nuts and gasket etc.- 250 mm dia		
1	395	Lab. flange joint 300mm
Labour charges for flange joints to double flanged CI pipes and special including testing of joints excluding the cost of flanged bolts and nuts and gasket etc.- 300 mm dia		
1	396	Lab. flange joint 400mm
Labour charges for flange joints to double flanged CI pipes and special including testing of joints excluding the cost of flanged bolts and nuts and gasket etc.- 400 mm dia		
1	397	Lab. fixing ferrule CI pipe
providing and fixing of brass ferrule in CI pipes including cutting holes, threading complete as per the direction of Manager-in-charge upto 25mm nominal bore		
1	398	Disconnection of water
Disconnection of water main from the source of supply and opening the wheel / bonnet of CI valve for maintenance / greasing for its smooth operation, reconnecting back in its original position after the greasing & restoration of its supply main complete as per the instruction of the MIC.		
1	399	Greasing of CI valve 150mm
Greasing of CI valve including all labour charges & handling charges , providing gasket, gland, grease , all tools and tackles etc.- 150mm		
1	400	Greasing of CI valve 200mm
Greasing of CI valve including all labour charges & handling charges , providing gasket, gland, grease , all tools and tackles etc.- 200mm		
1	401	Greasing of CI valve 250mm
Greasing of CI valve including all labour charges & handling charges , providing gasket, gland, grease , all tools and tackles etc.- 250mm		
1	402	Greasing of CI valve 300mm
Greasing of CI valve including all labour charges & handling charges , providing gasket, gland, grease , all tools and tackles etc.- 300mm		

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Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
1	403	Greasing of CI valve 400mm Greasing of CI valve including all labour charges & handling charges , providing gasket, gland, grease , all tools and tackles etc.- 400mm
1	404	Replacing rubber gasket 80-150mm Replacing rubber gasket in CI pipe line jointing including removal of damaged rubber/leather gaskets of approved brand including the cost of materials and labour.- 80mm dia and above up to 150mm dia
1	405	Replacing rubber gasket 200-300mm Replacing rubber gasket in CI pipe line jointing including removal of damaged rubber/leather gaskets of approved brand including the cost of materials and labour.- 200mm dia and above up to 300mm dia
1	406	Replacing rubber gasket 400mm Replacing rubber gasket in CI pipe line jointing including removal of damaged rubber/leather gaskets of approved brand including the cost of materials and labour.-400mm dia
1	407	Removal of existing ferrule Removal of existing ferrule and clearing of any chockage including trenching refilling and refixing the ferrule in position.
1	408	Taking delivery OHT cover 600mm Taking delivery from manufacturing site and placing Over Head Tank opening cover 600mm dia.
1	409	WP Gelix in OHT 1000ltr cap. Applying two coats of impervious water proofing and protective coating of water proofing material "Gelix WP Insta H2O proof " applied evenly by brush perfectly in Over Head Tank inside surface . including preparation of surface as per direction of MIC. (excluding the cost of water proofing materials)-1000 ltr capacity
1	410	WP Gelix in OHT 500ltr cap. Applying two coats of impervious water proofing and protective coating of water proofing material "Gelix WP Insta H2O proof " applied evenly by brush perfectly in Over Head Tank inside surface . including preparation of surface as per direction of MIC. (excluding the cost of water proofing materials)-500 ltr capacity
1	411	WP Gelix in OHT 270ltr cap. Applying two coats of impervious water proofing and protective coating of water proofing material "Gelix WP Insta H2O proof " applied evenly by brush perfectly in Over Head Tank inside surface . including preparation of surface as per direction of MIC. (excluding the cost of water proofing materials)-270 ltr capacity
1	412	Sup. Gelix WP proof Supply of Gelix WP Insta H2O proof/ Dr. Fixit/ Fosroc water proof material of make ESBEE infrastructure in 20Ltr pack
1	413	Cleaning of OHT Cleaning of OHT of capacity 270 to 1000 ltr capacity manually and disinfecting with bleaching powder including removing, refixing of slabs closing and opening of outlet, inlet pipe line , removal and refixing of float vlave, draining out water, etc as per direction of MIC.
1	414	Operating valve of drinking water Operating valve of drinking water supply main in any shifts inside CISF & NALCO TOWNSHIP including closing & opening of main & sub main in sequence for smooth distribution of drinking water as per the instruction of the MIC. complete including tools & tackles etc. when ever required (Deploying one semi skilled manpower)

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Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
1	415	P/F 100mm dia glazed SW pipe
Providing, laying and jointing 100mm diameter glazed stoneware pipes grade `A# with stiff mixture of cement mortar in the proportion of 1:1(1 cement: 1 fine sand) including testing of joints etc. complete.		
1	416	RCC NP2 pipe 150mm dia
Providing and laying non pressure NP2 class RCC pipes with collars jointed with spun yarn caulking and stiff mixture of cement mortar in proportion of 1:2 (1 cement: 2 fine sand) including testing of joints etc. complete excluding the cost of collar. (Cement issued free of cost)- 150mm dia RCC pipe		
1	417	RCC NP2 pipe 250mm dia
Providing and laying non pressure NP2 class RCC pipes with collars jointed with spun yarn caulking and stiff mixture of cement mortar in proportion of 1:2 (1 cement: 2 fine sand) including testing of joints etc. complete excluding the cost of collar. (Cement issued free of cost)- 250mm dia RCC pipe		
1	418	RCC NP2 pipe 300mm dia
Providing and laying non pressure NP2 class RCC pipes with collars jointed with spun yarn caulking and stiff mixture of cement mortar in proportion of 1:2 (1 cement: 2 fine sand) including testing of joints etc. complete excluding the cost of collar. (Cement issued free of cost)- 300mm dia RCC pipe		
1	419	RCC NP2 pipe 450mm dia
Providing and laying non pressure NP2 class RCC pipes with collars jointed with spun yarn caulking and stiff mixture of cement mortar in proportion of 1:2 (1 cement: 2 fine sand) including testing of joints etc. complete excluding the cost of collar. (Cement issued free of cost)- 450mm dia RCC pipe		
1	420	RCC NP2 pipe 500mm dia
Providing and laying non pressure NP2 class RCC pipes with collars jointed with spun yarn caulking and stiff mixture of cement mortar in proportion of 1:2 (1 cement: 2 fine sand) including testing of joints etc. complete excluding the cost of collar. (Cement issued free of cost)- 500mm dia RCC pipe		
1	421	RCC NP2 pipe 600mm dia
Providing and laying non pressure NP2 class RCC pipes with collars jointed with spun yarn caulking and stiff mixture of cement mortar in proportion of 1:2 (1 cement: 2 fine sand) including testing of joints etc. complete excluding the cost of collar. (Cement issued free of cost)- 600mm dia RCC pipe		
1	422	Extra for collar 150mm dia
Extra for providing and fixing of collar for NP2 class RCC pipes for repairing works of existing line- 150mm dia		
1	423	Extra for collar 250mm dia
Extra for providing and fixing of collar for NP2 class RCC pipes for repairing works of existing line- 250mm dia		
1	424	Extra for collar 300mm dia
Extra for providing and fixing of collar for NP2 class RCC pipes for repairing works of existing line- 300mm dia		
1	425	Extra for collar 450mm dia
Extra for providing and fixing of collar for NP2 class RCC pipes for repairing works of existing line- 450mm dia		
1	426	Extra for collar 500mm dia
Extra for providing and fixing of collar for NP2 class RCC pipes for repairing works of existing line- 500mm dia		
1	427	Extra for collar 600mm dia
Extra for providing and fixing of collar for NP2 class RCC pipes for repairing works of existing line- 600mm dia		

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
1	428	P/F M.S Grating
Providing and fixing M.S grating size 150x150 mm with grouting, plastering and finishing all complete (cement free issue)		
1	429	P/F Gully trap chamber
Fixing square mouth SW/PVC gully trap grade `A# complete with CI grating brick masonry chamber inside size 300x300mm with full brick work of fly ash bricks, making the RCC cover water tight including excavation, filling, fixing of trap with CC 1:2:4, flooring, finishing, plastering, punning etc. complete as required and as per standard design. excluding the cost of gully trap, RCC precast cover (cement and ash brick free issue)		
1	430	Dismnt. MH upto 750x750mm
Dismantling of manhole/ inspection chamber completely including RCC top cover, CI cover with frame and stacking of useful material and disposal of unserviceable material within a lead of 2.0KM as directed by Manager #in-charge.- Manhole 750x750mm and 450mm deep		
1	431	Dismnt. MH upto 900x800mm
Dismantling of manhole/ inspection chamber including stacking of useful material and disposal of unserviceable material within a lead of 2.0KM as directed by Manager #in-charge.- Manhole 900x800mm and 450mm deep		
1	432	Dismnt. MH upto 1200x900mm
Dismantling of manhole/ inspection chamber including stacking of useful material and disposal of unserviceable material within a lead of 2.0KM as directed by Manager #in-charge.- Manhole 1200x900mm and 900mm deep		
1	433	Dismnt. extra depth MH 750x750mm
Dismantling of manhole/ inspection chamber for extra for depth - Manhole Size 750x750mm Inside.		
1	434	Dismnt. extra depth MH 900x800mm
Dismantling of manhole/ inspection chamber for extra for depth - Manhole Size 900x800mm Inside.		
1	435	Dismnt. extra depth MH 1200x900mm
Dismantling of manhole/ inspection chamber for extra for depth - Manhole Size 1200x900mm Inside.		
1	436	Refixing of IC manhole cover slab
Removing and refixing of cover slab of size upto 0.60 Sqm over inspection chamber/ manhole/ drain etc. for repair and cleaning purpose including dismantling of side concrete if any required for removal of slab and making good the damaged as required, disposal of derbies as per direction of Manager #in-charge. (Payment for repairing of concrete, brick work, plaster and punning shall be paid extra in respective item)		
1	437	Removing & refixing R.C.C. top slab
Removing and refixing of same R.C.C. top slab 0.60 Sqm above with C.I. frame and cover of manholes of various sizes manually/ by mechanical means including dismantling of side concrete, plaster if any required for removal of slab and making good the damaged as required, disposal of derbies as per direction of Manager #in-charge. (Payment for repairing of concrete, brick work, plaster and punning shall be paid extra in respective item)		
1	438	Mak. Conn. Drain 100 to 230mm dia
Making connection of drains or sewerage line with existing manhole including cutting and making good the walls, floors with cement concrete 1:2:4 (1 cement:2 sand:4 graded stone aggregate 20mm nominal size)and cement plaster on both side with cement mortar 1:3(1 cement:3 sand) finished with a floating coat of neat cement and making necessary channel for the drains etc. complete - 100 to 230mm dia		
1	439	Mak. Conn. Drain 250 to 300mm dia
Making connection of drains or sewerage line with existing manhole including cutting and making good the walls, floors with cement concrete 1:2:4 (1 cement:2 sand:4 graded stone aggregate 20mm nominal size)and cement plaster on both side with cement mortar 1:3(1 cement:3 sand) finished with		

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Line Item No	Activity SNo.	Description
a floating coat of neat cement and making necessary channel for the drains etc. complete - 250 to 300mm dia		
1	440	Mak. Conn. Drain 350 to 600mm dia
Making connection of drains or sewerage line with existing manhole including cutting and making good the walls, floors with cement concrete 1:2:4 (1 cement:2 sand:4 graded stone aggregate 20mm nominal size)and cement plaster on both side with cement mortar 1:3(1 cement:3 sand) finished with a floating coat of neat cement and making necessary channel for the drains etc. complete - 350 to 600mm dia		
1	441	Cleaning of gully/ floor/ WC trap
Removing chockage and cleaning of gully trap/ floor trap/ WC trap (bath/ kitchen/ water closet) including removal and refixing of trap grating, concrete cover of traps and disposal of debris upto 50 mtr etc. complete.		
1	442	Cleaning of manhole
Cleaning of manhole/ inspection chamber including removing and refixing of manhole cover.		
1	443	Cleaning of waste pipe line
Removing chockage and cleaning of waste pipe line (75/ 100mm dia CI pipe from WC / Floor trap to Gully trap/ inspection chamber of length up to 15 Mtr.) including opening and refixing of door, insert plate, scaffolding, trap grating, concrete cover of traps etc and disposal of debris upto 50 mtr. complete all bye works.		
1	444	Cleaning of sewerage pipe line
Removing chockage and cleaning of sewerage pipe line of all diameter from man hole to manhole or IC to MH including removal and refixing of manhole cover etc. complete and disposal of waste materials as directed.		
1	445	Cleaning of road side catch drain pit
Cleaning of road side catch drain pit including removing the concrete cover carefully removing the silt garbage from the pit, cleaning the mouths of the hume pipe and replacing back the concrete cover as per the instruction of the MIC.		
1	446	L/F serv. AC/SC/CI pipe 50-150
Laying and fixing of serviceable dismantled materials including jointing with CM (1:1) and carriage of materials from various point within Nalco township.- AC/SCI/CI pipe 50 to 150mm dia.		
1	447	L/F serv. AC/CI pipe fitting
Laying and fixing of serviceable dismantled materials including jointing with CM (1:1) and carriage of materials from various point within Nalco township.- AC/ CI pipe fittings 50 to 150mm dia		
1	448	L/F serv. RCC pipe 150-200mm
Laying and fixing of serviceable dismantled materials including jointing with CM (1:1) and carriage of materials from various point within Nalco township.- RCC pipe 150 to 200mm dia		
1	449	L/F serv. RCC pipe 300-450mm
Laying and fixing of serviceable dismantled materials including jointing with CM (1:1) and carriage of materials from various point within Nalco township.- RCC pipe 300 to 450mm dia		
1	450	L/F serv. RCC pipe 500-600mm
Laying and fixing of serviceable dismantled materials including jointing with CM (1:1) and carriage of materials from various point within Nalco township.- RCC pipe 500 to 600mm dia		
1	451	L/F serv. RCC collar 150-200mmm

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Line Item No	Activity SNo.	Description
		Laying and fixing of serviceable dismantled materials including jointing with CM (1:1) and carriage of materials from various point within Nalco township.- RCC collar for 150 to 200mm dia pipe
1	452	L/F serv. RCC collar 300-450mmm
		Laying and fixing of serviceable dismantled materials including jointing with CM (1:1) and carriage of materials from various point within Nalco township.- RCC collar for 300 to 450mm dia pipe
1	453	L/F serv. RCC collar 500-600mmm
		Laying and fixing of serviceable dismantled materials including jointing with CM (1:1) and carriage of materials from various point within Nalco township.- RCC collar for 500 to 600mm dia pipe
1	454	L/F serv. SCI/CI floor trap
		Laying and fixing of serviceable dismantled materials including jointing with CM (1:1) and carriage of materials from various point within Nalco township.- SCI/ CI floor trap or SW gully trap. 75 to 100mm dia
1	455	Taking MH cover with frame 500mm
		Taking delivery form store and fixing of manhole cover (CI/RCC/SFRC) of various size including stacking of useful material as directed by Manager #in-charge.- Cover with frame size 500m internal dia
1	456	Taking MH cover with frame 560mm
		Taking delivery form store and fixing of manhole cover (CI/RCC/SFRC) of various size including stacking of useful material as directed by Manager #in-charge.- Cover with frame size 560m internal dia
1	457	Taking MH cover w/o frame 500mm
		Taking delivery form store and fixing of manhole cover (CI/RCC/SFRC) of various size including stacking of useful material as directed by Manager #in-charge.- Cover without frame size 500m internal dia
1	458	Taking MH cover w/o frame 560mm
		Taking delivery form store and fixing of manhole cover (CI/RCC/SFRC) of various size including stacking of useful material as directed by Manager #in-charge.- Cover without frame size 560m internal dia
1	459	Dismantling of 100mm old SW pipe
		Dismantling of 100mm old SW pipe including breaking of joints and bed concrete stacking of useful materials near the site within 50m lead .
1	460	Dismantling RCC pipe 150-300mmm
		Dismantling of RCC pipe and stacking of pipe within 50mtr lead .- 150mm to 300mmm
1	461	Dismantling RCC pipe Above 350-600mm
		Dismantling of RCC pipe and stacking of pipe within 50mtr lead .- Above 350mm up to 600mm
1	462	Dismantling of gully trap
		Dismantling of gully trap including extra excavation of earth work for reconstruction of gully trap including stacking of useful material, refilling and disposal of unserviceable material within a lead of 50mtr as directed by Manager #in-charge.
1	463	Repair of gully trap chamber
		Repair of gully trap chamber with cement concrete 1:2:4 of 75mm thickness on all sides around trap mouth inside chamber including closing of rat holes, removal and refixing of slab, plastering, punning of inside walls of chamber, earth work, cleaning of chamber and sewer line upto manhole .

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Line Item No	Activity SNo.	Description
back filling if any etc. complete as per direction of MIC. (brick work if any will be paid extra).		
1	464	MS Butt hinges 125x65x2.12
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS Oxidized Butt hinges 125x 65x2.12mm		
1	465	MS Butt hinges 100x58x1.90
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS Oxidized Butt hinges 100x58x1.90mm		
1	466	MS Butt hinges 75x47x1.70
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS Oxidized Butt hinges 75x47x1.70mm		
1	467	MS Butt hinges 50x37x1.50
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS Oxidized Butt hinges 50x37x1.50mm		
1	468	MS Piano hinges 35mmx1.0mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS nickel plated Piano hinges 35x 1.0mm thick		
1	469	MS Cup hinges for steel window
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS Cup hinges for steel window		
1	470	MS Hooks & eye 200mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS Oxidized Hooks & eyes 200mm		
1	471	MS Hooks & eye 150mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS Oxidized Hooks & eyes 150mm		
1	472	MS Hooks & eye 100mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS Oxidized Hooks & eyes 100mm		
1	473	MS Handle 125mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS Oxidized Handle 125mm		
1	474	MS Handle 100mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS Oxidized Handle 100mm		
1	475	MS Handle 75mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS Oxidized Handle 75mm		
1	476	MS Sliding door bolt 300x16mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. -		

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Line Item No	Activity SIno.	Description
MS Oxidized Sliding door bolt 300x16mm		
1	477	MS Sliding door bolt 250x16mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS Oxidized Sliding door bolt 250x16mm		
1	478	MS Tower bolt 250x10mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS Oxidized Tower bolt 250x10mm		
1	479	MS Tower bolt 150x10mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS Oxidized Tower bolt 150x10mm		
1	480	MS Hasp & staple 115mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS Oxidized Hasp & staple 115mm		
1	481	MS hasp & staple 90mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS Oxidized Hasp & staple 905mm		
1	482	MS casement stay 300mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS Oxidized Casement Pegstay 300mm not less than 0.33Kg		
1	483	MS casement stay 250mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS Oxidized Casement Pegstay 250mm not less than 0.28Kg		
1	484	MS casement stay 200mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS Oxidized Casement Pegstay 200mm not less than 0.24Kg		
1	485	MS socket for TB 10mm dia
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS socket tower bolt 10mm dia		
1	486	MS bracket for SDB 16mm dia
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS bracket SDB 16mm dia		
1	487	MS screw 15mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS screw 15mm (Packet of 100 Pcs)		
1	488	MS screw 20mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS screw 20mm (Packet of 100 Pcs)		

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Line Item No	Activity SNo.	Description
1	489	MS screw 25mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS screw 25mm (Packet of 100 Pcs)		
1	490	MS screw 30mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS screw 30mm (Packet of 100 Pcs)		
1	491	MS screw 40mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS screw 40mm (Packet of 100 Pcs)		
1	492	MS screw 50mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS screw 50mm (Packet of 100 Pcs)		
1	493	Stainless steel full thread screw 12
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Stainless steel full threaded screw 12mm (Packet of 100 Pc)		
1	494	Stainless steel full thread screw 20
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Stainless steel full threaded screw 20mm (Packet of 100 Pc)		
1	495	Stainless steel full thread screw 30
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Stainless steel full threaded screw 30mm (Packet of 100 Pc)		
1	496	Stainless steel full thread screw 40
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Stainless steel full threaded screw 40mm (Packet of 100 Pc)		
1	497	Panel pin nail 20- 25mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Panel pin nail 20- 25mm		
1	498	Wire nail 25- 50mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Wire nail 25- 50mm		
1	499	Knob for cupboard nickel plated
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Knob for cupboard nickel plated 25mm		
1	500	Sup hydraulic door closure
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Door closer "Hyper/Godrej/ make double speed		
1	501	Sup. PVC sleeves for 20-75 screw
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - PVC sleeves for 20 - 75mm screw (100 nos)		

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Line Item No	Activity SNo.	Description
1	502	Sup. Al. butt hinges 125
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Anodized aluminium butt hinges 125mm		
1	503	Sup. Al. butt hinges 100
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Anodized aluminium butt hinges 100mm		
1	504	Sup. Al. handle 125mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Anodized aluminium Handle 125mm (Alto make) with base plate 175x32mm		
1	505	Sup. Al. handle 100mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Anodized aluminium Handle 100mm (Alto make) with base plate 150x32mm		
1	506	Sup. Al. handle 75mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Anodized aluminium Handle 75mm (Alto make) with base plate 125x32mm		
1	507	Sup. Al. SDB 300x16mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Anodized aluminium Sliding door bolt 300x16mm		
1	508	Sup. Al. SDB 250x16mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Anodized aluminium Sliding door bolt 250x16mm		
1	509	Sup. Al. Tower bolt 250x10mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Anodized aluminium tower bolt 250x10mm		
1	510	Sup. Al. Tower bolt 150x10mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Anodized aluminium tower bolt 150x10mm		
1	511	Sup. Al. Tower bolt 100x10mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Anodized aluminium tower bolt 100x10mm		
1	512	Aluminium floor door stopper
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Aluminium floor door stopper with twin rubber and stopper		
1	513	Roller for sliding arrangement
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Roller for stainless steel sliding arrangement in cupboard		
1	514	40mm cupboard lock 6 lever
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - 40mm cupboard lock 6 lever		
1	515	MS nickel plated curtain rod
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. -		

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Line Item No	Activity SNo.	Description
MS Nickel plated curtain rod 20mm dia		
1	516	MS nickel plated MS bracket
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - MS Nickel plated MS bracket for 20mm dia curtain rod		
1	517	Wooden fillet 12x12mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Wooden fillet size 12x12mm		
1	518	Teak wood lipping 20x6mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Teak wood lipping 20x6mm		
1	519	Teak wood lipping 25x6mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Teak wood lipping 25x6mm		
1	520	Favicol S.H
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Fencil- S.H.		
1	521	Seasoned hard wood plant 50x30mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Seasoned hard wood plank Size 50x30mm		
1	522	Seasoned hard wood plant 50x35mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Seasoned hard wood plank Size 50x35mm		
1	523	Seasoned hard wood plant 75x30mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Seasoned hard wood plank Size 75x30mm		
1	524	Seasoned hard wood plant 75x35mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Seasoned hard wood plank Size 75x35mm		
1	525	Seasoned hard wood plant 100x35mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Seasoned hard wood plank Size 100x35mm		
1	526	Seasoned hard wood plant 150x35mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Seasoned hard wood plank Size 150x35mm		
1	527	Seasoned hard wood plant 200x35mm
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Seasoned hard wood plank Size 200x35mm		
1	528	S/A Water proofing liquid
Supply and application of water proofing liquid Pidiproof 101LW+ of Dr. Fixit or equivalent of Sika for plaster and concrete as directed by M-I-C		
1	529	Dr. Fixit new coat

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Line Item No	Activity SNo.	Description
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Dr. Fixit New Coat for water proof coating material		
1	530	Dr. Fixit crack X paste
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Dr. Fixit Crack-X Paste for crack sealing.		
1	531	Gelix XP water proof
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Gelix WP Insta h2o proof water proof material		
1	532	Brushbond of Fosroc
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Brushbond of Fosroc make two components acrylic modified cementitious coating compound. Applied @1.35Kg/ Sqm.		
1	533	Sika multy seal (Roll)
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - SIKA Multy seal Self adhesive bituminous sealing tape (Roll of 10mtr x 5cm.		
1	534	Recron 3S fibre
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - Recron 3S fibrer of M/s. Relience. (125gm/ pkt)		
1	535	Supply of white cement
Supply of materials of approved quality and brand including delivery at department store/ at site with all cost complete as per the instruction of MIC. - white cement		
1	536	Sup.PTMT waste coupling 31/32mm
Supplying of PTMT - symet bath assets of Prayag make- Waste coupling & gratings- 31/32mm 79x62mm (code 101)		
1	537	Sup.PTMT waste coupling 38/40mm
Supplying of PTMT - symet bath assets of Prayag make- Waste coupling & gratings- 38/40mm 83x77mm (code 102)		
1	538	Sup.PTMT waste coupling 31mm urinal
Supplying of PTMT - symet bath assets of Prayag make- Urinal 31mm 94x62mm (code 104)		
1	539	Sup.PTMT grating 100mm doom WO hole
Supplying of PTMT - symet bath assets of Prayag make- 100mm doom without hole (code 111)		
1	540	Sup.PTMT grating 125mm doom WO hole
Supplying of PTMT - symet bath assets of Prayag make- 125mm doom without hole (code 112)		
1	541	Sup.PTMT grating 125mm doom with hole
Supplying of PTMT - symet bath assets of Prayag make- 125mm doom with hole (code 113)		
1	542	Sup.PTMT 15mm bib cock-standard
Supplying of PTMT - symet bath assets of Prayag make- Bath fittings- Bib cock standard 15mm (code-121/122)		
1	543	Sup.PTMT 15mm bib cock-nozzle
Supplying of PTMT - symet bath assets of Prayag make- Bath fittings- Bib cock with nozzle 15mm (code-116)		
1	544	Sup.PTMT 15mm bib cock-long body

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Line Item No	Activity SNo.	Description
Supplying of PTMT - symet bath assets of Prayag make- Bath fittings- Bib cock long body 15mm (code-124)		
1	545	Sup.PTMT extension nipple 15mmm
Supplying of PTMT - symet bath assets of Prayag make- Bath fittings- Extension nipple 15mm 30x30x70mm (code 128)		
1	546	Sup.PTMT 15mm pillar cock- fancy
Supplying of PTMT - symet bath assets of Prayag make- Bath fittings- Pillar cock Fancy 125x131x43mm (code 131)		
1	547	Sup.PTMT 15mm push cock
Supplying of PTMT - symet bath assets of Prayag make- Bath fittings- Push cock 15mm (code-139)		
1	548	Sup.PTMT urinal cock
Supplying of PTMT - symet bath assets of Prayag make- Bath fittings- Urinal cock15mm dia 80x44x30 (code 140)		
1	549	Sup.PTMT urinal spreader
Supplying of PTMT - symet bath assets of Prayag make- Bath fittings- Urinal Spreader 15mm dia 95x60x100 (code 186)		
1	550	Sup.PTMT 15mm stop cock
Supplying of PTMT - symet bath assets of Prayag make- Bath fittings- Stop cock15mm 86x90x43mm (code 141/142)		
1	551	Sup.PTMT 20mm stop cock
Supplying of PTMT - symet bath assets of Prayag make- Bath fittings- Stop cock 20mm 86x86x15mm (code 143)		
1	552	Sup.PTMT 15mm angular stop cock
Supplying of PTMT - symet bath assets of Prayag make- Bath fittings- Stop cock 15mm angular 125x59x42mm (code 144)		
1	553	Sup.PTMT 15mm concealed stop cock
Supplying of PTMT - symet bath assets of Prayag make- Bath fittings- Stop cock 15mm concealed 113x65x59mm (code 146)		
1	554	Sup.PTMT 20mm concealed stop cock
Supplying of PTMT - symet bath assets of Prayag make- Bath fittings- Do- Stop cock 20mm concealed 118x68x59mm (code 148)		
1	555	Sup.PTMT 15mm float valve
Supplying of PTMT - symet bath assets of Prayag make- Ball cock complete with epoxy coated aluminium rod and HD ball - 15mm float valve (Code 151)		
1	556	Sup.PTMT 20mm float valve
Supplying of PTMT - symet bath assets of Prayag make- Ball cock complete with epoxy coated aluminium rod and HD ball - 20mm float valve (Code 152)		
1	557	Sup.PTMT 25mm float valve
Supplying of PTMT - symet bath assets of Prayag make- Ball cock complete with epoxy coated aluminium rod and HD ball - 25mm float valve (Code 153)		
1	558	Sup.PTMT 40mm float valve
Supplying of PTMT - symet bath assets of Prayag make- Ball cock complete with epoxy coated aluminium rod and HD ball - 40mm float valve (Code 154)		

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Line Item No	Activity SNo.	Description
155)		
1	559	Sup.PTMT 15mm float valve WO ball
Supplying of PTMT - symet bath assets of Prayag make- Ball cock body (without rod and ball)- 15mm float valve (Code 161)		
1	560	Sup.PTMT 20mm float valve WO ball
Supplying of PTMT - symet bath assets of Prayag make- Ball cock body (without rod and ball)- 20mm float valve (Code 162)		
1	561	Sup.PTMT 25mm float valve WO ball
Supplying of PTMT - symet bath assets of Prayag make- Ball cock body (without rod and ball)- 25mm float valve (Code 163)		
1	562	Sup.PTMT float ball cock
Supplying of PTMT - symet bath assets of Prayag make- HD ball for float ball cock		
1	563	Sup.PTMT tank nipple 15mm
Supplying of PTMT - symet bath assets of Prayag make- Tank nipple- 15mm 67x40x40mm (code 331)		
1	564	Sup.PTMT tank nipple 20mm
Supplying of PTMT - symet bath assets of Prayag make- Tank nipple- 20mm 69x43x43mm (code 332)		
1	565	Sup.PTMT tank nipple 25mm
Supplying of PTMT - symet bath assets of Prayag make- Tank nipple- 25mm 81x51x51 (code 333)		
1	566	Sup.PTMT shower 95x65mm
Supplying of PTMT - symet bath assets of Prayag make- Bath room accessories - Swiveling shower 15mm code-181		
1	567	Sup.PTMT shower arm 225mm
Supplying of PTMT - symet bath assets of Prayag make- Bath room accessories - Shower arm 225mm code-184		
1	568	Sup.PTMT health faucet
Supplying of PTMT - symet bath assets of Prayag make- Bath room accessories - Health faucet 1.00mtr tube with hook code -187		
1	569	Sup.PTMT the shelf
Supplying of PTMT - symet bath assets of Prayag make- Bath room accessories - The shelf code -191		
1	570	Sup.PTMT towel ring
Supplying of PTMT - symet bath assets of Prayag make- Bath room accessories - Towel ring code 196		
1	571	Sup.PTMT soap dish/ holder
Supplying of PTMT - symet bath assets of Prayag make- Bath room accessories - Soap dish/ holder 138x102x75mm (code 195)		
1	572	Sup.PTMT connection pipe 450mm
Supplying of PTMT - symet bath assets of Prayag make PVC connection pipe with PTMT nut- 15mm dia 450mm length (code 323)		
1	573	Sup.PTMT connection pipe 600mm
Supplying of PTMT - symet bath assets of Prayag make PVC connection pipe with PTMT nut- 15mm dia 600mm length (code 324)		
1	574	Sup.PTMT waste pipe 32mm 800mm
Supplying of PTMT - symet bath assets of Prayag make-PVC waste pipe - 32mm dia 800mm length (code 327)		
1	575	Sup.PTMT waste pipe 40mm 800mm

ANNEXURE-II

Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
Supplying of PTMT - symet bath assets of Prayag make-PVC waste pipe - 40mm dia 800mm length (code 328)		
1	576	Sup.PTMT waste pipe 32mm 1150mm
Supplying of PTMT - symet bath assets of Prayag make-PVC waste pipe - 32mm dia, 1150mm length (code 329)		
1	577	Sup.PTMT waste pipe 40mm 1150mm
Supplying of PTMT - symet bath assets of Prayag make-PVC waste pipe - 40mm dia 1150mm length (code 330)		
1	578	Sup.CP pillar cock 15mm
Supply of CP bath assets of L&K or equivalent make - Pillar cock 15mm code-0017		
1	579	Sup.CP pillar cock long nose 15mm
Supply of CP bath assets of L&K or equivalent make - Pillar cock long nose 15mm code-0307		
1	580	Sup.CP pillar/bib cock elbow
Supply of CP bath assets of L&K or equivalent make - Pillar /Bib cock elbow action (surgical purpose) code -0137/0417		
1	581	Sup.CP bib cock
Supply of CP bath assets of L&K or equivalent make - Bib cock 15mm code-0057		
1	582	Sup.CP bib cock long body
Supply of CP bath assets of L&K or equivalent make - Bib cock long body 15mm code-0047		
1	583	Sup.CP stop cock 15mm
Supply of CP bath assets of L&K or equivalent make - Stop cock 15mm code-0087		
1	584	Sup.CP stop cock 20mm
Supply of CP bath assets of L&K or equivalent make - Stop cock 20mm code-0097		
1	585	Sup.CP concealed stop cock 15mm
Supply of CP bath assets of L&K or equivalent make - Concealed stop cock 15mm code-0107		
1	586	Sup.CP concealed stop cock 20mm
Supply of CP bath assets of L&K or equivalent make - Concealed stop cock 20mm code-514F		
1	587	Sup.CP angle stop cock
Supply of CP bath assets of L&K or equivalent make - Angle stop cock 15mm code-526		
1	588	Sup.CP shower connection pipe
Supply of CP bath assets of L&K or equivalent make - Hand shower and fllexible tube 1 1/2 mtr code-551-571-555 with bracket		
1	589	Sup.CP Telephonic shower
Supply of CP bath assets of L&K or equivalent make - Wall mixer with telephonic shower arrangement		
1	590	Sup.CP concealed flush cock 25mm

ANNEXURE-II

Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
Supply of CP bath assets of L&K or equivalent make - Concealed flush cock 25mm code-553		
1	591	Sup.CP tumbler holder
Supply of CP bath assets of L&K or equivalent make - CP tumbler holder		
1	592	Sup.CP coat hook
Supply of CP bath assets of L&K or equivalent make - CP coat hook		
1	593	Sup. CP towel rail
Supply of CP bath assets of L&K or equivalent make - CP Towel rail 18"		
1	594	Sup. CP spreader
Supply of CP bath assets of L&K or equivalent make - CP spreader		
1	595	Sup.CP health faucet
Supply of CP bath assets of L&K or equivalent make - Health faucet with 1.00mtr flexible tube and hook with extra tap facility.		
1	596	Sup.CP grating
Supply of CP bath assets of L&K or equivalent make - CP grating (Restricted)		
1	597	Sup.CP geyser connection
Supplying of spares and jointing materials for repair of bath and sanitary fittings.- CP geyser connection 15mm pipe		
1	598	Sup. glass pan 600x120mm
Supplying of spares and jointing materials for repair of bath and sanitary fittings.- 4mm glass pan of size 600x120mm for glass shelf.		
1	599	Sup. Rubber washer for porcelain cistern
Supplying of spares and jointing materials for repair of bath and sanitary fittings.- Rubber washer set for porcelain cistern (hindware/ pariware)		
1	600	Sup. PVC cistern handle/knob
Supplying of spares and jointing materials for repair of bath and sanitary fittings.- PVC handle/ knob for PVC cistern		
1	601	Sup. PVC Cistern syphon
Supplying of spares and jointing materials for repair of bath and sanitary fittings.- PVC syphon set for PVC cistern		
1	602	Sup. PVC Cistern ball cock
Supplying of spares and jointing materials for repair of bath and sanitary fittings.- PVC ball cock for cistern with ball		
1	603	Sup. Cistern plunger washer
Supplying of spares and jointing materials for repair of bath and sanitary fittings.- Plunger washer for cistern		
1	604	Sup. EWC cover hinges
Supplying of spares and jointing materials for repair of bath and sanitary fittings.- Aluminium/CP hinges for EWC cover		
1	605	Sup. CP pillar cock spindle heavy
Supplying of spares and jointing materials for repair of bath and sanitary fittings.- CP pillar cock spindle heavy		

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
1	606	Sup. CP pillar cock spindle medium
Supplying of spares and jointing materials for repair of bath and sanitary fittings.- CP pillar cock spindle medium		
1	607	Sup.rubber washer for cock
Supplying of spares and jointing materials for repair of bath and sanitary fittings.- EPDM Rubber washer for stop/bib/pillar cock.		
1	608	Sup.GI pipe MS clamp
Supplying of spares and jointing materials for repair of bath and sanitary fittings.- MS clamp for GI pipe fixing 15mm to 25mm		
1	609	Sup.Teflon tape
Supplying of spares and jointing materials for repair of bath and sanitary fittings.- Teflon Tape		
1	610	Sup.M-seal
Supplying of spares and jointing materials for repair of bath and sanitary fittings.- M-Seal (50gm) per packing		
1	611	Sup.White paint (holdlite)
Supplying of spares and jointing materials for repair of bath and sanitary fittings.- White paint (holdlite) for pipe joint (100ml/ packing)		
1	612	Sup.Platic bib cock
Supplying of spares and jointing materials for repair of bath and sanitary fittings.- Plastic bib cock		
1	613	Sup.CP extension piece
Supplying of spares and jointing materials for repair of bath and sanitary fittings.- CP extension piece 1" to 2"		
1	614	Sup.CP knob/cap for stop cock
Supplying of spares and jointing materials for repair of bath and sanitary fittings.- CP knob/ cap for stop cock		
1	615	Sup.CP knob for pillar cock
Supplying of spares and jointing materials for repair of bath and sanitary fittings.- CP knob for pillar cock		
1	616	Sup.CP flange for stop/bib cock
Supplying of spares and jointing materials for repair of bath and sanitary fittings.- CP flange for stop/bib cock		
1	617	Sup. rubber lubricant UPVC
Supplying of UPVC pipe jointing materials.- Rubber lubricant for UPVC pipe		
1	618	Sup. solvent cement UPVC
Supplying of UPVC pipe jointing materials.- Solvent cement for UPVC pipe		
1	619	Sup. Solvent cement for CPVC
Supplying of UPVC pipe jointing materials.- Solvent cement for CPVC pipe		
1	620	Sup. Rubber Seal for WC 110mm
Supplying of UPVC pipe jointing materials.- Rubber Seal for WC 110mm		

ANNEXURE-II

Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
1	621	Sup. Rubber Seal ring UPVC pipe 75mm
Supplying of UPVC pipe jointing materials.- Rubber Seal ring for UPVC pipe 75mm		
1	622	Sup. Rubber Seal ring UPVC pipe 110mm
Supplying of UPVC pipe jointing materials.- Rubber Seal ring for UPVC pipe 110mm		
1	623	Sup.UPVC pipe type-A 50mm
Supplying UPVC SWR (soil waste rain water) pipe conforming to IS-13592 -1992 with rubber seal ring conforming to IS:5382 on wall surface and drainage (Supreme make or equivalent) - Type-A pipe for ventilator and rain water. 50mm OD wall thickness 1.8 to 2.2mm 4Kg/CM2		
1	624	Sup.UPVC pipe type-A 75mm
Supplying UPVC SWR (soil waste rain water) pipe conforming to IS-13592 -1992 with rubber seal ring conforming to IS:5382 on wall surface and drainage (Supreme make or equivalent) - Type-A pipe for ventilator and rain water.75mm OD wall thickness 1.8 to 2.2mm (4Kg/CM2)		
1	625	Sup.UPVC pipe type-A 110mm
Supplying UPVC SWR (soil waste rain water) pipe conforming to IS-13592 -1992 with rubber seal ring conforming to IS:5382 on wall surface and drainage (Supreme make or equivalent) - Type-A pipe for ventilator and rain water-110mm OD wall thickness 2.2 to 2.7mm		
1	626	Sup.PVC pipe clip 75mm
Supplying PVC pipe clips of Supreme make or equivalent for rain water/ vent pipes with MS screw of required length and PVC sleeves.75mm dia		
1	627	Sup.PVC pipe clip 110mm
Supplying PVC pipe clips of Supreme make or equivalent for rain water/ vent pipes with MS screw of required length and PVC sleeves. 110mm dia		
1	628	Sup.Coupler 75mm dia
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- Coupler 75mm dia		
1	629	Sup.Coupler 110mm dia
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- Coupler 110mm dia		
1	630	Sup.Reducer 110x75mm
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- Reducer 110x75mm		
1	631	Sup.Single tee 75mm dia
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- Single tee 75mm dia		
1	632	Sup.Single tee 110mm dia
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- Single tee 110mm dia		
1	633	Sup.Single tee with door 75mm dia
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- Single tee with door 75mm dia		

ANNEXURE-II

Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
1	634	Sup.Single tee with door 110mm dia
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- Single tee with door 110mm dia		
1	635	Sup.Reducing tee 110x75mm
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- Reducing tee 110x75mm		
1	636	Sup.Cross tee 75mm dia
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- Cross tee 75mm dia		
1	637	Sup.Cross tee 110mm dia
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- Cross tee 110mm dia		
1	638	Sup.Cross tee with door 75mm dia
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- Cross tee with door 75mm dia		
1	639	Sup.Cross tee with door 110mm dia
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- Cross tee with door 110mm dia		
1	640	Sup.Bend 87.5 deg 75mm
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- Bend 87.5 deg 75mm		
1	641	Sup.Bend 87.5 deg 110mm
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- Bend 87.5 deg 110mm		
1	642	Sup.Door bend (TS/RS./LS) 75mm dia
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- Door bend (TS/RS./LS) 75mm dia		
1	643	Sup.Door bend (TS/RS./LS) 110mm dia
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- Door bend (TS/RS./LS) 110mm dia		
1	644	Sup.Vent cowl 75mm dia
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- Vent cowl 75mm dia		
1	645	Sup.Vent cowl 110mm dia
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- Vent cowl 110mm dia		

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
1	646	Sup.Shoe 75mm
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- Shoe 75mm		
1	647	Sup.Shoe 110mm
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- Shoe 110mm		
1	648	Sup.WC connector 125x110mm dia,
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- WC connector straight 125x110mm dia, length 450mm		
1	649	Sup.P- trap 125x110mm W/O WC ring
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- P- trap 125x110mm without WC ring		
1	650	Sup.P- trap 125x110mm with WC ring
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- P- trap 125x110mm with WC ring		
1	651	Sup.Q- trap 125x110mm with WC ring
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- Q- trap 125x110mm with WC ring		
1	652	Sup.S- trap 125x110mm with WC ring
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- S- trap 125x110mm with WC ring		
1	653	Sup.Nahani trap without jali 75mm
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- Nahani trap / floor trap without jali 75mm		
1	654	Sup.Nahani trap without jali 110mm
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- Nahani trap / floor trap without jali 110mm		
1	655	Sup.Nahani trap with jali 75mm
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- Nahani trap / floor trap with jali 75mm		
1	656	Sup.Nahani trap with jali 110mm
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring conforming to IS-5382 (Supereme make or equivalent)- Nahani trap / floor trap with jali 110mm		
1	657	Sup.PVC gully trap
Supplying UPVC soil waste drainage pipe fittings rubber ring type as per DIN-19531 & DIN-19534 conforming to IS-14735-1999 with rubber seal ring		

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
conforming to IS-5382 (Superme make or equivalent)- PVC gully trap		
1	658	Sup. CPVC pipe 15mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp , - CPVC Pipe - 15mm nominal bore		
1	659	Sup. CPVC pipe 20mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp , - CPVC Pipe - 20mm nominal bore		
1	660	Sup. CPVC pipe 25mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp , - CPVC Pipe - 25mm nominal bore		
1	661	Sup. CPVC pipe 32mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp , - CPVC Pipe - 32mm nominal bore		
1	662	Sup. CPVC pipe 40mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp , - CPVC Pipe - 40mm nominal bore		
1	663	Sup. CPVC coupler 15mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC coupler-15mm nominal bore		
1	664	Sup. CPVC coupler 20mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC coupler-20mm nominal bore		
1	665	Sup. CPVC coupler 25mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC coupler-25mm nominal bore		
1	666	Sup. CPVC coupler 32mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC coupler-32mm nominal bore		
1	667	Sup. CPVC coupler 40mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC coupler-40mm nominal bore		
1	668	Sup. CPVC elbow 15mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC Elbow 90 deg- 15mm nominal bore		
1	669	Sup. CPVC elbow 20mm

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC Elbow 90 deg- 20mm nominal bore		
1	670	Sup. CPVC elbow 25mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC Elbow 90 deg- 25mm nominal bore		
1	671	Sup. CPVC elbow 32mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC Elbow 90 deg- 32mm nominal bore		
1	672	Sup. CPVC elbow 40mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC Elbow 90 deg- 40mm nominal bore		
1	673	Sup. CPVC equal tee 15mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC equal tee- 15mm nominal bore		
1	674	Sup. CPVC equal tee 20mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC equal tee- 20mm nominal bore		
1	675	Sup. CPVC equal tee 25mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC equal tee- 25mm nominal bore		
1	676	Sup. CPVC equal tee 32mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC equal tee- 32mm nominal bore		
1	677	Sup. CPVC equal tee 40mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC equal tee- 40mm nominal bore		
1	678	Sup. CPVC union 15mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp - CPVC union-15mm nominal bore		
1	679	Sup. CPVC union 20mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp - CPVC union-20mm nominal bore		
1	680	Sup. CPVC union 25mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp - CPVC union-25mm nominal bore		

ANNEXURE-II
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Line Item No	Activity SNo.	Description
1	681	Sup. CPVC union 32mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp - CPVC union-32mm nominal bore		
1	682	Sup. CPVC union 40mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp - CPVC union-40mm nominal bore		
1	683	Sup. CPVC end cap 15mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp - CPVC end cap-15mm nominal bore		
1	684	Sup. CPVC end cap 20mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp - CPVC end cap-20mm nominal bore		
1	685	Sup. CPVC end cap 25mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp - CPVC end cap-25mm nominal bore		
1	686	Sup. CPVC end cap 32mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp - CPVC end cap-32mm nominal bore		
1	687	Sup. CPVC end cap 40mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp - CPVC end cap-40mm nominal bore		
1	688	Sup.CPVC reducing bush 20x15mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC reducing bush- 20x15mm dia		
1	689	Sup.CPVC reducing bush 25x15mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC reducing bush- 25x15mm dia		
1	690	Sup.CPVC reducing bush 25x20mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC reducing bush- 25x20mm dia		
1	691	Sup.CPVC reducing bush 32x25mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC reducing bush- 32x25mm dia		
1	692	Sup.CPVC reducing bush 40x25mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC reducing bush- 40x25mm dia		

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
1	693	Sup.CPVC reducing bush 40x32mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC reducing bush- 40x32mm dia		
1	694	Sup. CPVC reducer tee 20x15mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp-CPVC reducer tee- 20x15mm dia		
1	695	Sup. CPVC reducer tee 25x15mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp-CPVC reducer tee- 25x15mm dia		
1	696	Sup. CPVC reducer tee 25x20mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp-CPVC reducer tee- 25x20mm dia		
1	697	Sup. CPVC reducer tee 32x25mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp-CPVC reducer tee- 32x25mm dia		
1	698	Sup.CPVC FTA metal 15mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC Female threaded adopter (FTA) metal- 15mm dia		
1	699	Sup.CPVC FTA metal 20mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC Female threaded adopter (FTA) metal- 20mm dia		
1	700	Sup.CPVC FTA metal 25mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC Female threaded adopter (FTA) metal- 25mm dia		
1	701	Sup.CPVC FTA metal 32mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC Female threaded adopter (FTA) metal- 32mm dia		
1	702	Sup.CPVC FTA metal 40mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC Female threaded adopter (FTA) metal- 40mm dia		
1	703	Sup.CPVC MTA metal 15mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC male threaded adopter (MTA) metal- 15mm dia		
1	704	Sup.CPVC MTA metal 20mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of		

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SIno.	Description
2.18MPa at normal temp -CPVC male threaded adopter (MTA) metal- 20mm dia		
1	705	Sup.CPVC MTA metal 25mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC male threaded adopter (MTA) metal- 25mm dia		
1	706	Sup.CPVC MTA metal 32mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC male threaded adopter (MTA) metal- 32mm dia		
1	707	Sup.CPVC MTA metal 40mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp -CPVC male threaded adopter (MTA) metal- 40mm dia		
1	708	Sup.CPVC FTA plastic- 15mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp-CPVC threaded adopter (FTA) plastic- 15mm dia		
1	709	Sup.CPVC FTA plastic- 20mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp-CPVC threaded adopter (FTA) plastic- 20mm dia		
1	710	Sup.CPVC FTA plastic- 25mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp-CPVC threaded adopter (FTA) plastic- 25mm dia		
1	711	Sup.CPVC FTA plastic- 32mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp-CPVC threaded adopter (FTA) plastic- 32mm dia		
1	712	Sup.CPVC FTA plastic- 40mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp-CPVC threaded adopter (FTA) plastic- 40mm dia		
1	713	Sup.CPVC MTA plastic- 15mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp-CPVC Female/ Male threaded adopter (MTA) plastic- 15mm dia		
1	714	Sup.CPVC MTA plastic- 20mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp-CPVC Female/ Male threaded adopter (MTA) plastic- 20mm dia		
1	715	Sup.CPVC MTA plastic- 25mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp-CPVC Female/ Male threaded adopter (MTA) plastic- 25mm dia		
1	716	Sup.CPVC MTA plastic- 32mm

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp-CPVC Female/ Male threaded adopter (MTA) plastic- 32mm dia		
1	717	Sup.CPVC MTA plastic- 40mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp-CPVC Female/ Male threaded adopter (MTA) plastic- 40mm dia		
1	718	Sup. CPVC FT tee metal 15mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp-CPVC Female threaded Tee metal 15mm dia		
1	719	Sup. CPVC FT elbow metal 15mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp- CPVC Female threaded elbow metal-15mm dia		
1	720	Sup.CPVC pipe clip (plastic)-15-20mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp-CPVC pipe clip (plastic)- 15mm to 20mm dia		
1	721	Sup. CPVC pipe clamp 15-20mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp-Powder coated metal clamp for CPVC pipe - 15 to 20mm dia		
1	722	Sup. CPVC pipe clamp 25-32mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp-Powder coated metal clamp for CPVC pipe - 25 to 40mm dia		
1	723	Sup. CPVC ball valve 15mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp-CPVC ball valve (solvent weld) -15mm dia		
1	724	Sup. CPVC ball valve 20mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp-CPVC ball valve (solvent weld) -20mm dia		
1	725	Sup. CPVC ball valve 25mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp-CPVC ball valve (solvent weld) -25mm dia		
1	726	Sup. CPVC ball valve 32mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp-CPVC ball valve (solvent weld) -32mm dia		
1	727	Sup. CPVC ball valve 40mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp-CPVC ball valve (solvent weld) -40mm dia		

ANNEXURE-II

Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
1	728	Sup. CPVC ball valve 50mm
Supplying CPVC pipe and fittings of Supreme, Ajay Flowline, Oriplast or equivalent as per IS15778-2007 having SDR 13.5 and working pressure of 2.18MPa at normal temp-CPVC ball valve (solvent weld) -50mm dia		
1	729	Sup.GI pipe 15mm
Supplying GI pipe and fittings - GI pipe (medium duty ISI mark)- 15mm nominal bore		
1	730	Sup.GI pipe 20mm
Supplying GI pipe and fittings - GI pipe (medium duty ISI mark)- 20mm nominal bore		
1	731	Sup.GI pipe 25mm
Supplying GI pipe and fittings - GI pipe (medium duty ISI mark)- 25mm nominal bore		
1	732	Sup.GI pipe 32mm
Supplying GI pipe and fittings - GI pipe (medium duty ISI mark)- 32mm nominal bore		
1	733	Sup.GI pipe 40mm
Supplying GI pipe and fittings - GI pipe (medium duty ISI mark)- 40mm nominal bore		
1	734	Sup.GI elbow 15mm
Supplying GI pipe and fittings - GI Elbow- 15mm nominal bore		
1	735	Sup.GI elbow 20mm
Supplying GI pipe and fittings - GI Elbow- 20mm nominal bore		
1	736	Sup.GI elbow 25mm
Supplying GI pipe and fittings - GI Elbow- 25mm nominal bore		
1	737	Sup.GI elbow 32mm
Supplying GI pipe and fittings - GI Elbow- 32mm nominal bore		
1	738	Sup.GI elbow 40mm
Supplying GI pipe and fittings - GI Elbow- 40mm nominal bore		
1	739	Sup.GI elbow 50mm
Supplying GI pipe and fittings - GI Elbow- 50mm nominal bore		
1	740	Sup.GI plug 15mm
Supplying GI pipe and fittings - GI plug-15mm nominal bore		
1	741	Sup.GI plug 20mm
Supplying GI pipe and fittings - GI plug-20mm nominal bore		
1	742	Sup.GI plug 25mm
Supplying GI pipe and fittings - GI plug-25mm nominal bore		

ANNEXURE-II

Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
1	743	Sup.GI plug 32mm
Supplying GI pipe and fittings - GI plug-32mm nominal bore		
1	744	Sup.GI plug 40mm
Supplying GI pipe and fittings - GI plug-40mm nominal bore		
1	745	Sup.GI plug 50mm
Supplying GI pipe and fittings - GI plug-50mm nominal bore		
1	746	Sup.GI socket 15mm
Supplying GI pipe and fittings - GI socket- 15mm nominal bore		
1	747	Sup.GI socket 20mm
Supplying GI pipe and fittings - GI socket- 20mm nominal bore		
1	748	Sup.GI socket 25mm
Supplying GI pipe and fittings - GI socket- 25mm nominal bore		
1	749	Sup.GI socket 32mm
Supplying GI pipe and fittings - GI socket- 32mm nominal bore		
1	750	Sup.GI socket 40mm
Supplying GI pipe and fittings - GI socket- 40mm nominal bore		
1	751	Sup.GI socket 50mm
Supplying GI pipe and fittings - GI socket- 50mm nominal bore		
1	752	Sup.GI Tee 15mm
Supplying GI pipe and fittings - GI Tee-15mm nominal bore		
1	753	Sup.GI Tee 20mm
Supplying GI pipe and fittings - GI Tee-20mm nominal bore		
1	754	Sup.GI Tee 25mm
Supplying GI pipe and fittings - GI Tee-25mm nominal bore		
1	755	Sup.GI Tee 32mm
Supplying GI pipe and fittings - GI Tee-32mm nominal bore		
1	756	Sup.GI Tee 40mm
Supplying GI pipe and fittings - GI Tee-40mm nominal bore		
1	757	Sup.GI Tee 50mm
Supplying GI pipe and fittings - GI Tee-50mm nominal bore		
1	758	Sup.GI SP 15mm

ANNEXURE-II

Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
Supplying GI pipe and fittings - GI short piece up to 150mm long- 15mm nominal bore		
1	759	Sup.GI SP 20mm
Supplying GI pipe and fittings - GI short piece up to 150mm long- 20mm nominal bore		
1	760	Sup.GI SP 25mm
Supplying GI pipe and fittings - GI short piece up to 150mm long- 25mm nominal bore		
1	761	Sup.GI SP 32mm
Supplying GI pipe and fittings - GI short piece up to 150mm long- 32mm nominal bore		
1	762	Sup.GI SP 40mm
Supplying GI pipe and fittings - GI short piece up to 150mm long- 40mm nominal bore		
1	763	Sup.GI SP 50mm
Supplying GI pipe and fittings - GI short piece up to 150mm long- 50mm nominal bore		
1	764	Sup.GI union 15mm
Supplying GI pipe and fittings - GI union- 15mm nominal bore		
1	765	Sup.GI union 20mm
Supplying GI pipe and fittings - GI union- 20mm nominal bore		
1	766	Sup.GI union 25mm
Supplying GI pipe and fittings - GI union- 25mm nominal bore		
1	767	Sup.GI union 32mm
Supplying GI pipe and fittings - GI union- 32mm nominal bore		
1	768	Sup.GI union 40mm
Supplying GI pipe and fittings - GI union- 40mm nominal bore		
1	769	Sup.GI union 50mm
Supplying GI pipe and fittings - GI union- 50mm nominal bore		
1	770	Sup.GI RS 20-15mm
Supplying GI pipe and fittings - GI reducer socket-20- 15mm		
1	771	Sup.GI RS 25mm
Supplying GI pipe and fittings - GI reducer socket-25mm to any smaller size		
1	772	Sup.GI RS 32mm
Supplying GI pipe and fittings - GI reducer socket-32mm to any smaller size		
1	773	Sup.GI RS 40mm
Supplying GI pipe and fittings - GI reducer socket-40mm to any smaller size		

ANNEXURE-II

Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
1	774	Sup.GI RS 50mm
Supplying GI pipe and fittings - GI reducer socket-50mm to any smaller size		
1	775	Sup.GM valve 15mm
Providing and fixing Gun metal gate valve with CI wheel of approved quality (ISI marked)- 15mm nominal bore		
1	776	Sup.GM valve 20mm
Providing and fixing Gun metal gate valve with CI wheel of approved quality (ISI marked)- 20mm nominal bore		
1	777	Sup.GM valve 25mm
Providing and fixing Gun metal gate valve with CI wheel of approved quality (ISI marked)- 25mm nominal bore		
1	778	Sup.GM valve 32mm
Providing and fixing Gun metal gate valve with CI wheel of approved quality (ISI marked)- 32mm nominal bore		
1	779	Sup.GM valve 40mm
Providing and fixing Gun metal gate valve with CI wheel of approved quality (ISI marked)- 40mm nominal bore		
1	780	Sup.GM valve 50mm
Providing and fixing Gun metal gate valve with CI wheel of approved quality (ISI marked)- 50mm nominal bore		
1	781	Sup.GM ball valve 15mm
Providing and fixing Gun metal Ball valve with handle of approved quality - 15mm nominal bore		
1	782	Sup.GM ball valve 20mm
Providing and fixing Gun metal Ball valve with handle of approved quality - 20mm nominal bore		
1	783	Sup.GM ball valve 25mm
Providing and fixing Gun metal Ball valve with handle of approved quality - 25mm nominal bore		
1	784	Sup.Pillar cock 15mm (Jaquar)
Supply of "Jaquar" make bath fittings for VIP guest house.- 15mm Pillar cock (code 011)		
1	785	Sup.Pillar cock 15mm long (Jaquar)
Supply of "Jaquar" make bath fittings for VIP guest house.- 15mm Pillar cock long neck with aerator (code 021)		
1	786	Sup.Bib cock 15mm (Jaquar)
Supply of "Jaquar" make bath fittings for VIP guest house.- 15mm Bib cock with wall flange (code-047)		
1	787	Sup.Angular stop cock 15mm (Jaquar)
Supply of "Jaquar" make bath fittings for VIP guest house.- 15mm Angular stop cock with wall flange (code-059)		
1	788	Sup.Concealed stop cock (Jaquar)
Supply of "Jaquar" make bath fittings for VIP guest house.- Concealed stop cock extra heavy body with adjustable wall flange code-083		

ANNEXURE-II

Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
1	789	Sup.Long body bib cock (Jaquar)
Supply of "Jaquar" make bath fittings for VIP guest house.- Long body bib cock with wall flange code-107		
1	790	Sup.Central hole basin mixer (Jaquar)
Supply of "Jaquar" make bath fittings for VIP guest house.- Central hole basin mixer without popup waste system with 450mm long copper pipes and brass nuts code-167		
1	791	Sup.Wall mixer tele. shower (Jaqua
Supply of "Jaquar" make bath fittings for VIP guest house.- Wall mixer with telephone shower arrangement only but without telephone shower crutch code-217		
1	792	Sup.Wall mixer WM tel.shower(Jaquar)
Supply of "Jaquar" make bath fittings for VIP guest house.- Wall mixer (wall mounted model) with telephone shower arrangement only and with telephone shower crutch code-267		
1	793	Sup.Hand shower (Jaquar)
Supply of "Jaquar" make bath fittings for VIP guest house.- Hand shower (ABS chrome plated) with rubit cleaning system with 1 1/2m flexible tube with 8mm dia with swinging wall hook Code-559		
1	794	Sup.Flush cock (Jaquar)
Supply of "Jaquar" make bath fittings for VIP guest house.- Flush cock with wall flange 25mm with lever knob code 1081A		
1	795	Sup.CP towel rail 18" (Jaquar)
Supply of "Jaquar" make bath fittings for VIP guest house.- CP Towel rail 18" code-1111B		
1	796	Sup.Towel ring (Jaquar)
Supply of "Jaquar" make bath fittings for VIP guest house.- Towel ring code -1121		
1	797	Sup.Soap dish (Jaquar)
Supply of "Jaquar" make bath fittings for VIP guest house.- Soap dish (polyurethane) code-1133		
1	798	Sup.Toilet paper holder (Jaquar)
Supply of "Jaquar" make bath fittings for VIP guest house.- Toilet paper holder code 1151		
1	799	Sup.Double coat hook (Jaquar)
Supply of "Jaquar" make bath fittings for VIP guest house.- Double coat hook code-1161		
1	800	Sup.Glass shelf (Jaquar)
Supply of "Jaquar" make bath fittings for VIP guest house.- Glass shelf 22" code 1171		
1	801	Sup.Corner glass shelf (Jaquar)
Supply of "Jaquar" make bath fittings for VIP guest house.- Corner glass shelf with bracket code -1173		
1	802	Sup.Towel rack 18" (Jaquar)
Supply of "Jaquar" make bath fittings for VIP guest house.- Towel rack 18" code 1181A		

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
1	803	Sup. Wall mixer spindle
Supply of "Jaquar" make bath fittings for VIP guest house.- Wall mixer spindle		
1	804	Sub. Hand drier jaguar
Supply of "Jaquar" make bath fittings for VIP guest house.- Hand drier jaguar		
1	805	Water storage tank 1000ltr
Providing and placing on terrace (all floor levels) water storage tank with cover and suitable locking arrangements and making necessary holes for inlet and outlet and over flow pipes but without fittings and base supports for tank - Polyethylene Tank of 1000 ltr/500ltr/250ltr etc capacity (Sintex, Electroplast, Star, Lotus or equivalent as per IS 12701.)		
1	806	RCC Water tank 1200ltr
Providing and placing on terrace (all floor levels) water storage tank with cover and suitable locking arrangements and making necessary holes for inlet and outlet and over flow pipes but without fittings and base supports for tank - RCC Tank of dia 1200 and height 1.20mtr (NP2 class RCC pipe collars jointed with stiff mixture of cement mortar 1:2 (1 cement: 2 fine sand) with base and top cover including inside and out side plastering 6mm thick 1:3 and inside punning (Cement free issue)		
1	807	Carry out the work -Semi-skilled labour
Carry out the work for receive and dispatch of file record keeping, other office assistance and for miscellaneous civil works in township maintenance by engaging minimum of one semi-skilled worker per general shift basis.		
1	808	Carry out the work -Semi-skilled labour
Carry out the work for receiving complaints, entry of complaints in the computer, record keeping, other office assistance and for miscellaneous civil works in township maintenance by engaging minimum of one semiskilled worker per general shift basis.		
1	809	Carry out the work -skilled labour
Carry out the work for receiving complaints, entry of complaints in the computer, record keeping, other office assistance and for miscellaneous civil works in township maintenance by engaging minimum of one skilled worker per general shift basis.		
1	810	Supply of un-skilled labour
Supply of labours for miscellaneous civil works as and when required for shifting of materials on trolley including all tools and tackles etc. Unskilled (Per Man-day)		
1	811	Cleaning of mosaic floor
Cleaning and polishing of mosaic floor and skirting with cleaning agent and acid by machine as per direction of MIC with all cost complete		
1	812	Cleaning of wooden floor
Cleaning and polishing of wooden floor with cleaning agent as per direction of MIC with all cost complete		
1	813	Cleaning of glass door window
Cleaning of glass doors and windows with cleaning agent as per direction of MIC with all cost complete		
1	814	Welding of MS but hinges
Welding by electric plant/ gas plant with all cost complete for fixing MS fittings to steel doors, windows etc. for repair works as per direction of Manager #in-charge at different site with all cost complete.- MS butt hinges, Tee hinges, cup hinges tower bolt, sliding door bolt, MS handle, pegstay, helical door spring, holdfast, MS ring, steel window locking arrangement, MS lugs, MS cleats. Door closer		

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
1	815	Welding of piano hinges
Welding by electric plant/ gas plant with all cost complete for fixing MS fittings to steel doors, windows etc. for repair works as per direction of Manager #in-charge at different site with all cost complete.- Piano hinges		
1	816	Welding by elect. MS/GI pipe
Welding by electrical plant with MS/GI pipes including transpiration of electric welding plant at site etc. complete all cost and conveyance.		
1	817	Cutting by gas MS/GI/CI pipe
Cutting by gas plant with MS/GI/CI pipes including transpiration of gas welding plant at site etc. complete all cost and conveyance.		
1	818	Minor repair of trap
Minor repair of trap mouth/ rain water pipe mouth with cement mortar 1:3 and cement slurry to close the voids around the trap/ pipe mouth upto 150mm all around the pipe for arresting water seepage including fixing of gratings if any including dismantling of concrete/ plaster, chipping, leveling, finishing & curing as per the direction of MIC.		
1	819	Refixing floor trap
Cutting, dismantling and refixing of floor trap of kitchen and bath including making good the same as per the following specification for repair of floor trap leakage- dismantling of concrete floor., removing of CI floor trap, jointing of trap joints water tight, back filling, making floor good by laying concrete (1:3:6) of 100mm thick over area (0.4x0.4)sq mt around trap mouth and 40mm thick IPS flooring over concrete area including removal and refixing of trap gratings with cement mortar/ slurry, disposal of debris within 1.0KM. excluding cost of floor trap. (Cement free issue)		
1	820	Flooring for WC
Cutting of toilet floor for fixing of Indian type WC pan/ trap or repairing of trap joint leakage and making good the same after completing as per the following specification. -Dismantling of concrete floor., Removing of sand/ brick khoa/ earth up to the depth of trap bottom, Keeping the area clear for fixing and repairing of trap and pan. Refilling of sand/ brick khoa after completion fixing work, repairing of sunken slab area with application of brushbond, plastering, punning (if required), making floor good by providing 100mm thick PCC 1:5:10 and 25mm thick IPS flooring, Disposal of surplus earth and debris at disposal area within 250M excluding cost of WC and trap. This item will be operated specifically to arrest seepage of water from first floor toilet trap) (Cement free issue) (plaster, punning, brushbond payment extra).		
1	821	Repair RW pipe mouth
Repair of rain water pipe mouth leakage by cutting/dismantling of brick masonry / RCC, rain water pipe bend, chipping of floor etc. and refixing of rain water mouth piece including jointing, grouting concrete size 0.20x0.20x0.10 approx, plastering, punning at required slope/level, finishing and making water tight and making good the same etc. with all labour, tools & tackles and all bye works etc. complete at all heights as per the direction of MIC excluding the cost of rain water mouth piece and water proofing compound. (Cement free issue)		
1	822	Rain water shoe
Construction of fly ash brick masonry rain water shoe of minimum size 300x300x300mm including plastering, punning and finishing, cleaning of rain water pipe opening dismantling of adjoining wall plaster, hacking and cleaning of floor, all cost completed as per direction of MIC. (Cement and fly ash brick free of cost)		
1	823	Cleaning & washing of mosquito proof wir
Cleaning and washing of mosquito proof wire mesh net of door and windows/ glazed tile, dado/ enamel painted wall surface/ washable distemper surface etc. using soap water, washing soda or any other cleaning agent, finally washing with clean water as per direction of Manager #in-charge.		
1	824	Repair of pot hole
Repairing of pot holes with road bond or equivalent material including cutting of road in a regular shape, disposal of debris with in a lead of 50 mtr cleaning the cutting surface placing of road bond compacting with steel template of 10 kg weight, placing of safety board during work etc. complete as directed by MIC. Road bond shall be issued from store of township civil maintenance on weighment basis.		

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
1	825	Premix carpet
Providing and laying of premix carpet surfacing of required thickness, level, grade etc., with 3 cum of stone chippings 10 mm and down nominal size in desired gradation per 2.5 Cum of premixed material well mixed with bitumen emulsion (medium setting min. 65% bitumen contents) complying with IS : 8887, using 96 kg per cum of stone chippings of road surface, including cleaning the road surface, consolidation with road roller, cambering etc complete as directed by M-I-C.(Bitumen emulsion as FIM issued from Nalco's store).Mode of measurement-Gross volume of stone chips in tipper/hyva/tractor with a deduction of void of (1-2.5/3) i.e.17%.		
1	826	Concertina coil fencing
Providing and fixing of ZAL (Zinc Aluminium) Super Razor Punched Barb Tape(SRPBT) of Aluminium base(Consec make or equivalent) helix coil of 610mm dia(Before stretch) with specification such as (i) No of circles:- 50 turns per coil (ii) Coverage per coil:-6Mtr. (iii) Clipping points per Helical Loop: 5 nos (iv) Central core wire:-Made from 2.6 mm dia Spring Steel core wire of 1670 N/m2 Tensile strength as per IS-4454 galvanized as per IS-2629 (v) Razor punched strip:-Razor punched tape is ZAL steel comprising of Aluminium base with Zinc alloy @ 150 gm/m2 conforming to ASTM A-792/A-792M with additional primer treatment of Epoxy/Polyurethane & final paint top coat of caulfield green shade (BSL 139) by HOT Dipping process. Barb tape length-23.50 mm, Barb width-18.60 mm, Barb spacing-36.00mm, centre width-7.40 mm, colour-Caulfield green (BSL-139) with 2 nos. ZAL HARPOON RIPPER Horizontal runner strands (Consec make or equivalent) with specification such as (i) Centre core wire-Made from 2.6 mm dia spring steel core wire of 1670 N/m2 Tensile strength as per IS-4454 & galvanized as per IS-2629, (ii) Razor punched strip:-Razor punched tape is ZAL steel comprising of Aluminium base with Zinc alloy @ 150gm/m2 conforming to ASTM A-792/A-792M with additional primer treatment of Epoxy/Polyurethane & Final paint top coat of caulfield green shade (BSL 139) by Hot dipping process. Razor punched barb tape length 60mm & Barb spacing 100.00mm as per IS:513 DD grade comprising of 12-18 micron at all heights on boundary wall along with structural posts placed at suitable distance tied with GI staples and GI clips retain horizontal runner, including necessary GI nut bolts tied to angle iron, all complete along scaffolding, staging, platform etc as per Direction of Manager-In-Charge (Structural posts will be paid separately in the respective items)		
1	827	Cleaning of vacant qtr -A & TA type
Cleaning of vacant quarters after completion of all civil maintenance work with sweeping, watering, mopping, cleaning with detergent, including cleaning of all ceramic and sanitary fittings etc. with hydro chloric acid etc complete. For A & TA type quarters.		
1	828	Cleaning of vacant qtr -B,TB & TBT type
Cleaning of vacant quarters after completion of all civil maintenance work with sweeping, watering, mopping, cleaning with detergent, including cleaning of all ceramic and sanitary fittings etc. with hydro chloric acid etc complete. For B , TB & TBT type quarters.		
1	829	Cleaning of vacant qtr -C & TC type
Cleaning of vacant quarters after completion of all civil maintenance work with sweeping, watering, mopping, cleaning with detergent, including cleaning of all ceramic and sanitary fittings etc. with hydro chloric acid etc complete. For C & TC type quarters.		
1	830	Cleaning of vacant qtr -D & TD type
Cleaning of vacant quarters after completion of all civil maintenance work with sweeping, watering, mopping, cleaning with detergent, including cleaning of all ceramic and sanitary fittings etc. with hydro chloric acid etc complete. For D & TD type quarters.		
1	831	Cleaning of vacant qtr -non-res building
Cleaning of vacant quarters after completion of all civil maintenance work with sweeping, watering, mopping, cleaning with detergent, including cleaning of all ceramic and sanitary fittings etc. with hydro chloric acid etc complete. For non residential building		
1	832	Cleaning of vacant qtr -hostel
Cleaning of vacant quarters after completion of all civil maintenance work with sweeping, watering, mopping, cleaning with detergent, including cleaning of all ceramic and sanitary fittings etc. with hydro chloric acid etc complete. For Hostel (TH, BH, RSSJN, VBMN, & SOT and other hotel.		
1	833	Attending for water supply main CI pipe

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
		Attending and carrying out work for water supply main CI pipe line leakages on emergency basis from 100- 300mm dia immediately within or beyond normal working hours including temporary arrangement for arresting water leakage, earth work, dewatering, carriage of materials, fixing of fittings etc. all complete as per direction of MIC. (earth work, fittings, fixing of fittings shall be paid extra)
1	834	2.5mm thick of road marking paint
		Providing and applying 2.5mm thick of road marking paint (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 of the road surface of all dirt, seals, grease and foreign materials etc. complete as per the direction of MIC and accordance with applicable specifications.
1	835	Supply of WPC flush door 30mm thick
		Supplying and manufacturing of solid decorative wood polymer composites (WPC) flush doors of thickness 30mm as per direction of MIC.
1	836	Supply of WPC flush door 35mm thick
		Supplying and manufacturing of solid decorative wood polymer composites (WPC) flush doors of thickness 35mm as per direction of MIC.
1	837	Supply of WPC door frame 90x45mm
		Supplying and manufacturing of moulded WPC door frame of sizes 90x 45mm as per direction of MIC.
1	838	Supply of WPC door frame 125x65mm
		Supplying and manufacturing of moulded WPC door frame of sizes 125x 65mm as per direction of MIC.
1	839	P/F UPVC casement window small series
		Providing and fixing factory made uPVC white colour casement/casement cum fixed glazed windows comprising of uPVC multi-chambered frame, sash and mullion (where ever required) extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), uPVC extruded glazing beads of appropriate dimension, EPDM gasket, stainless steel (SS 304 grade) friction hinges, zinc alloy (white powder coated) casement handles, G.I fasteners 100 x 8 mm size for fixing frame to finished wall, plastic packers, plastic caps and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, mullion (if required) shall be also fusion welded including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Manager-in-Charge. (Single / double glass panes shall be paid separately) Note: For uPVC frame, sash and mullion extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. - Casement window double panels with S.S. Friction hinges (300 x 19 x 1.9 mm), made of (small series) frame 47 x 50 mm, sash 47 x 68 mm & mullion 47 x 68mm all having wall thickness of 1.9 ± 0.2 mm and single glazing bead of appropriate dimension.
1	840	P/F UPVC casement window big series
		Providing and fixing factory made uPVC white colour casement/casement cum fixed glazed windows comprising of uPVC multi-chambered frame, sash and mullion (where ever required) extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), uPVC extruded glazing beads of appropriate dimension, EPDM gasket, stainless steel (SS 304 grade) friction hinges, zinc alloy (white powder coated) casement handles, G.I fasteners 100 x 8 mm size for fixing frame to finished wall, plastic packers, plastic caps and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, mullion (if required) shall be also fusion welded including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Manager-in-Charge. (Single / double glass panes shall be paid separately) Note: For uPVC frame, sash and mullion extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. -Casement window double panels with S.S. Friction hinges (300 x 19 x 1.9 mm), made of (big series) frame 67 x 60 mm, sash/mullion 67 x 80 mm both having wall thickness of 2.3 ± 0.2 mm and single glazing bead/ double glazing bead of appropriate dimension.
1	841	P/F UPVC window/ventilator

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
		Providing and fixing factory made uPVC white colour fixed glazed windows/ ventilators comprising of uPVC multi-chambered frame and mullion (where ever required) extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), uPVC extruded glazing beads of appropriate dimension, EPDM gasket, G.I fasteners 100 x 8 mm size for fixing frame to finished wall, plastic packers, plastic caps and necessary stainless steel screws etc. Profile of frame shall be mitred cut and fusion welded at all corners, mullion (if required) shall be also fusion welded including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Manager-in-Charge. (Single / double glass panes shall be paid separately) Note: For uPVC frame, sash and mullion extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. -Fixed window/ ventilator made of (small series) frame 47 x 50 mm & mullion 47 x 68 mm both having wall thickness of 1.9 ± 0.2 mm and single glazing bead of appropriate dimension. (Area of window upto 0.75 sqm.)
1	842	P/F UPVC casement cum fixed door
		Providing and fixing factory made uPVC white colour casement/casement cum fixed glazed door comprising of uPVC multi-chambered frame, sash and mullion (where ever required) extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), uPVC extruded glazing beads of appropriate dimension, EPDM gasket, zinc alloy (white powder coated) 3D hinges and one handle on each side of panels along with zinc plated mild steel multi point locking having transmission gear, cylinder with keeps and one side key, G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, mullion (if required) shall be also fusion welded including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Manager-in-Charge. (Single / double glass panes shall be paid separately) Note: For uPVC frame, sash and mullion extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. - Casement door with 3D hinges made of (big series) frame 67 x 64 mm & sash 67 x 110 mm both having wall thickness of 2.3 ± 0.2 mm and single glazing bead/double glazing bead of appropriate dimension. (Area of door upto 2.00 sqm).
1	843	P/F UPVC sliding window 2 track 2 panels
		Providing and fixing factory made uPVC white colour sliding glazed window upto 1.50m in height dimension comprising of uPVC multi-chambered frame with in built roller track and sash extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), appropriate dimension of uPVC extruded glazing beads and uPVC extruded interlocks, EPDM gasket, wool pile, zinc alloy (white powder coated) touch locks with hook , zinc alloy body with single nylon rollers(weight bearing capacity to be 40 kg), G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Manager-in-Charge. (Single / double glass panes, wire mesh shall be paid separately) Note: For uPVC frame, and sash extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. -Two track two panels sliding window made of (small series) frame 52 x 44 mm & sash 32 x 60 mm both having wall thickness of 1.9 ± 0.2 mm and single glazing bead of appropriate dimension. (Area of window upto 1.75 sqm).
1	844	P/F UPVC sliding window 3 track 3 panels
		Providing and fixing factory made uPVC white colour sliding glazed window upto 1.50m in height dimension comprising of uPVC multi-chambered frame with in built roller track and sash extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), appropriate dimension of uPVC extruded glazing beads and uPVC extruded interlocks, EPDM gasket, wool pile, zinc alloy (white powder coated) touch locks with hook , zinc alloy body with single nylon rollers(weight bearing capacity to be 40 kg), G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Manager-in-Charge. (Single / double glass panes, wire mesh shall be paid separately) Note: For uPVC frame, and sash extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. -Three track three panels sliding window with fly proof SS wire mesh (Two nos. glazed & one no. wire mesh panels) made of (small series) frame 92 x 44 mm & sash 32 x 60 mm both having wall thickness of 1.9 ± 0.2 mm and single glazing bead of appropriate dimension (Area of window upto 1.75 sqm).

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
1	845	P/F UPVC sliding door two track
Providing and fixing factory made uPVC white colour sliding glazed door comprising of uPVC multi-chambered frame with in-built roller track and sash extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), appropriate dimension uPVC extruded glazing beads, uPVC extruded interlock and uPVC extruded Inline sash adaptor (if required), EPDM gasket, wool pile, zinc alloy (white powder coated) handle with key on one side of extreme panels along with zinc plated mild steel multi point locking having transmission gear with keeps, zinc alloy (white powder coated) crescent lock (if required), stainless steel (SS 304 grade) body with adjustable double nylon rollers (weight bearing capacity to be 120 kg), G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Manager-in-Charge. (Single / double glass panes, wire mesh shall be paid separately).Note: For uPVC frame and sash extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. Two track two panels sliding door made of (big series) frame 67 x 50 mm & sash 46 x 82 mm both having wall thickness of 2.3 ± 0.2 mm and single glazing bead / double glazing bead of appropriate dimension.		
1	846	P/F Armstrong false ceiling
Providing & Fixing of Armstrong Mineral Fibre Acoustical Suspended Ceiling System with Dune Max/ultima micro look (Board) Edge Tiles (600MM*600MM*20MM)With Armstrong 24mm Exposed GRID. The tiles should have Humidity Resistance (RH) of 99%, NRC 0.7, Light Reflectance #85%, Thermal Conductivity k = 0.052 - 0.057 w/m K, Colour White, Fire Performance UK Class 0 / Class 1 (BS 476 pt - 6 & 7) in module size of 600 x 600 x 20mm, suitable for Green Building application, with Recycled content of 63%. The tile shall be laid on Armstrong Prelude38 with 24 mm wide T - section flanges colour white having rotary stitching on all T sections i.e. the Main Runner, 1200 mm & 600 mm Cross Tees with a web height of 38mm and a load carrying capacity of 15.34Kgs/M2 & pull out strength of 100Kgs. The T Sections have a Galvanizing of 90 grams per M2 and need to be installed with Suspension system of Armstrong make. The Tile & Grid system used together should carry a 30 year warranty.		
1	847	P/F GRG false ceiling
Providing & fixing false ceiling at all heights with GRG (Glass Fibre Reinforced Gypsum) false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having moisture content less than 2%, humidity resistance of 99%, NRC 0.50 to 0.75 as per IS 8225:1987, Non combustible as per BS 476 (part-4)-1970 and light reflectance of 85% (minimum) to be laid in true horizontal level suspended on inter-locking metal T-Grid of hot dipped galvanised iron section of 0.33mm thick (galvanized @ 120 grams per sqm including both sides) comprising of main-T runners of size 15x32 mm of length 3000 mm, cross - T of size 15x32 mm of length 1200 mm and secondary intermediate cross-T of size 15x32 mm of length 600mm to form grid module of size 600 x 600 mm, suspended from ceiling using galvanised mild steel items (galvanizing @ 80 grams per sqm) i.e. 50 mm long, 8 mm outer diameter M-6 dash fasteners, 6 mm dia fully threaded hanger rod up to 1000 mm length and L-shape level adjuster of size 85x25x2 mm. Galvanised iron perimeter wall angle of size 24x24x0.40 mm of length 3000 mm to be fixed on periphery wall / partition with the help of plastic rawl plugs at 450 mm center to center and 40 mm long dry wall SS screws. The work shall be carried out as per specifications, drawing and as per directions of Manager-in-Charge. -With semi perforated 12 mm thick micro tegular edged GRG false ceiling tiles. INSTALLATION: To comprise main runner spaced at 1200mm centres securely fixed to the structural soffit using Armstrong suspension system (specifications below) at 1200mm maximum centre. The First/Last Armstrong suspension system at the end of each main runner should not be greater than 450mm from the adjacent wall. Flush fitting 1200mm long cross tees to be interlocked between main runners at 600mm centre to form 1200 x 600 mm module. Cut cross tees longer than 600mm require independent support. 600 x 600mm module to be formed by fitting 600mm long flush fitting cross tees centrally between the 1200 mm cross tees. Perimeter trim to be Armstrong wall angles of size 3000x19x19mm, secured to walls at 450 mm maximum centres. Installation to be carried out by Armstrong Trained Installation team & Installation should be carried out as per Armstrong recommended procedure. ARMSTRONG SUSPENSION SYSTEM accessories manufactured and supplied by Armstrong World Industries consisting of M6 Anchor Fasteners with Vertical Hangers made of Galvanized steel of size 26 x 26 x 25 x 1.2mm with a Galvanized Thickness of A pre Straightened Hanger wire of dia # 2.5 mm of 1.8 m length., thickness of 80gsm and a tensile strength of 344-413 MPa, along with Adjustable hook clips of 0.8mm thick, galvanized spring steel for 2.68 mm with a minimum pull strength of 110 kg. The adjustable clip also consists of a 3.5 mm aquiline wire to be used with the main runner .Certificate for guarantee shall be provided by M/s ARMSTRONG .The work shall be carried out including fixing of light fixture, speakers, AC grills etc. as directed by M-I-C.		
1	848	Second class teak wood frame
Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia. & length as directed by M-I-C.(hold fast lugs or dash fastener shall be paid for separately). -Second class teak wood		

ANNEXURE-II
Bill of Quantities & Schedule of Rates (BOQ & SOR)

Line Item No	Activity SNo.	Description
1	849	Second class teak wood 35mm shutter
Providing and fixing factory made panelled or panelled and glazed shutters for doors, windows and clerestory windows, including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws, excluding panelling which will be paid for separately, all complete as per direction of Manager-in-charge. -Second class teak wood 35 mm thick shutters		
1	850	Second class teak wood 30mm shutter
Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows, including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws, excluding panelling which will be paid for separately, all complete as per direction of Manager-in-charge. -Second class teak wood 30 mm thick shutters		
1	851	Panelled 2nd class teak wood 12mm shutte
Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick as directed by M-I-C.: -Second class teak wood 12mm thick		
1	852	Glass mosaic tiles
Providing and fixing Glass mosaic tiles at finished plain wall surface of size 20 mm x 20 mm x 4 mm in all colour, design , fixing in customize design as per direction of Manager-in- Charge. The glass mosaic tiles to be fixed on the wall surface with the help of approved adhesive applied at the rate of 2.5 kg per sqm and grouting of the same. The rate is inclusive of all operation, material and required pattern approved by Manager-in-Charge:		
1	853	Providing of new 1.0HP pump
Providing of new single phase, 4 inch water filled submersible pump of Crompton/kiloskar brand having minimum capacity of 1.0HP, minimum delivery head of 90mtr, for yield of 10LPM, pipe size 32mm etc. As per direction of MIC.		
1	854	Providing of new 1.5HP pump
Providing of new single phase, 4 inch water filled submersible pump of Crompton/kiloskar brand having minimum capacity of 1.5HP, minimum delivery head of 110mtr,for yield of 10LPM, pipe size 32mm etc. As per direction of MIC.		
1	855	Control panel board 1.0HP
Supply of control panel board of kiloskar/Crompton/C&S brand for 1.0HP submersible pump.		
1	856	Control panel board 1.5HP
Supply of control panel board of kiloskar/Crompton/C&S brand for 1.5HP submersible pump.		
1	857	Fixing of pump upto 2.0HP
Fixing of submersible pump of any capacity upto 2.0HP inside Nalco township including carryng of new pump from civil office, removal and refixing of tube well, pipes , pump etc, replacement of old/damaged pump/motor with new pump set, refitting, testing of water supply and return of the old pump/motor, pipe etc. to civil township store, complete as per direction of Manager in charge.		
1	858	Repair & refixing of pump upto 2.0HP
Repair and refixing of submersible pump of any capacity upto 2.0HP inside Nalco township including removal of tube well, pipes , pump, repair of damaged pump/motor with winding, ball bearing, oil seal, water seal, cooling oil etc including testing of water supply complete as per site condition and direction of Manager in charge.		



GENERAL CONDITIONS OF CONTRACT

**NATIONAL ALUMINIUM COMPANY LIMITED
NALCO BHAWAN, P-1 NAYAPALLI,
BHUBANESWAR – 751 013**

Web site: www.nalcoindia.com

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SECTION – 1

DEFINITIONS AND INTERPRETATION

1. DEFINITION & INTERPRETATION:

1.1 Definition:

In the contract (as hereinafter defined) the following words and expressions shall have the meanings hereby assigned to them except where the context otherwise requires.

- 1.1.1 The ‘Owner’ shall mean the National Aluminium Company Limited (NALCO), a Company incorporated under the Companies Act, 1956 having its registered office at IDCO Tower, 8th Floor, Janapath, Bhubaneswar –751007 or any other place as modified subsequently and shall include its Chairman-cum-Managing Director or other Administrative Officers authorised to deal with these presents are concerned on his behalf posted in the any of the Offices of NALCO and shall also include Owner’s successors and assignees.

The Chairman-cum-Managing Director has nominated the following persons as the representative of the ‘Owner’ for the purpose of all contractual matters.

Smelter	-	General Manager (Smelter)	} Projects
CPP	-	General Manager (CPP)	
Mines	-	General Manager (Mines)	
Alumina	-	General Manager (Alumina)	

- 1.1.2 The ‘Tender’ shall mean the tender submitted by the tenderer for acceptance by the Owner.
- 1.1.3. The ‘Chairman-cum-Managing Director’ shall mean the Chairman-cum-Managing Director of National Aluminium Co. Ltd., or his successors in office as designated by the Owner.
- 1.1.4. The ‘Project Head’ shall mean General Manager/ Deputy General Manager of the Project of National Aluminium Company Ltd., or his successor in office or his authorised representative.
- 1.1.5. The ‘Contractor’ shall mean the person or persons, firm or company whose tender has been accepted by owner and includes the contractor’s legal representatives, his successors and permitted assigns.
- 1.1.6. The ‘Sub-contractor’ shall mean any person or firm or company (other than the contractor to whom any part of the work has been entrusted by the contractor, with the written consent of the owner or his representative and the legal representatives, successors and permitted assignee of such person, firm or company.

- 1.1.7. The ‘Engineer-in-Charge’ shall mean the person nominated by the Owner from time to time and shall include those who are expressly authorised by the Owner to act for and on his behalf for all function pertaining to operation of this contract. All functions pertaining to the operation of contract means all acts necessary for execution of the contract coordinating between the different agencies and final closing of the contract.
- 1.1.8. The ‘Works’ shall mean and include all works to be executed in accordance with the contract or part thereof as the case may and shall include all extras, addition, altered or substituted works as required for the purpose of the contract or as may be required to be executed by the owner/ engineer-in-charge.
- 1.1.9. The ‘Contract’ shall mean the agreement between the Owner and the contractor for the execution of the works including therein all documents such as the invitation to tender, instructions to Tenders, General Conditions of Contract, Special Conditions of Contract, Job Specifications, General Requirements, Time Schedule of Completion of Job, Drawings, Letter of Intent awarding the work, Agreed variations, if any etc.
- 1.1.10. The ‘Contract Document’ shall mean collectively the tender documents, designs, drawings specifications, agreed variations, if any and other documents constituting the tender and acceptance thereof.
- 1.1.11. ‘Constitutional Plant’ shall mean all appliances or things of whatsoever nature required in or about the execution, completion or maintenance of the works or temporary works (as hereinafter defined) but does not include materials or other things intended to form of forming part of the permanent work.
- 1.1.12. ‘Temporary Works’ shall mean all temporary works of every kind required in or about the execution, completion or maintenance of the works.
- 1.1.13. ‘Specifications’ shall mean all directions, various technical specification, provisions, and requirements, attached to the contract, which pertain to the method and manner of performing the work or works to the quantities and qualities of the work or works and the materials to be furnished under the contract for the work or works as may be amplified or modified by the Owner or the Engineer-in-charge during the performance of Contract in order to provide the unforeseen conditions or in the best interests of the work or works. It shall also include the latest edition including all addenda/ corrigenda or relevant Indian Standard Specifications and other relevant codes.
- 1.1.14. ‘Plans’ shall mean all maps, sketches, and layouts as are incorporated in the contract in order to define broadly the scope and specifications of the work or works, and all reproductions thereof.

- 1.1.15. 'Drawings' shall include maps, plans and tracings or prints thereof with any modifications approved in writing by the Engineer-in-Charge and such other drawings as may, from time to time, be furnished or approved in writing by the Engineer-in-charge.
- 1.1.16. 'Foreign consultant' shall mean a person, agency or firm including their successors and assigns, who are nonresidents of India and are responsible for supply of process Technology for expansion plant based on review of existing plant including material flow, energy balance, additional facilities and improvement on the basis of the recent experience.
- 1.1.17. 'Indian Consultant' shall mean a person, agency or firm including their successors and assign who are responsible for detailed engineering and construction management of the project.
- 1.1.18. 'Project manager' shall mean the authorised representative of the consultant posted at site. He shall be responsible for supervision of the work by the contractors as well as coordinate with different agencies within the organisation or otherwise.
- 1.1.19. 'Site' shall mean the lands and other places on, under in or through which the permanent works are to be carried out and any other lands or places provided by the owner for the purpose of the contract.
- 1.1.20. 'Notice in writing or written Notice' shall mean a notice in written, typed or printed characters sent (unless delivered personally or other wise proved to have been received) by registered post to the last known private or business address or registered office of the addressee and shall be deemed to have been received in the ordinary course of post it would have been delivered.
- 1.1.21. The 'Completion Certificate' shall mean the certificate to be issued by the owner or his representative when the works have been completed to his satisfaction.
- 1.1.22. The 'Final Certificate' in relation to the work shall mean the certificate regarding the satisfactory compliance of the various provisions of the contract to be issued by the owner or his representative after the period of liability is over.
- 1.1.23. 'Approved' shall mean approved in writing including subsequent written conformation of previous verbal approval and 'Approval' means approved in writing including as aforesaid.
- 1.1.24. The 'Period of Liability' in relation to a work means the specified period from the date of issue of completion certificate up to the date of issue of final certificate which the contractor stands responsible for rectifying all defects that may appear in the works.

- 1.1.25. The ‘Appointing Authority’ for the purpose of arbitration shall be the Chairman and managing Director or any other person so designated by him.
- 1.1.26. The ‘Alteration Variation Order’ means an order given in writing by the Engineer-in-Charge/ owner to effect additions to or deletions from or alteration in the works.
- 1.1.27. ‘Letter of Intent’ shall mean an intimation by a letter to tenderer that the tender has been accepted in accordance with the provisions contained in the letter.
- 1.1.28. ‘Days’ means a day of 24 hours from mid night irrespective of the number of hours worked in that day.
- 1.1.29. ‘Working Day’ mean any day which is not declared to be holiday or rest day by the Owner.
- 1.1.30. ‘Week’ means a period of any consecutive seven days.
- 1.1.31. ‘Metric System’: All technical documents regarding the construction of works are given in the metric system and all work in the project should be carried out accordingly to the metric system. All documents concerning the work shall also be maintained in the metric system.
- 1.1.32. ‘Value of Contract’ shall mean the sum accepted or the sum calculated in accordance with the prices accepted in tender and / or the contract rates as payable to the contractor for the entire execution and full completion of the work.
- 1.1.33. ‘Headings and Marginal Notes’ in these contract documents are given solely for facility of reference and are not part of the contract documents and are not to be taken into account in the interpretation of the provisions of the contract.
- 1.1.34. ‘Language for Drawings & Instruction’: All the drawings, titles, notes, instruction, dimensions etc. shall be in English Language.
- 1.1.35. ‘Singular and Plural’: The singular shall include the plural and vice versa wherever the context so requires.

SECTION - II

2. FACILITIES TO CONTRACTOR

2.1 Location of Sites and Access by Road:

2.1.1 Locations of Sites:

The general information about Mines Alumina, Aluminium Smelter and Captive power Plants furnished below is of indicative nature only and shall not be considered as binding in any way on the Owner and shall not govern either the scope of work or the nature of the respective rights and the obligations of the parties to such contract.

(a) Alumina Plant and Mines:

Alumina plant is on south-western side of the Panchpatmali hill near Damanjodi village in Koraput District, Orissa State. The site is situated at 12 Km from the national highway No. 43 off Semiliguda village. The Alumina Plant Site has the form of saddle between groups of low hills. The location of Red Mud Pond is in the natural basis of hills situated at a distance of 2 Km from the western side of the plant. The Bauxite mine is located at 14 Km away from the Alumina Plant Site.

(b) Smelter Plant:

Aluminium Smelter is on the Southern side of National Highway No. 42, with its approximate latitude and longitude as 20°51'N and 85°10'E respectively. The area, at a higher elevation in comparison with adjacent land, is not subjected to either normal or flash foods. The prevalent directions of wind are from North-West and West.

(c) Captive Power Plant:

Captive Power Plant is located at Angul, District Angul, Orissa on the south of Talcher Thermal Power Station of Orissa State Electricity Board the main plant site is about 3 Km on the north of the junction of the National Highway Nos. 42 and 23, between the villages Balaram Prasad Patna and Gotamara. The access roads to the main plant site may be taken from either of the highways.

2.1.2. Access by Road:

Contractor, if necessary, shall build other temporary access roads to the actual site of construction for his own work at his own cost. The Contractor shall be required to permit the use of the roads so constructed by him for vehicles of any other parties who may be engaged on the project site. The Contractor shall also facilitate the construction of the permanent roads should the construction thereof start while he is engaged on this work. He shall make due allowance in his tender for any inconvenience he anticipates on such account.

Non-availability of access roads, railway siding and railway wagons for the use of contractor shall in no case condone any delay in the execution of works not be the cause for any claim for compensation against the Owner.

2.2 Water Supply:

2.2.1. Unless other wise provided in the Contract, the Contractor shall be responsible for the arrangements to obtain supply of water necessary for the works, his labour colony, his workshops, his offices etc. All pumping installations, pipe network and distribution system will have to be carried out by the Contractor at his own cost.

2.2.2. The Owner may agree to supply water to the Contractor for use in the Owner's works on specified terms and conditions as shall be determined by the Owner, which shall be binding on the Contractors. The tenderer is however required to exercise his option to receive such water supply from Owner's main at the time of submission of his tender.

2.2.3. When the water is supplied by the Owner, the Owner's main will be within 500 metres form the site of work. The Contractor shall provide at his own cost, all necessary ferrules, pipes, fitting, couplings and tanks and temporary works required and he shall maintain all such works in satisfactory condition. The Contractor shall remove all such works and shall re-instate and make good any work disturbed, to the satisfaction of the Engineer-in-Charge.

2.2.4. In the event of the Contractor's drawing water from the Owner's main/ source, he shall not claim any compensation for interruption or failure of Owner's water supply caused due to any reasons beyond the control of the owner.

2.2.5. The water so supplied by the Owner shall be free of cost for the Constructional work only.

2.3. Power Supply:

2.3.1 Subject to availability, Owner will supply power at 400/440 V at only one point at the nearest substation, from where the contractor will make his own arrangement for temporary distribution. The point of supply will not be more than 500 Metres away from the Contractor's premises. All the works will be done as per IEA regulations and passed by the Engineer-in-Charge. The temporary line will be removed forthwith after the completion of work or if there is any hindrance caused to the other works due to the alignment of these lines, the contractor will re-route or remove the temporary lines at his own cost. The Contractor at his cost will also provide suitable electric metres, fuses, switches, etc. for purposes of payment to the Owner which should be in the custody and control of the Owner. The cost of power supply shall be payable to the owner every month. Rs. 1/- per kWh for power, which will be deducted from the running bills. The owner shall not, however, guarantee the supply of electricity and no compensation for any failure or short supply of electricity will be entertained and this does not relieve the contractor of his

responsibility for timely completion of this works as stipulated in the contract.

- 2.3.2 It shall be the responsibility of the contractor to provide and maintain the complete installation of the load side of the supply with due regard to safety requirement at site. All cabling, equipment, installations etc. shall comply in all respects with the latest statutory requirements and safety provisions i.e. as per and the Central/ State Electricity Acts and Rules etc. The Contractor will ensure that his equipment and Electrical wiring etc. are installed modified, maintained by a licensed Electrician/ Supervisor. A test certificate is to be produced to the Engineer-in-Charge for his approval, before power is made available.
- 2.3.3 At all times, IEA regulations shall be followed failing which the Owner has a right to disconnect the power supply without any reference to the contractor. No claim shall be entertained for such disconnection by the Engineer-in-Charge. Power supply will be reconnected only after production of fresh certificate from authorised electrical supervisors.
- 2.3.4 The Owner is not liable for any loss or damage to the Contractor's equipment as a result of variation in voltage or frequency or interruption in power supply or other loss to the Contractor arising there from.
- 2.3.5 The Contractor shall ensure that the Electrical equipment installed by him are such that average power factor does not fall below 0.90 at his premises. In case power factor falls below 0.90 in any month, he will reimburse to the Owner at the penal rate determined by the Owner for all units consumed during the month.
- 2.3.6 The Power supply required for Contractor's colony near the plant site will be determined by the Owner and shall as per state Electricity Board's Rules and other Statutory provisions applicable for such installations from time to time. In case of power supply to Contractor's colony, the power will be made available at a single point and the Contractor shall make his own arrangement at his own cost for distribution to the occupants of the colony as per Electricity Rules & Acts. The site area and colony shall be sufficiently illuminated to avoid accidents.
- 2.3.7 The Contractor will have to provide and install his own light and power meters, which will be governed as per Central/ State Government Electricity Rules. The meters shall be sealed by the Owner.
- 2.3.8 In case of damage to any of the Owner's equipment on account of fault, intentional or unintentional on the part of the Contractor the Owner reserves the right to recover the cost of such damage from the contractor's bill. Cost of HRC Fuses replaced at the Owner's terminals due to any fault

in the Contractor's installation shall be to contractor's account at the rates decided by the Engineer-in-Charge.

- 2.3.9 Only motors upto 3 HP will be allowed to be started direct on line. For motors above 3 HP and up to 100 HP a suitable starting devices approved by the Engineer-in-Charge shall be provided by the Contractor For Motor s above 100 HP slipping induction motors will suitable starting devices as approved by the Engineer-in-Charge shall be provided by the Contractor.
- 2.3.10 The Contractor shall ensure at his cost that all electric lines and equipment and all installations are approved by the State Electricity Inspector before power can be supplied by the Owner.
- 2.3.11 The total requirement of power shall be indicated by the tenderer along with his tender.

2.4. Land for Contractor's Filed Office, Godown and Workshop :

- 2.4.1. The Owner will at his discretion and convenience and for the duration of the execution of the work may provide the land for construction of Contractor's field office, godown, workshops and assembly yard required for the execution of the contract nearer to the site.

The Contractor shall at his cost construct all these temporary buildings structures and provide suitable water supply and sanitary arrangement as approved by the Engineer-in-Charge and other inspectorates.

- 2.4.2. On completion of the works undertaken by the Contractor, he shall remove all temporary works erected by him and have the site cleared as directed by Engineer-in-Charge. If the Contractor fails to comply with these requirements, the Engineer-in-Charge has the right to remove any structure, such surplus, rubbish materials and depose off the same as he deems fit and get the site cleared and the contractor shall forthwith pay the amount of all expenses so incurred and shall have no claim in respect of any such surplus materials disposed as aforesaid. The Owner reserves the right to ask the Contractor at any time during the pendancy of the contract, to vacate the land by giving 7 (seven) days notice on security reasons or on national interest or otherwise. A token rent of Rs. 100/- (Rupees One hundred only) per hectare or part thereof per annum or part thereof shall be charged for the land so made available.

Land provided shall be solely on licence basis which is terminable by at any time without notice or without assigning any reasons. In the event of any such termination or the termination of the contract/completion thereof, the contractor shall forthwith vacate the premises.

2.5. Land for Residential Accommodation:

Land for residential accommodation for staff and labour may be made available at the discretion of the Engineer-in-Charge and rent for the same will be as decided by the Engineer-in-Charge according to location and the area occupied by the Contractor.

SECTION - III

GENERAL INSTRUCTIONS TO TENDERERS

3. SUBMISSION OF TENDER:

3.1. The documents issued to the tenderers shall be as follows:

- (i) One complete set of tender documents as per index sheet and drawings marked 'ORIGINAL' (To be submitted along-with the quotation).
- (ii) One complete set of tender documents as per index sheet marked 'TENDERER'S COPY' (To be retained by the tenderer for reference).

3.1.1. The tender documents shall be in 2 parts viz. Technical Bid and Price Bid. Technical and Price Bid should be put in separate sealed cover and marked with the tender reference and name of the work. In addition, a note on the Price Bid "Quotation do not open" is to be superscribed. Both the sealed covers are to be put in a single sealed cover. The name of the work the tender reference and date of opening are to be superscribed on this sealed envelope also.

The technical Bid shall be opened in the first instance. Clarifications, confirmations, if any, shall be obtained with regard to technical specifications. After technical specifications are firmed up, if a tenderer revises his price bid, he is required to submit justification in support of the revision made. The price bid shall be opened thereafter.

3.2. If Addenda/ Corrigenda are issued to this tender document, they must be signed, submitted along-with the tender documents. The tenderer should write clearly the revised quantities in schedule of Rates of Tender Document and should price the work based on revised quantities when amendments on quantities are issued in addenda.

3.3. Tenderers are advised to submit quotations based strictly on the terms and conditions and specifications contained in the tender documents and not stipulate any deviations. Should it however become unavoidable, deviations should be stipulated in the prescribed proforma only, contained in the proposal form. Owner reserves the right to evaluate the quotations containing deviations having financial implications, by adding the cost for such deviations are determined by Owner.

3.4. Tenders should be submitted in double sealed envelope with the name of work superscribed thereon and with the note "QUOTATION DO NOT OPEN" written prominently. The full name, postal address and telegraphic address of the tenderer shall be written on the bottom left hand corner of the sealed cover.

4.0. DOCUMENTS:

4.1.1 Bidders shall submit with his bids the particular/ documents as envisaged from Appendix (i) to (x) along with tentative construction net work/ Bar chart for completion of work taking into account various intermediate completion milestones/ component milestones and the overall completion of work under the contract.

4.1.2. Details to be submitted along with tender:

The tenders, as submitted will consist of the following:

The technical Bid and Price Bid shall be submitted as stated in para 3.1.1 Documents to be attached with price bid.

- (i) Complete set of the tender document (marked ORIGINAL) as issued duly filled in by the tenderer as prescribed in different clauses of the tender document, signed and date affixed.

Documents to be attached with Technical Bid.

- (ii) Earnest money in the manner specified in Clause 6 hereof.
- (iii) The following proposal forms in FIVE copies
 - (a) Details of works of similar nature and magnitude carried out during last 5 years as per the Appendix – 1(A)
 - (b) Concurrent commitments of the tenderer as per the Appendix – 1(B).
 - (c) Details of equipments, tools and tackles proposed to be deployed for this work as per the Appendix – (II).
 - (d) Details of manpower proposed to be deployed for this work as per the Appendix – (III), indicating the qualification.
 - (e) Site organisation chart showing number of qualified engineers and supervisors etc. indicating their bio-data as per the Appendix – (IV), indicating the qualification.
 - (f) List of proposed sub-contractors to be deployed as per the Appendix – (V).
 - (g) Progress Billing as per the Appendix – (VI).
 - (h) Information about tenderers as per the Appendix – (VII).
 - (i) List of enclosures as per the Appendix – (VIII).
 - a) Power of attorney
 - b) Income tax & Sales tax clearance certificate.
 - c) Solvency certificate from nationalised Bank
 - d) Documents showing annual turnover.
 - (j) Exception and deviation which tenderer may desire to stipulate as per Appendix – (IX).

4.2 All pages to be initialled:

All signatures in tender documents shall be dated, as well as the pages of all sections of tender documents shall be initialled at the lower right hand corner or signed wherever required in the tender papers by the tenderer or by a person holding power of attorney authorising him to sign on behalf of the tenderer before submission of tender.

4.3. Rates to be in Figures and Words:

The tenderer shall quote in English, in figures and in words for the rates and amount tendered by him in the Schedule of Rates forming part of the documents, in such a way that interpolation is not possible. The amount of each item shall be worked out and entered and requisite total given of all items. The tendered amount for the work shall be entered in the tender and duly signed by the tenderer.

If some discrepancies are found between the rates given in works and figures or the amount shown in the tender, the following procedure shall be followed:-

- a) When there is difference between the rates in figures and words, the rate which corresponds to the amount worked out by the tenderer shall be taken as correct.
- b) When the rate quoted by the tenderer in figures and words tally but the amount is incorrect, the rate quoted by the tenderer shall be taken as correct.
- c) When it is not possible to ascertain the correct rate by either of above methods the rate quoted in words shall be taken as correct.

4.4. Corrections and Erasures:

All corrections and alterations in the entries of tender papers shall be signed in full by the tenderer with date. No erasures or over writings are permissible.

4.5. Signature of Tenderer:

- 4.5.1. The tender shall contain the name, residence and place of business of person or persons making the tender and shall be signed by the tenderer with his usual signature. Partnership firms shall furnish the full names of the partners in the tender. It should be signed in the partnership's name by all the partners or by duly authorised representative followed by the name and designation of the person signing. Tender by a corporation shall be signed by an authorised representative and a power of attorney on the behalf shall accompany the tender. A copy of constitution of the firm with names of all partners shall be furnished.
- 4.5.2. When the tenderer signs a tender in a language other than English, the total amount tendered should in addition be written in the same language. The signature should be attested by at least one witness.

4.6 Witness: Witness and sureties shall be persons of status and property. Their name occupation and address shall be stated below their signature.

5. TRANSFER OF TENDER DOCUMENTS:

Transfer of tender document purchased by one intending tenderer to another is not permissible.

6. EARNEST MONEY:

6.1. The tenderer must pay earnest money as given in the Letter/ Notice Inviting Tenders. Tenders not accompanied with earnest money deposit will be rejected. The earnest money can be paid in cash or by crossed demand draft or fixed deposit or Bank Guarantee from any Nationalised/ Scheduled Bank or Insurance Guarantee in the prescribed proforma as indicated in the tender document in favour of National Aluminium Company Ltd.

6.2. The Bank Guarantee so furnished by the tenderer shall be only in the proforma prescribed by the Owner and valid for six months from the date of opening of the tender. No interest shall be paid by the Owner on the Earnest Money deposited by the tenderer.

7. **VALIDITY:** Tender submitted by tenderers shall remain valid for acceptance for a period of four months from the date of opening of the tender. The tenderers shall not be entitled during the said period of four months, without the consent in writing of the Owner, to revoke or cancel his tender or to vary the tender given or any term thereof. In case of tenderer revoking or canceling his tender or varying any terms in regard thereof without the consent of a Owner in writing, the earnest money paid by him along-with the tender shall be forfeited.

8. ADDENDA/ CORRIGENDA:

8.1. Addenda/ Corrigenda to the tender documents may be issued prior to the date of opening of the tenders to clarify documents or to reflect modification in the design or contract terms.

8.2. The Addenda/ Corrigenda will be issued in duplicate to each person or organisation to whom a set of tender documents has been issued. Each recipient should acknowledge the receipt of the same and attach one copy of the addenda/ corrigenda along-with his offer. All addenda/ corrigenda issued shall become part of Tender Documents.

9. RIGHT OF OWNER TO ACCEPT OR REJECT TENDER:

9.1. The right to accept the tender will rest with the Owner. The Owner further does not bind himself to accept the lowest tender and reserves the authority to reject any or all the tenders received without assigning any reason whatsoever. The whole work may be split up between two or more contractors or accepted in part (not entirely) if considered expedient. The quoted rates would hold good for such eventualities. Tenders in which any of the particulars and prescribed information are missing or incomplete in any respect and / or the prescribed conditions are not

fulfilled are liable to be rejected. The decision for the owner in respect of the above shall be final and binding on the contractor.

9.2. Canvassing in connection with tenders is strictly prohibited. The submitted tenders of the tenderers who resort to canvassing are liable to rejection. Tenders containing uncalled remarks or any additional conditions are liable to be rejected.

10. THE SCHEDULE:

10.1. The work shall be executed strictly as per the Time Schedule given in Appendix –1. The period of construction given in time Schedule includes the time required for mobilisation as well as testing, rectification if any, re-testing and completion in all respects to entire satisfaction of the Engineer-in-Charge.

10.2. A joint programme of execution of the work will be prepared by the Engineer-in-Charge and contractor based on priority requirement of this project. This programme will take into account the time of completion mentioned in 19.1 above and the time allowed for the priority works by the Engineer-in-Charge.

10.3. Monthly/ weekly construction programme will be drawn up by the Engineer-in-Charge jointly with the Contractor, based on availability of work fronts and the joint construction programme as per 10.2 above. The contractor shall scrupulously adhere to these targets/ programs by deploying adequate personnel construction tools and tackles and he shall also supply himself materials of his scope of supply in good time to achieve the targets/ programmes. In all matters concerning the extents of targets set out in the weekly and monthly programmes and the degree of achievement, the decision of the Engineer-in-Charge will be final and binding on the contractor.

10.4. CONSTRUCTION SCHEDULE AND PRESENTATION:

The construction schedule shall be in the form of network of PERT CHART/ CPM or other suitable presentation for the programme of the work indicating therein the different components item of works and time required for completion of each components item wise/ month wise season wise so as to complete the work in all respects within the stipulated period. Before award of the work the contractor is also required to make the presentation to satisfy owner of their proposal for construction schedule in the form of BAR CHART and organizational resources, equipments, machinaries, manpower to be deployed for timely completion of the project.

11. TENDERER'S RESPONSIBILITY:

The intending tenderers shall be deemed to have visited the site and familiarised themselves thoroughly with the site conditions before submitting the tender. Non-familiarity with the site conditions will not be considered a reason either for extra claims or for not carrying out the works in strict conformity with the drawings and specifications.

12. RETIRED GOVERNMENT OR COMPANY OFFICERS:

No Engineer of Gazetted rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering department of the State/ Central Government or of the owner is allowed to work as a contractor for a period of two years after his retirement from Government service or from the employment of the Owner without the previous permission of the Owner. The contract if awarded, is liable to be cancelled if either the contractor or any of his employees is found at any time to be such a person, who had not obtained permission of the owner as aforesaid before submission of tender or engagement in the contractor's service as the case may be.

13. SIGNING OF THE CONTRACT:

The successful tenderer shall be required to execute an agreement with the Owner in the proforma attached with tender document within 10 days of the receipt by him of the notification of acceptance of the tender. In the event of failure on the part of the successful tenderer to sign the agreement within the above stipulated period, the earnest money or his initial security deposit will be forfeited and the acceptance of the tender shall be considered as cancelled. No bills shall be payable unless the agreement is executed.

14. FIELD MANAGERMENTS AND CONTROLLING AUTHORITY:

14.1 The field management will be responsibility of the Project Manager posted at site by the consultant and nominated by the owner. The Project manager shall work in accordance with the directions given to him from time to time by the project head.

14.2. The Engineer-in-Charge shall only co-ordinate with the other agencies engaged to work at site, to ensure minimum disruption of work carried out by different agencies. It shall be the responsibility of the contractor to plan and execute the works strictly in accordance with site instructions and avoid hindrance to the works being executed by other agencies. The instructions of the Engineer-in-Charge shall be binding on the contractor.

15. NOTE TO SCHEDULE OF RATES:

15.1. The schedule of rates should be read in conjunction with all the other sections of the tender.

15.2. The tenderer shall be deemed to have studied the drawings, specifications and details of work to be done within time schedule and to have acquainted himself of the conditions prevailing at site.

15.3. Rates must be filled in the original tender document. If quoted in separate typed sheets, no variation in time description or specification shall be accepted. Any exceptions taken by the tenderer to the schedule of rates shall be brought out in the terms and conditions of offer.

15.4. The quantities shown against the various items are only approximate. Any increase or decrease in the quantities shall not form the basis of alternation of the rates quoted and accepted.

15.5. The owner reserves the right to interpolate the rates for such items of work falling between similar items of lower and higher magnitude.

SECTION - IV GENERAL OBLIGATIONS

16. INTERPRETATION OF CONTRACT DOCUMENTS:

- 16.1. Complete documents forming the contract are to be taken as mutually explanatory. Should there be any discrepancy, inconsistency, error or omission in the contracts or any of them the matter may be referred to Engineer-in-Charge who shall give decisions and Issue to the contractor instructions directing in what manner the work is to be carried out. The decision of Engineer-in-Charge shall be final and conclusive and the contractor shall carry out work in accordance with this decision.
- 16.2. Works shown in the drawing but not mentioned in the specification or described in specification but not shown in the drawings shall nevertheless be deemed to be included in the same manner as if they had been specifically shown upon the drawings as well as described in the specifications.
- 16.3. Unless otherwise stated specifically, the 'singular' shall also mean 'plural' and vice versa wherever the context so requires words implying 'persons' shall include relevant 'corporate companies or registered association' or 'body of individuals' or 'firm of partnership' as case may be.

17. SPECIAL CONDITIONS OF CONTRACT:

- 17.1. Special Conditions of Contract shall be read in conjunction with the General Condition of Contract Specifications of work, drawing and any other documents forming part of this contract wherever the context so requires.
- 17.2. Notwithstanding the sub-divisions of the documents into the separate sections and volumes each part shall be deemed to be supplementary to complementary of every other part and shall be read with and into the contract so far as it may be practicable to do so.
- 17.3. In case of any discrepancy between various sections of the contract, the following order of preference shall be observed.
 - (1) Schedule of quantities
 - (2) Technical specifications
 - (3) Special Conditions of Contract
 - (4) General Conditions of Contract
- 17.4. Wherever it is mentioned in the specifications that the Contractor shall perform certain work or provide certain facilities it is understood that the Contractor shall do so at his cost.
- 17.5. The materials, design and workmanship shall satisfy the relevant Indian Standard, the job specifications contained herein and codes referred to.

Where the job specifications stipulate the requirements in addition to those contained in the standard codes and specification, these additional requirements shall also be satisfied.

18. Tenderer to Obtain his Own Information:

- 18.1. The tenderer shall for all purposes and whatsoever reason may be, deemed to have himself independently obtained all necessary information for the purpose of preparing his tender. The correctness of the details given in the Tender Document as guideline information to help the tenderer but to make-up the tender is not guaranteed.
- 18.2. The tenderer shall be deemed to have examined the tender documents, to have obtained his own information in all matters whatsoever that might influence carrying out of the works at the scheduled rates and satisfied himself to the sufficiency of his tender. Any error in description or quantity or omission therefrom shall not vitiate the contract or release the contractor from executing the work comprised in the contract according to drawings and specifications at the scheduled rates. He is deemed to know the scope, nature and magnitude of the works, the requirements of materials and labour involved etc. and as what works he has to complete in accordance with the contract document whatever be the defects, omissions or errors that may be found in the Contract Document. The contractor shall be deemed to have visited site and surroundings areas, to have satisfied himself to the nature of all existing structures, and also as to the nature and the conditions of available facilities like Railways, roadways, bridges culverts, means of transport and communications like by land, water or air and possible interruptions thereto the access to and egress from site and to have made enquiries, examined satisfied himself of the sites for obtaining sand, stones, bricks and other materials, the sites for disposal of surplus materials, the available accommodation like depots, buildings as may be necessary for executing and completing the works, to have made local independent enquiries as to the sub-soil water and variations thereof, storms, prevailing winds and climatic conditions and all other similar matters affecting the works. He is deemed to have acquainted himself his liability for payment of Government Taxes, Customs Duties and other charges.
- 18.3. Any neglect or failure on the part of the tenderer in obtaining necessary and reliable information or issues stated at 18.2 or any other matters affecting the contract shall not relieve him from any risks or liabilities or the entire responsibility for completion of the works at the scheduled rates and time in strict accordance with the contract documents.
- 18.4. Any change in layout due to site conditions or technological requirement shall be binding on the contractor and no extra claim on this account shall be entertained.

- 18.5. No verbal agreement or inference from conversation with any officer or employee of the Owner either before, during or after the execution of the contract agreement shall in any way affect or modify and of the terms or obligations herein contained.

19. Security Deposit:

- 19.1. A sum of 10% of the accepted value of the tender or actual value of the work done whichever is higher for contracts not exceeding Rs. 1 Crore, 7 1/2 % for the value of contracts over Rs. 1 up to Rs. 5 crores and 5% for the value of contracts over Rs. 5 crores shall have to be deposited by the person/ persons (hereinafter called as contractor) as security deposit with the owner until the expiry of defect liability period.
- 19.2. This may be deposited initially at 2 1/2% of the value of the contract (referred as initial Security deposit) within 20 days of receipt by him of the notification of acceptance of tender and the balance will be recovered in installments through the deduction @ 10% of the gross value of the each running account bill for the contract upto Rs. 1 crore, 7 1/2 % for contract between Rs. 1 to Rs.5 crores and 5% for contract over Rs. 5 crores, till total security deposit is collected. No further deduction from the bills will be made on this account subject to clause 19.6 below.
- 19.3. Alternatively the contractor may at his option to deposit the full amount percentage as mentioned 19.1 above towards deposit within 10 days of issue of notification accepting his tender. This amount will have to be suitably enhanced to the tune of above percentage of the executed value.
- 19.4. The earnest money deposited with the tender shall be adjusted towards security deposit.
- 19.5. Contractor can furnish the initial or total security deposit amount (a) in Demand Draft or (b) through a Bank Guarantee from any Scheduled bank in the prescribed proforma.
- 19.6. If contractor /sub-contractor or their employees damages, breaks, deface or destroy the property belonging to the owner or other during the execution of the contract, the same shall be made good by the contractor at his own expense and in default thereof; the Engineer-in-Charge may cause the same to be made good by other agencies and recover expenses from the contractor (for which the certificate of Engineer-in-Charge shall be final).
- 19.7. All compensation or other sums of money payable by the contractor to the Owner or recoveries to be made under terms of this contract may be deducted from or paid by the sale of a sufficient part of his security deposit or from any sums which may be due or may become due to the contractor by the Owner on any account whatsoever. In the event of his security being reduced by reasons of any such deduction or sale, the contractor shall within ten days

thereafter make good in cash, bank drafts, any sum or sums which may have fallen short or Security deposit amount or any part thereof. No interest shall be payable by the Owner for sum deposited as security deposit.

- 19.8. The security deposit will be refunded after the expiry of the period of liability as stipulated in the contract.

20. Forfeiture of Security Deposit:

Whenever any claim against the Contractor for the payment of a sum of money arises out of or under the contract, the Owner shall be entitled to recover such sum by appropriating in part or whole the security deposit of the contractor, and to sell any Government securities, etc. forming whole or part of such security deposit. In the event of security being insufficient or if no security has been taken from the contractor, then the balance or the total sum recoverable as the case may be, shall be deducted from any sum then due or which at any time thereafter may become due to the contractor. The contractor shall pay to the Owner on demand any balance remaining due.

In the event of any breach by the contractor or any loss or damage occasioned to the owner which in the opinion of the owner has arisen, the decision whereof shall be final and binding on the contractor or in the event of the termination of the contract for any such breach, the security deposit is liable to be forfeited. The decision of forfeiture by the Owner shall be final and binding on the contractor.

21. Time of performance:

The work covered by this contract shall be commenced within twenty one days after the issue of the letter of acceptance of tender and be completed in stages on or before the dates as mentioned in the time schedule of completion of works. The contractor should bear in mind that time is the essence of the contract, unless such time be extended pursuant to the provision of clause No.22 Request for Revision of Construction time after tenders are opened will not receive consideration. The above period of twenty one days is included within the overall completion schedule, not over and above the completion time.

22. Extension of Time.

- 22.0. The application for extension of time is to be given to project head through the engineer –in-charge and the project head may authorise extension of time after considering the due merits.

Whenever extension of time is granted by the project head, the same shall be on the existing terms and conditions of the contract and without any additional financial liability to the Owner. The contractor in any case shall have no claim whatsoever for any type of compensation on account of any delay attributable to any one.

23. Force Majeure:

- 23.1 Any delays in or failure of the performance of either parties thereto shall not constitute default hereunder or give rise to any claims for damages, if any, to the extent such delays or failure of performance caused by occurrences such as acts of God or the public enemy, expropriation or confiscation of facilities by Government authority, compliance with any order or request of any Governmental authorities, acts or war rebellion, sabotage, fire, floods, explosions riots or illegal strikes, provided always that such occurrences result in impossibility of performances of the contract.
- 23.2 Only events of Force Majeure which impedes the execution of the contract at the time of its occurrence shall be taken into cognizance.

24. Compensation For Delay:

- 24.1. Time is essence of the contract. In case the contractor fails to complete the work within the stipulated period, he shall be liable to pay to the Owner as compensation, an amount equal to 1% of the value of contract per week of the delay subject to a maximum of 10% of the value of the contract. This is a genuine pre-estimate of the loss/ damage which will be suffered on account of delay /breach on the part of the contractor and he agrees to pay the said amount on demand without going in for any proof of the actual loss or damages caused by such delay/ breach.
- 24.2. To ensure good progress during execution of work, the contractor shall be bound in all case in which the time allowed for any work exceeds by one month to complete one-fifth of the work before one-fourth of the time allowed under the contractor has elapsed, three-eighth of the work before the half of such time has elapsed and three-fourth of the work before three-fourth of such time has elapsed. In the event of the contractor failing to comply with this condition, he shall be liable to pay as compensation for delay an amount as stipulated above. The compensation for delay so paid shall not relieve the contractor from his obligations to complete the work or from any other obligations and liabilities under this contract.

25. Failure by the Contractor to Comply with the Provisions of the Contract:

- 25.1. If the contractor refuses or fails to execute the work or any separate part thereof with such diligence as will ensure its completion within the time specified in the contract or extension thereof or fails to perform any of his obligation under the Contract or in any manner commits a breach of any of the provisions of the contract it shall be open to the Owner at its option by written notice to the Contractor to: -
- (a) Determine the Contract: In which event the Contract shall stand terminated and shall cease to be in force and effect on and from the date appointed by the Owner on that behalf, whereupon the contractor shall stop forth with any of the contractor's work then in progress, except such work as the Owner may, in writing, requires to be done to safeguard any property or work, or

installations from damage, and the owner, for its part, may take over the work remaining unfinished by the Contractor and complete the same through fresh contractor or by other means, at the risk and cost of the Contractor, and any of his sureties if any, shall be liable to the owner for any excess cost occasioned by such work having to be so taken over and completed by the Owner over and above the cost at the rates specified in the schedule of quantities and rates.

- (b) Without determining the Contract: To take over the work of the contractor or any part thereof and complete the same through a fresh contractor or by other means at the risk and cost of the Contractor. The contractor and any of his sureties are liable to the Owner for any excess cost over and above the cost at the rates specified in the schedule of quantities/ rates, occasioned by such works having been taken over and completed by the Owner. Besides, the contractor shall also be liable for any compensation accruing under clause 24.
- (c) In other cases, the decision of the Owner is binding on the contractor.

25.2. In such events of clause 25.1 (a) or (b) above

- (a) The whole or part of the security deposit furnished by the Contractor is liable to be forfeited without prejudice to the right of the Owner to recover from the contractor the excess cost referred to in the sub-clause aforesaid, the Owner shall also have the right of taking possession and utilizing in completing the works or any part thereof, such of materials, equipment and plants available at work site belonging to the contractor as may be necessary and the Contractor shall not be entitled for any compensation for use or damage to such materials, equipment and plant.
- (b) The amount that may have become due to the Contractor on account of work already executed by him shall not be payable to him until after the expiry of six (6) calendar months reckoned from the date of termination of contract or from the taking over of the work or part thereof by the Owner as the case may be, during which period the responsibility for faulty materials or workmanship in respect of such work shall under the contract, rest exclusively with the contractor. This amount shall be subject to deduction of any amounts due from the Contractor to the Owner under the terms of the contract authorised or required to be reserved or retained by the Owner.

25.3. Before determining the contract as per clause 25.1 (a) or (b) provided in the judgement of the Owner, the default or defaults committed by the Contractor is/are curable and can be cured by the Contract if an opportunity given to him, then the Owner may issue notice in writing calling the Contractor to cure the default within such time specified in the notice.

25.4. The Owner shall also have the right to proceed or take action as per 25.1 (a) or Clause 25.1(b) above, in the event that the contractor becomes bankrupt, insolvent, compounds with his creditors, assigns the contract in favour of his

creditors or any other person or persons or being a company or a corporation goes into liquidation, provided that in the said events it shall not be necessary for the Owner to give any prior notice to the contractor.

- 25.5. Termination of the Contract as provided for in sub-Clause 25.1 (a) above shall not prejudice or affect their rights of the Owner which may have accrued upto the date of such termination.

26. Contractor Remains Liable to Pay Compensation if Action Not Taken Under Clause 25.

In any case in which any of the powers conferred upon the owner by clause 25 hereof shall have become exercisable and the same had not been 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 further case of default by the contractor for which by any clause or clauses hereof he is declared liable to pay compensation amount to the whole of his security deposit and the liability of the contractor for past and future compensation shall remain unaffected. In the event of the Owner putting in force the powers vested in him under the proceeding clause no. 25 he may if he do so desires, take possession of all or any tools and plants, materials and stores in or upon the works of the site thereof belonging to the contractor or procured by him 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 case of these not being applicable at current market rates to be certified by the Engineer-in-Charge whose certificate thereof shall be final, otherwise the Engineer-in-Charge may give notice in writing to the contractor or his clerk of the works, foremen or other authorised agent, requiring him to remove such tools, plant, materials or stores from the premises (within a time to be specified in such notice), and in the event of the contractor failing to comply with any such requisition, the Engineer-in-Charge may remove them at the contractor's expenses or sell them by auction or private sale on account of the contract and at his risk in all respects without any further notice as to the date, time or place of sale and the certificate of the Engineer-in-Charge as to the expense of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against the contractor.

27. No Compensation For Alteration in or Restriction of Work:

At any time from the commencement of the work if the Owner decides for whatsoever reason, not to carryout the whole work or part thereof as specified in the tender, then owner shall give notice in writing of the fact to the contractor, who shall have no claim to any payment or compensation on whatsoever account (profit or advantage which he might have derived by executing the work in full) neither shall he have any claim for compensation by reason of any alterations having been made from the original specifications, drawings, designs and instructions which may involve any curtailment of the work as originally contemplated.

28. Change in Constitution:

When the contractor is a partnership firm the prior approval in writing from the Owner shall be obtained before any changes are 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, like wise be obtained before such contractor enters into any agreement with other parties, where under the reconstituted firm would have the right to carry out the work hereby undertaken by the contractor. In either case if prior approval is not obtained. The contractor shall be deemed to have been allotted in contravention of Clause - 34 hereof and the action and consequence shall ensure as provided in that clause.

29. Termination of Contract For Death:

If the Contractor is an individual or a proprietary concern and the individual or the proprietor dies or if the contractor is a partnership concern and one of the partners dies then, unless the Owner is satisfied that the legal representative of the individual or the proprietary concern or the surviving partners are capable of carrying out and completing contract, he (the Owner) is entitled to cancel the contract for the uncompleted part without being in any way liable for any compensation payment to the estate of the diseased contractor and/or to the surviving partners of the contractor's firm on account of the cancellation of contract. The decision of the Owner in such assessment shall be final and binding on the parties. In the event of such cancellation, the Owner shall not hold the estate of the diseased contractor and / or the surviving partners of the contractor's firm liable for any damages for non-completion of contract.

30. Members of the Owner Not individually Liable:

No Director or official or employee of the Owner shall in any way be personally bound or liable for the acts or obligations of the Owner under the contract or answerable for any default or omission in the observance or performance of the acts, matters or things which are herein contained.

31. Owner Not Bound by Personal Representation:

The Contractor shall not be entitled to any increase on the scheduled rates or any other rights or claims whatsoever by reason of any representation, explanation, statement or alleged understanding promise or guarantees given or to have been given to him by any person.

32. Contractors Office at Site:

The Contractor shall provide and maintain an office at the site for the accommodation of his agent and staff and such office shall be open at all reasonable hours to receive instructions, notices or other communications. The contractor at all time shall maintain a site instruction book and compliance of these shall be communicated to the Engineer –in-Charge from time to time and the whole document to be preserved and handed over after completion of works.

33. Contractor's Sub-ordinate Staff and their conduct :

- 33.1. The contractor on award of the work shall name and depute a qualified engineer having sufficient experience in carrying out work of similar nature to whom the equipment, materials if any, shall be issued and instruction for works given. The contractor shall also provide to the satisfaction of the Engineer-in-charge sufficient and qualified staff to supervise the execution of the works, competent sub-agents, foremen and leading hands including those specially qualified by previous experience to supervise the types works comprised in the contract in such manner as will ensure the best quality and expeditious working. At any time of in the opinion of the Engineer-in-Charge any additional, qualified experienced staff is considered necessary, they shall be employed by the contractor without additional charge. The contractor shall ensure to the satisfaction of the Engineer-in-Charge that sub-contractors, if any, shall provide competent and efficient supervision over the work entrusted to them.
- 33.2. If any of the contractor's sub-contractor's, agents, sub-agents, assistants, foremen or any employee in the opinion of Engineer-in-Charge be guilty of any misconduct or be incompetent or insufficiently qualified or negligent in the performance of their duties or that in the opinion of the Owner Engineer-in-Charge, undesirable for administrative or any other reasons, for such or person (s) to be employed on the works, then at the directions of Engineer-in-Charge the Contractor shall at once remove such person (s) from employment with the works without the written permission of the Engineer –in-Charge. Vacancy so created shall be immediately filled at the expenses of the contractor by a qualified and competent substitute. Should the contractor be requested to repatriate any person removed from the works he shall do so and shall bear all costs in connection therewith.
- 33.3. The contractor shall be responsible for the proper behaviour of all the staff, foremen, workmen and others, shall exercise proper degree of control over them and in particular without prejudice to the said generality the contractor shall be bound to prohibit/ prevent any employees from trespassing or acting in any way detrimental or prejudicial to the interest of the community or the properties or the occupiers of land or properties in the neighborhood. In the event of such trespassing, the contractor shall be responsible for all consequent claims or actions for damages or injury or any other grounds whatsoever. The decision of the Engineer-in-Charge upon any matter arising under this clause shall be final.
- 33.4. If and when required by the Owner, all contractor's personnel entering upon the owner's premises shall be properly identified by badges of a type acceptable to the owner which must be worn at all times on Owner's premises.

33.5. It is made clear that no relationship of employer and employee is created between the owner and the contractor labourer and no claim for employment of any such labourer shall be tenable or entertained.

34. Sub-Letting Work:

34.1. No part of the contract nor any share or interest there in shall in any manner or degree be transferred, assigned or sublet by the contractor directly or indirectly to any person, firm or corporation whatsoever except as provided for in the succeeding sub-clauses without the consent in writing of the Owner.

34.2. Sub – Contracting of Works:

The Engineer-in-Charge may give written consent to sub-contract for the execution of any part of the works at the site, provided the contractor submits each individual sub-contract to the Engineer-in-Charge for approval of mode of operation and agency for the work. The contractor is advised not to enter into contract before the consent of Engineer-in-Charge.

34.3. List of sub-contracted works to be furnished:

At the commencement of each month, the contractor shall furnish to the Engineer-in-charge, a list of sub-contractors, persons or firms engaged by the contractor and worked at the site during the previous month with particulars like general nature of the sub-contract or works done by them.

34.4. Contractor's liability not Limited by Sub-Contractors:

Notwithstanding any sub-letting with such approval as aforesaid and notwithstanding that the Engineer-in-Charge shall have received copies of any sub-contracts, the contractors shall be and shall remain solely responsible for the quality and proper and expeditious execution of the works and the performance of all the conditions of the contract in all respects as if such sub-contract or sub-letting had not taken place, and as if such work had been done directly by the contractor.

34.5. Owner may terminate sub-contracts:

If any sub-contractor engaged upon the works at the site executes any work which in the opinion of the Engineer-in-Charge is not in accordance with the contract documents, the owner may by written notice to the contractor request him to terminate such sub-contract. The contractor upon the receipt of such notice shall terminate and dismiss the sub-contract and the sub-contractor. The owner shall have the right to remove such sub-contractor from the site if contractor fails to vacate the sub-contractor immediately.

34.6. No remedy for action taken under this clause:

For action taken by the owner under the clause shall not relieve the contractor of any of his liabilities under the contract or give rise to any right or compensation, extension of time or otherwise.

35. Power of Entry:

If the contractor shall not commence the work in the manner described in the contract documents or if he at any time in the opinion of the Engineer-in-Charge.

- (i) fail to carry on the works in conformity with the contract documents or
- (ii) fail to carry on the works in accordance with the contract schedule or
- (iii) substantially suspend work or the works for a period of fourteen days without authority from the Engineer-in-Charge or
- (iv) fail to carry on and execute the works to the satisfaction of Engineer-in-Charge or
- (v) fail to supply sufficient or suitable constructional plant, temporary works, labour materials or other things or
- (vi) Commit, suffer or permit any other breach of any of the provisions of the contract on his part to be performed or observed or persist in any of the above mentioned breaches of the contract for fourteen days, after notice in writing shall have been given to the contractor by the Engineer-in-Charge requiring such breach to be remedied or
- (vii) If the contractor abandons the works or
- (viii) If the contractor during the continuance of the contract shall become bankrupt, make any arrangement or composition with his creditors, or permit any execution to be levied or go into liquidation whether compulsory or voluntary not being merely a voluntary liquidation for the purpose of amalgamation or reconstruction then in any such case, the owner shall have the power to enter upon the works and take possession thereof and of the materials, temporary works, constructional plant, and stock thereon, and to revoke the contractor's licence to use the same, and to complete the works by his agents, other contractors, or workmen, or to relate the same upon any terms and to such other person, firm or corporation as the Owner in his absolute discretion may think proper to employ and for the purpose aforesaid to use or authorize the use of any materials, temporary works, constructional plant, and stock as aforesaid, without making payment or allowance to the contractor for the said materials other than such as may be certified in writing by the Engineer-in-Charge to be reasonable, and without making any payment or allowance to the contractor for the use of temporary said works, constructional plant and stock or being liable for any loss or damage thereto and if the Owner shall by reason or his taking possession of the work or of the works being completed by other contractor (due account being taken of any such extra work or works which may be omitted) than the amount of such excess as certified by the Engineer-in-Charge shall be deducted from any money which may be due for work done by the contractor under the contract and not paid for any deficiency shall forthwith be made good and paid to the Owner by the contractor and the Owner shall have power to sell in such manner and for such price as he may think fit all or any of the constructional plan, materials etc. constructed by or belonging to and

to recoup and retain the said deficiency or any part thereof out of the proceeds or the sale.

36. Contractor's Responsibility with other Agencies:

36.1 Without repugnance to any other condition, it shall be the responsibility of the contractor executing the work of civil construction to work in close cooperation and to coordinate in the works with the mechanical, electrical, air-conditioning and intercommunication contractors and other agencies or their authorised representatives, in providing the necessary grooves, recesses, cuts and opening etc. in wall, slabs beams and column etc. and making good the same to the desired finish as per specification, for the placement of electrical and intercommunication cables, conduits, air-conditioning inlets and outlets, grills and other equipment in the false ceiling and other partitions, the contractor before starting up the work shall in consultation, with the electrical, mechanical, inter-communication, air-conditioning contractors and other agencies prepare and put up a joint scheme, showing the necessary opening, grooves, recesses, cuts, the methods of fixing required for the works of the aforesaid, and the finishes therein, to the Engineer-in-Charge and get the approval. The contractor before finally submitting the scheme to the Engineer-in-Charge, shall have the written agreement of the other agencies. The Engineer-in-Charge, before communicating his approval to the scheme, with any required modifications shall get the final agreements of all the agencies, which shall be binding. No claim shall be entertained on account of the above.

36.2 The contractor shall conform in all respect with the provisions any statutory regulation, ordinance or bye-laws of any local or duly constituted authorities or public bodies which may be applicable from time to time to the works or any temporary works. The contractor shall keep the Owner indemnified against all penalties and liabilities of every kind, arising out of non-adherence to such statutes, ordinances, laws, rules, regulations, etc.

37. Other Agencies at Site:

The contractor shall have to execute the work in such place and condition where other agencies will also be engaged for other works such as site grading, filling and leveling, electrical and mechanical engineering works etc. No claim shall be entertained due to work being executed in the above circumstances.

38. Serving of Notices:

38.1. To the Contractor:

Any notice may be served on the contractor or his duly authorised representatives at the job site or by registered mail directly to the address furnished by the contractor. Proof of issue of such notice should be conclusive of the contractor having been duly informed of the contents.

38.2. To the Owner:

Any notice to be given to the Owner under the terms of the contract shall be served by sending the same by Registered mail to or delivering the same at the respective site offices of M/s. National Aluminium Co. Ltd. addressed to the head/ site in-charge.

38.3. Rights of various Interests:

- (i) The Owner reserves the right to distribute the work between more than one contractor. The contractor shall cooperate and afford the other contractors all reasonable opportunity for access to the works for the carriage and storage of materials and execution of their works.
- (ii) Wherever the work being done by any department of the Owner or by the contractor employed by the Owner as per the contingent upon work covered by this contract, the respective rights and various interests involved shall be determined by the Engineer-in-Charge to secure the completion of the various portions of the work in general harmony.

40. Patents, Royalties, Rent and Excavated Material:

- 40.1. The contractor, if licensed under any patent covering equipment, machinery, materials or compositions of matter to be used or supplied or methods and process to be practiced or employed in the performance of this contract, agrees to pay all royalties and licence fees which may be due with respect thereto. If any equipment, machinery, materials composition matters, to be used or supplied or methods and processes to be practiced or employed the performance of this contract, is covered by a patent under which the contractor is not licensed then the contractor before supplying or using the equipment, machinery, materials, composition, method or processes shall obtain such licenses and pay such royalties and license fees as may be necessary for performance of this contract. In the event the contractor fails to pay any royalty or obtain any such license, any suit for infringement of such patents which is brought against the contractor or the Owner as a result of such failure will be defended by the contractor at his Own expense and the contractor will pay damages and costs awarded in such suit. The contractor shall promptly notify the Owner if the contractor has acquired knowledge of any plant under which a suit for infringement could be reasonably brought because of the use by the owner of any equipment, machinery, materials, process, methods, to be supplied hereunder. The contractor agrees to and does hereby grant to Owner, together with the right to extent the same to any of the subsidiaries of the Owner as irrevocable, royalty-free licence to use in country, any invention made by the contractor or his employee in or as a result of the performance of the work under the contract.
- 40.2. All charges on account of royalty, tollage, rent octroi terminal or sales tax and/ or other duties or any other levy on materials obtained for the work or temporary work or part thereof (excluding materials provided by the Owner) shall be borne by the contractor.

- 40.3. The contractor shall not set or otherwise dispose of or remove except for the purpose of this contract, the sand stone, clay, ballast, earth, rock or other substances, or materials obtained from any excavation made for the purpose of the works or any building or produce upon the sited at the time of delivery of the possession thereof, but all such substances, materials buildings and produce shall be the property of the Owner provided that contractor may with the permission of the Engineer-in-Charge, use the same for the purpose of the works by payment of cost of the same at such a rate as may be determined by the Engineer-in-Charge.

The Owner shall indemnify and save harmless the contractor from any loss on account of claims against contractor for the contributory infringement of patent rights arising out and based upon the claim that the use by the Owner of the process included in the design prepared by the Owner and used in the operation of the plant infringes on patent right. With respect of any sub-contract entered into by the contractor pursuant to the provisions on the respect to any sub-contract entered into by the contractor pursuant to the provisions of the relevant clause thereof, the contractor shall obtain from the sub contractor an undertaking to provide the Owner with the same patent protection that contractor is required to provide under the provisions of this clause.

41. Liens:

- 41.1. If at any time there should be evidence or any lien, claim for which the Owner might have become liable, which is chargeable to the contractor, then the Owner may pay and discharge the same and deduct the amount so paid from any amount which may be or may become due and payable to the contractor, if any lien or claim remain unsettled after all payments are made, the contractor shall refund or pay to the Owner the cost such lien or claim including all payment and reasonable expenses. Owner reserves the right to the same.

41.2. Nothing Extra for Adverse Sub-Soil Conditions:

The nature of sub-soil of the work site varies widely horizontally and vertically. The KI and KII values also vary widely from place to place. In addition the water bearing seems are also conspicuous with the water table at a depth of 0.75 to 3.0 metres from ground level. A number of cohesive and non-cohesive strata are available particularly everywhere. The contractor shall have to make cuts and resort to pumping with due care to avoid collapsing of sides and occurrence of 'Piping'. The Contractor shall also be careful to avoid occurrence of excessive 'heaving' by avoiding keeping the excavation proposed to atmosphere for a longer period.

- 41.3. Slips and falls in excavation shall be cleared by the contractor at his own cost.

Excessive heaving shall have to cut and refill with lean concrete by the contractor at his own cost. The contractor shall have to adopt under-water work in case of occurrence of piping/ quick condition without any additional cost to the Owner.

The contractor will be paid for the earthwork as per the drawing. The slopes etc. as required for the safety of the work has to be provided as per the decision of the Engineer-in-Charge at his own cost. All types of dewatering including seepage, rain water entering. The earthwork in excavation or from any other source is to be done by the contractor at his own cost till the completion of foundation upto ground level including back filling.

41.3. No Compensation in case of change of Location of site :

Change of location of site do not invalidate the contract and tenderer have no claim for any compensation for such changes.

SECTION – V **PERFORMANCE OF WORK**

42. Execution of Works:

All the work shall be executed in strict conformity with the provisions of the contract documents explanatory detailed drawings, specifications and instructions by the Engineer-in-Charge whether mentioned in the contract or not. The contractor shall be responsible for ensuring that works are executed in the most substantial, proper and workman like manner using the quality materials and labour, through out the job Completion in strict accordance with the specifications and to the entire satisfaction of the Engineer-in-Charge.

43. Coordination and inspection of Works:

The coordination and inspection of the day-to-day work under the contract shall be the responsibility of the Engineer-in-Charge or his authorised representative. A work order book will be maintained by the contractor for each sector in which the aforesaid written instructions will be entered. These will be signed by the contractor or his authorised representative by way of acknowledgement within 12 hours.

44. Works in Monsoon and Dewatering:

44.1 The execution of work may entail working in the monsoon also. The contractor must maintain a minimum labour force as may be required for the job. And plan execute the construction and erection according to the prescribed schedule. No extra will be considered for such work in monsoon.

44.2 During monsoon and other period, it shall be the responsibility of the contractor to keep the construction work site free from water at his own cost.

45. Work on Sundays and Holidays:

For carrying out works on Sundays and holidays, the contractor will to keep Engineer-in-Charge or his representative at least two days in advance and obtain permission in writing. The contractor shall observe all labour laws and other statutory rules and regulations in force. In case of any violation of such laws, rules and regulations, consequence if any, including the cost thereto shall be exclusively borne by the contractor and the Owner shall have no liability whatsoever on his account.

46. General Conditions of Construction and Erection Work:

46.1 The working time at the time of work is 48 hours per week. Overtime work is permitted in case of need and the owner will not compensate the same. Shift-working at 2 or 3 shifts per day will become necessary and the contractor should take this aspect into consideration for formulating his rates for quotation. No extra claims will be entertained by the Owner on this account.

- 46.2 The contractor must arrange for the placement of workers in such a way that the delayed completion of the work or any part thereof or for any reason whatsoever will not affect their proper employment. The Owner will not entertain any claim for old time payment whatsoever.
- 46.3 The contractor shall submit to the Engineer-in-Charge reports at regular intervals regarding the state and progress of work. The contract shall provide display boards showing progress and labour strength at work site, as directed by the Engineer-in-Charge.
- 46.4 The site of work will be released progressively in stages and no claim for any compensation or damages will be tenable for non-release of the entire site at a time.
- 47. Drawings to be supplied by Owner:**
- 47.1 The drawings attached with tender are only for the general guidance to the contractor to enable him to visualise the type of work contemplated. The contractor will be deemed to have studied the drawings and formed an idea about the total work involved.
- 47.2 In the Course the progress of work detailed working drawings on the basis of which actual execution of the work has to proceed, shall be furnished in stages. The contractor shall be deemed to have gone through the drawings supplied to him thoroughly and carefully, in conjunction will all other connected drawings and discrepancies if any, shall be brought to the notice of the Engineer-in-Charge, before actually carrying out the works.
- 47.3 Copies of all detailed working drawings relating to the works shall be kept at the contractor's office on the site and shall be made available to the Engineer-in-Charge at any time during the contract period. The drawings and other documents issued shall be returned to the Owner on completion of the works.
- 48. Drawings to be supplied by the Contractor:**
- 48.1 The drawings/data which are to be furnished by the contractor are enumerated in the special conditions of contract and shall be furnished within the specified time.
- 48.2 Where approval of drawings for manufacture/construction/fabrication has been specified it shall be contractor's responsibility to have these drawings prepared as per the directions of Engineer-in-Charge and get them approved before proceeding with manufacture/construction/fabrication works as the case may be. Any changes that may have become necessary in these drawings during the execution of the work shall have to be carried out by the contractor to the satisfaction of Engineer-in-Charge at no extra cost. All final approved drawings shall bear the certification stamp duly signed by both the contractor and the Engineer-in-Charge as indicated below.

“Certified true for
(Name of work)

Agreement No

Signed
(Contractor) (Engineer-in-Charge)

48.3 A period of 3 weeks from the date of receipt shall be required for approval of drawings by the Engineer-in-Charge.

48.4 As built drawing showing all Corrections, adjustments etc. shall be furnished by the Contractor in five copies and one transparent to record purposes to the owner.

49 Setting Out Works:

49.1 The Engineer-in-Charge shall furnish to the contractor with only the four corners of the work site that is plant boundary limits, and a level bench mark only. The contractor shall set out the works, provide an efficient staff for the purpose and shall be solely responsible for the accuracy of such setting out.

49.2 The contractor shall provide, fix and be responsible for the maintenance of all stacks, templates, level marks, profiles and other similar things and shall take all necessary precautions to prevent their removal or disturbance. He shall be responsible for their consequences arising of such removals, disturbances corrections thereon and for their efficient and timely reinstatement. The contractor shall also be responsible for the maintenance of all existing survey marks, boundary marks, distance marks and centre line marks, either existing or supplied and fixed by the contractor. The work shall be set out to the satisfaction of the Engineer-in-Charge. The approval thereon or jointing with the contractor by the Engineer-in-Charge in setting out the work, shall not relieve the contractor of any of his responsibilities.

49.3 Before beginning the work the contractor shall at his own cost, provide all necessary reference and level posts-pegs, bamboos, flags, ranging rods, strings, and other materials for proper layout of the work in accordance with the scheme for bearing marks acceptable to the Engineer-in-Charge. The centre, longitudinal, face and cross lines shall be marked by means of small masonry pillars. Each pillar shall have distinct mark at the centre to enable the theodolite to be set over it. No work shall be started until all these points are checked and approved by Engineer-in-Charge in writing, but such approval shall not relieve the contractor of any of his responsibilities. The contractor shall also provide all labour, materials and other facilities as necessary, for the proper checking or layout and inspection of the points during construction.

49.4 Pillars bearing geodetic marks located at the sites of units of works under construction should be protected and faced by the contractor.

49.5 On completion of work, the contractor must submit the geodetic documents according to which the work was carried out.

50. Responsibility for Level and Alignment:

50.1 The contractor shall be entirely and exclusively responsible for the horizontal and vertical alignment, the level and correctness of every part of the work shall rectify effectually any errors or imperfections therein. Such rectification shall be carried out by the contractor at his own cost, when instructions are issued to that effect by the Engineer-in-Charge.

50.2 Lighting, Watch & Ward:

The contractor shall in connection with works provide and maintain at his own cost all lightings, guards, fencing and watch and ward and the security of the entire work in progress including all the machineries, materials shall be the responsibility of the contractor till taken over by the owner by way of the written taking over certificate.

51. Materials to be Supplied by Contractor :

51.1 The contractor shall procure and provide the whole of the materials required for the construction including M.S. Rods, Cement and other building materials, tools, tackles, construction plant and equipment for the completion and maintenance of the work except the materials which will be issued by the Owner and shall make his own arrangement for procuring such materials and for the transport thereof. The owner may give necessary recommendation to the respective authorities, if so desired by the contractor, but assumes no further responsibility of any nature. The owner will insist on the procurement of materials which has the approval of Indian Standards Institution having ISI stamp and/or which are supplied by reputed suppliers borne on DGS & D list.

51.2 The contractor shall properly store all materials either issued to him or brought by him to the worksite to prevent damages due to rain, wind, direct exposure to sun etc. as also from theft, pilferage, etc. for proper and speedy execution of his works. The contractor shall maintain sufficient stocks of all materials required by him.

51.3 No material shall be despatched from the contractor's stores before obtaining the approval in writing of the Engineer-in-Charge.

51.4 All plants, tools and other materials brought by the contractor to the site must be declared at the time of bringing the same to the site.

52. Stores Supplied by the Owner:

52.1 If the specification of the work provides for the use of any material other than Steel & Cement of special description to be supplied from the Owner's stores or it is required that the contractor shall use certain stores to be provided by

the Engineer-in-Charge, such materials and stores, and price to be charged therefore as hereinafter mentioned being so far as practicable for the convenience of the contractor, but no so as in way to control the meaning or effect of the contract, the contract shall be bound to purchase and shall be supplied much materials and stores as are from time to time required to be used by him for the purpose of the contract only. The sums due from the contractor for the value of materials supplied by the Owner will be recovered from the Running Account Bill on the basis of actual consumption of materials (after taking into account any wastage allowance as may be provided for in the contract). The contractor should raise requisite copies of indents in a proforma as prescribed by the Engineer-in-Charge and no claim whatsoever will be entertained by the Engineer-in-Charge on this account. After completion of the works, the contractor is required to account as per relevant clauses in this document, for the full quantity of materials supplied to him.

52.2 The value of the stores/materials as may be supplied to the contractor by the Owner will be debited to the contractor's account at the rates shown in the schedule of materials and if they are not entered in the schedule, they will be debited at cost price, which for the purpose of the contract shall include the cost of carriage and all other expenses whatsoever such as normal storage supervision charges which shall have been incurred in obtaining the same at the Owner's stores. All materials so supplied to the contractor shall remain the absolute property of the Owner and shall not be removed on any account from the site of the work and shall be at all times open for inspection to the Engineer-in-Charge. Any such materials remaining unused at the time of the completion or termination of the contract shall be returned to the Owner's stores or at a place as directed by the Engineer-in-Charge in perfectly good condition at contractor's cost.

52.3 Steel & Cement:

52.3.1 If the specification of the work provides for the use of steel or cement such items of steel and cement to the extent required as per the specification of the works, shall be supplied at Owner's stores by the Owner for utilisation in the work on non-chargable basis from time to time depending upon the progress of the work. The tender rates shall be exclusive of the cost of steel and cement to be supplied as per the specification of the work, However, in case of flats and chequered plates the same have to be procured by the contractor at his own cost.

52.3.2 Such materials of steel and cement shall be issued only for permanent works and not for making other temporary works etc. Contractor shall bear all cost including lifting and loading carting from issue points to work site/contractor stores, custody and handling etc. and return of surplus serviceable/unserviceable materials to owner's store or other places to be designed by owner and no separate payment for such expenditure shall be made.

52.3.3 Items of steel as per specification of the work as mentioned above shall be supplied in the available length only. No claim on account of supply of non-standard length shall be entertained. Steel materials shall be issued on actual weight basis.

52.3.4 Cement as mentioned above will be supplied to the contractor a receive from the manufacturer/stockist. The theoretical weight of each bag of cement supplied will be considered as 50 Kg.

52.3.5 Scraps & Surplus Material:

The Contractor shall return all the surplus/unutilised as well as the scraps and wastages out of the materials supplied to him to the Owner's stores in a perfectly good condition at the contractor's cost. However, the following scraps allowances are permissible.

	<u>Unaccountable</u>	<u>Accountable</u>
(i) Cement	3%	Nil
(ii) Reinforcement Steel	½%	2.5%
(iii) Steel structural (Plates & Sections)	½%	4.5%
(iv) M.S. Plates for fabrication of Pipes	½%	As per cutting diagrams approved by Engineer-in-Charge before cutting and fabrication.

52.3.6 Return of unutilised/surplus materials and scrap/wastage:

In respect of any utilised/surplus quantities of cement and steel supplied by not accounted for and or returned by the contractor shall pay to the Owner amounts at the penal rate of twice the SAIL, Bhubaneswar Stock-yard rate of that particular section of steel and cement as the case may be as on the date of accountability. If the Contractor fails to return the scraps/wastage generated as per the above percentage, recovery of such scrap/wastage shall be made at the rate of Rs. 7000/- per tonne.

The charging of penal rate shall be without the prejudice to the other remedies or action available to the owner against the contractor including any criminal action.

52.3.7. Accounting for Materials:

Every month the Contractor shall submit a statement for all the materials supplied to him by the owner in the proforma prescribed by the Engineer-in-Charge.

52.3.8 On completion of the work, the Contractor shall submit material appropriation statement for the materials supplied to him by the Owner.

52.3.9 All materials supplied to the contractor shall remain the absolute property of the all times and title therein shall not pass to the contractor at any time. The possession of the materials in the hands of the contractor is only for the

purpose of incorporating the same in the Owner's work. The material supplied shall not be removed by the contractor on any account from the site of work and shall be at all times open for inspection by the Engineer-in-Charge or owners representative. The contractor shall not use the materials supplied to him for any purpose or work other than the work, which the said materials are supplied.

53. Conditions for issue of Materials:

- (i) Materials specified as to be issued by the Owner will be supplied to the contractor by the Owner from his stores. It shall be the responsibility of the contractor to take delivery of the materials and arrange for its loading, transport and unloading at the site work at his own cost. The material shall be issued during the working hours of his Stores and as per the rules of the Owner framed from time to time.
- (ii) The contractor shall bear all incidental charges for the storage and safe custody of materials at site after these have been issued to him.
- (iii) The contractor shall construct suitable godown at the site of work for storing the materials safe against damage by rain, dampness, fire, theft, etc. He shall also employ necessary watch and ward establishment for the purpose.
- (iv) Materials specified as to be issued by the Owner shall be issued in standard sizes as obtained from the manufacturers.
- (v) It shall be duty of the contractor to inspect the materials supplied to him at the time of taking delivery and satisfy himself that they are in good condition. After the materials have been delivered by the Owner, it shall be the responsibility of the contractor to keep them in good condition and if the materials are damaged or lost, at any time, they shall be repaired and/or replaced by him at his own cost according to the directions of the Engineer-in-Charge.
- (vi) The Owner shall not be liable for delay in supply or non-supply of any materials, which the Owner has undertaken to supply where such failure or delay is due to natural calamities, act of enemies, transport and procurement difficulties and any circumstances beyond the control of the Owner. In no case, the contractor shall be entitled to claim any compensation or loss suffered by him on his account.
- (vii) It shall be the responsibility of the contractor to arrange in time all materials required for the works other than those to be supplied by the Owner. If however in the opinion of the Engineer-in-Charge the execution of the work is likely to be delayed due to the contractor's inability to make arrangements for supply of materials which normally he has to arrange for, the Engineer-in-Charge shall have the right at his own discretion to issue such materials if available with the Owner or procure the materials from the market or elsewhere. The contractor will be bound to take such materials at the rates decided by the Engineer-in-Charge. This however, does not in anyway absolve the contractor from responsibility of making arrangement for the supply of such materials in part or in full, should such a situation occur nor shall this constitute a reason for the delay in the execution of the work.

- (viii) Non of the materials supplied to the contractor will be utilised by the contractor for manufacturing item which can be obtained as supplied from standard manufacturer in finished form unless approved by Engineer-in-Charge in writing.
- (ix) The contractor shall, if desired by the Engineer-in-Charge, be required to execute an indemnity bond in the prescribed form for safe custody, usage and accounting of all materials issued by the Owner.
- (x) The contractor shall furnish to Engineer-in-Charge sufficiently in advance a statement showing his requirements of the quantities of the materials to be supplied by the Owner and the time when the same will be required by him for the works, so as to enable the Engineer-in-Charge to make necessary arrangement for procurement and supply of material.
- (xi) Account of the materials to be issued by the Owner shall be maintained by the contractor indicating the daily receipt, consumption and balance in hand in a manner prescribed by the Enginner-in-Charge. All connected papers requisitions, issues returns etc. shall be always available for inspection in the contractor's office at site.
- (xii) The contractor should see that only the required quantities of materials are got issued. The contractor shall not be entitled to cartage and incidental charges for returning the surplus materials, if any, to the stores, place of issue or to the place as directed by the Engineer-in-Charge.
- (xiii) Materials/equipment supplied by Owner shall not be utilised for any other purpose (s) than issued for.
- (xiv) The owner may issue the material in phases at his discretion keeping in view the programmes of the work.
- (xv) In case of free issue of materials, the contractor shall submit an indemnity bond in the prescribed format for 80% (eighty) value of the materials and a bank guarantee for 20% (twenty) of the value of the materials. The indemnity bond and bank guarantee shall be valid till the material account is totally settled.

54. Return of Surplus:

Notwithstanding anything contained to the contrary in any or all the clauses of this contract where any materials for the execution of the contract are procured with the assistance of the Owner either by issue from Owner's stock or purchases made under orders, or permits or licences issued by government the contractor shall hold the said materials as trustee for the owner and use such materials economically and solely for the purpose of the contract and not dispose them off without the permission of the Owner and return, if required by the project head all surplus or unserviceable materials that may be left with him after the completion of the contract or at its termination for any reason whatsoever on his being paid or credited such price as the Project head shall determine having due regard so the condition of the materials. The price allowed to the contractor however, shall not exceed the amount charged to him excluding the storage charges, if any. The decision of the project head shall be final and conclusive in such matter. In the event of breach of the aforesaid conditions, the contractor shall, in the terms of the licences, or permits and/ or

for criminal breach of trust, be liable to compensate the Owner at double rate or any higher, in the event of those materials at the time having higher rate or not being available in the market, then any other rate to be determined by the project head and his decision shall be final and conclusive.

55. Materials Obtained From Dismantling:

If the contractor in the course of execution of the work is called upon to dismantle any part for reasons other than those stipulated in clauses 57 and 65 hereunder, the materials obtained in the work of dismantling etc. will be considered as the Owner's property and will be disposed off to the best advantage of the Owner.

56. Articles of Value Found:

All gold silver and other materials of any descriptions, precious stones, coins, treasures, relics, antiques and other similar things which shall be found, in, under or upon the site, shall be property of the Owner and the contractor shall duly preserve the same to the satisfaction of the Engineer-in-Charge and shall from time to time delivery the same to such person or persons indicated by the Owner.

57. Inspection of Works:

57.1 The Engineer-in-Charge will have full power and authority to inspect the works in progress at any time wherever the premises/ workshops situated, of the Contractor, person, firm or corporation where works in connection with the contract may be or where materials are being or intended to be supplied.. The contractor shall afford or procure every facility and assistance to Engineer-in-Charge carry out such inspection. The contractor shall, at all time during the usual working hours and at all other times at which reasonable notice of the intention of the Engineer-in-Charge or his representative to visit the works shall have been given to the contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing be present for the purpose. Orders given to the contractor's agent shall be considered to have the same force as if they had been given to the contractor himself.

57.2 The contractor shall give not less than seven days notice in writing to the Engineer-in-Charge before covering up or otherwise placing beyond reach of inspection and measurement any work in order that the same may be inspected and measured. In the event of failure of above the same shall be uncovered and all facilities made available again at contractor's expense for carrying out such measurement or inspection.

57.3 The contractor is to provide at all times during the progress of the work and maintenance period proper means at access with ladders gangways etc. and the necessary attendance to move and adopt as directed for inspection or measurement of the works by the Engineer-in-Charge.

58. Assistance to the Engineer:

The Contractor shall make available to the Engineer-in-Charge free of cost all necessary instructions and assistance in checking of settling out of works and

in the checking of any works made by the contractor for the purpose of setting out and taking measurements of work.

59. Discrepancies between instructions:

Should any discrepancy arise between the various instructions furnished to the contractor or his agents or staff or if any doubt arises on the meaning or implementation of any such instructions or should there be any difference of opinion on the issues, the contractor shall refer the matter immediately in writing to the Engineer-in-Charge whose decisions thereon shall be final and conclusive. No claim on losses alleged to have been caused by such discrepancies between instructions, doubts or misunderstanding shall in any event be admissible.

60. Alterations in Specifications and Designs and Extra Works:

(a) The Project Head shall have power to make any alterations, in omission from additions to or substitutions, for the schedule of rates, the original specifications, drawings and instructions that may appear to him to be necessary or advisable during the progress of the work, and the contractor shall be bound to carry out such altered/ extra/ new items of work in accordance with any instructions which may be given to him in writing signed by the Project Head 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 of completion of work may be extended for the part of the particular job at the discretion of the Project Head for any such alterations, additions, or substitutions of the work, as he may consider as just and reasonable. The rates for such additional, altered or substituted work under the clause shall be worked out in accordance with the following provisions:-

(b) 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.

(c) 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 rates for similar class of work as are specified in the contract for the work. The opinion of the Project head as to whether or not the rates can be reasonably so derived from the items in this contract will be final and binding on the contractor.

(d) If the rates for the additional, altered or substituted work can not be determined in the manner specified in sub-clause (a) & (b) above, then the contractor shall within 7 days of the date of receipt of order to carry out

the work, inform the Project Head of the rate which it is his intention to charge for such class of work, supported by analysis of the rate or rates claimed, and the project Head shall determine the rate or rates on the basis of the prevailing market rates of materials plus labour cost including equipment hire charge at schedule of hourly/ daily rates plus 15% to cover contractor's supervisions overhead and profit and pay to the contractor accordingly. The opinion of the Project Head to current market rates of the materials and the quantum of labour and equipment involved per unit of measurement will be final and binding on the contractor. The schedule of hourly/ daily rates shall be as enclosed.

61. Action Where no Specification is issued:

In case of any class of work for which there is no such specification supplied by the Owner as is mentioned in the tender document such work shall be carried out in accordance with the Indian Standard Specifications. If the Indian Standard Specifications do not cover the same, the work should be carried out as per standard Engineer in Practice subject to the approval of the Engineer-in-Charge.

62. Abnormal Rates:

The contractor is expected to quote the rate for each item after careful analysis of cost involved for the satisfactory performance and completion of item work considering all specifications and conditions of contract. This will avoid loss of profit or gain in case of curtailment or change in specification for any other item. In case the rate quoted by the tenderer for any item are usually high or unusually low it will be sufficient cause of the rejection of the tender unless the Owner is convinced about the reasonableness of the analysis for such rate furnished by the tenderer (on demand) after scrutiny.

63. Tests For Quality Works:

63.1 All materials and workmanship shall be of the respective kinds described in the contract documents and in accordance with the instructions of the Engineer-in-Charge and shall be subjected from time to time to such tests at contractor's cost as the Engineer-in-Charge may direct at the place of manufacture or fabrication or at the site or at all or any such places. The contractor shall provide assistance, instruments, machines, labour and materials as are required for examining, measuring and testing any workmanship as may be selected and required by the Engineer-in-Charge.

63.2 All the tests that will be necessary in connection with the execution of the work as decided by Engineer-in-Charge shall be carried out at the field testing laboratory of this Owner if available by paying the charges as decided by the Owner from time to time. In case of non-availability of testing facilities with the Owner, the required laboratory as directed by Engineer-in-Charge.

63.3 If any tests are required to be carried out in connection with the work or materials or workmanship not supplied by the contractor, such tests shall be

carried out by the contractor as per the instructions of Engineer-in-Charge and cost of such tests shall be reimbursed by the Owner.

64. Samples:

The contractor shall furnish to the Engineer-in-Charge for approval when request or if required by the specifications, adequate samples of all materials and finished to be used in the work. Such samples shall be submitted before the work is commenced and in sample time to permit tests and examinations thereof. All materials furnished and finishes applied in actual work shall be fully equal to the approved samples.

65. Liabilities for Defect, Imperfections etc. and Rectifications Thereof:

If it shall appear to the Engineer-in-Charge that any work has been executed with unsound, imperfect or unskilled workmanship, or with materials of any inferior description, or that any materials or articles provided by the contractor for the execution of work are unsound or of quality inferior to that contracted for, or otherwise not in accordance with the contract, the contractor shall on demand in writing from the Engineer-in-Charge or his authorised representative specifying the work, materials or articles complained of, notwithstanding that the same may have been inadvertently passed, certified and paid for, forthwith rectify or remove and reconstruct that work so specified and provide other proper and suitable materials or articles at his own charge and cost, and in the event of failure to do so within a period to be specified by the Engineer-in-Charge in his demand aforesaid, the Engineer-in-charge may on expiry of notice period rectify or remove, and re-execute the work or remove and replace with others, the materials or articles complained of as the case may be at the risk and expense in all respects of the contract. The decision of the Engineer-in-Charge as to any question arising under this clause shall be final and conclusive.

66. Suspension of Works:

- (i) Subject to the provision of sub para (ii) of this clause, the contractor shall if ordered in writing by the Engineer-in-Charge, or his representative, temporarily suspend the works or any part thereof such period and such time as so ordered and shall not, after receiving such written orders, proceed with the work therein, ordered to be suspended until he shall have received a written order to proceed therewith. The contractor shall not be entitled to claim compensation for any loss or damage sustained by him by reason of temporary suspension of the works aforesaid. An extension of time for completion, corresponding with the delay caused by any such suspension of the works as aforesaid will be granted to the contractor should he apply for the same provided that the suspension was not consequent to any default or failure on the part of the contractor.
- (ii) In case of suspension of entire work, ordered in writing by the Engineer-in-Charge, for a period of more than two months, the contractor shall have the option to terminate contract.

67. Possession Prior to Completion:

The Engineer-in-Charge shall have the right to take possession of or any completed or partially completed work or part of the work. Such possession or use shall not be deemed to be an acceptance of any work completed in accordance with the contract. If such prior possession or use by the Engineer-in-Charge delay the progress of work, equitable adjustment in the time of completion will be made and the contract agreement shall be deemed to be modified accordingly.

68 Twelve months Period of Liability from the Date of Issue of Completion Certificate:

68.1 The contractor shall guarantee the installation/work for a period of 12 months from the date of completion of work as certified by the Engineer-in-Charge which is indicated in the completion certificate. Any damage or defect that may arise though remained undiscovered at the time of issue of completion certificate, connected in any way with the equipment or materials supplied by him or in the workmanship shall be rectified or replaced by the contractor at his own expenses as deemed necessary by the Engineer-in-Charge or in default the Engineer-in-Charge may cause the same to be made good by other agency and deduct expenses (of which the certificate or Engineer-in-Charge shall be final) from any sums that may be then or at any time thereafter become due to the contractor or from his security deposit, or the proceeds of sale thereof or of a sufficient portion thereof.

68.2 If the contractor feels that any variation in work or in quality of materials or proportions would be beneficial or necessary to fulfil the guarantees called for, he shall bring this in writing to the notice of the Engineer-in-Charge.

68.3 Care of works:

From the commencement of completion of the work, the contractor shall take full responsibility for the care of all works including all temporary works and in case any damage, loss or injury shall happen to the work or to any part thereof or to any temporary works from any cause whatsoever, shall at his own cost repair and make good the same so that on completion the work shall be in good order and in conformity in every respects with the requirements of the contract and the Engineer-in-Charge's Instructions.

68.4 Defects Prior to Taking Over:

If at any time before the work is taken over, the Engineer-in-Charge shall:

- (a) Decide that any work done or materials used by the contractor or any sub-contractor is defective or not in accordance with the contract, or that the works or any portion thereof are defective, or do not fulfil the requirements of contract (all such matter, being hereinafter, called 'Defects' in this clause) and (b) as soon as reasonably practicable gives to the contractor notice in writing of the said decision specifying particulars of the defects claimed to exist or to have occurred then the contractor shall at his own expenses and with all speed make good the defects so specified.

In case contractor shall fail to do so, the Owner may take, at the cost of contractor, such steps as may in all circumstances be reasonable to make good such defects. The expenditure so incurred by the owner be recovered from the amount due to the contractor. The decision of the Engineer-in-Charge with regard to the amount to be recovered from the contractor will be final and binding on the contractor. As soon as the works have been completed in accordance with the contract (except minor respects that do not affect their use for the purpose for which they are intended and except for maintenance thereof provided in clause 68.1 of General Conditions of Contract) and have passed the tests on completion, the Engineer-in-Charge shall issue a certificate (hereinafter called completion certificate) in which he shall certify the date on which the works have been so completed and have passed the said tests and the Owner shall be deemed to have taken over the works on the date so certified. If the works have been divided into various groups in the contract, the Owner shall be entitled to take over any group or groups before the other or others.

68.5 Defect After Taking Over:

In order that the contractor could obtain a completion certificate he shall make good with all possible speed, any defect arising from the defective materials supplied by the contractor or that may have been noticed or developed, after the works or group of the works has been taken over, the period allowed, for carrying out such work will be normally one month. If any defect be not remedied within a reasonable time, the owner may proceed to do the work at contractor's Risk and expenses and deduct from the final bill such amount as may be decided by the Owner.

If by reason of any default on the part of the contractor a completion certificate has not been issued in respect of every portion of the works within one month after date fixed by the contract for the completion of the works, the Owner shall be at liberty to use the work or any portion thereof in respect of which a completion certificate has not been issued, provided that the works or the portion thereof so used as aforesaid shall be afforded reasonable opportunity for completion of these works for the issue of completion certificate.

68.6 Guarantee/Transfer of Guarantee:

For works like water-proofing, acid & alkali resisting materials, pre-construction soil treatment against termite or any other specialized works etc. the contractor shall invariably engage sub-contractors who are specialists in the field and firms of repute and such a sub-contractor shall furnish guarantees for their workmanship to the Owner, through the contractor. In case such a sub-contractor/firm is not prepared to furnish a guarantee to the owner, the contractor shall give that guarantee to the Owner directly.

SECTION – VI CERTIFICATE AND PAYMENT

69. SCHEDULE OF RATE AND PAYMENTS:

69.1 Contractor's Remuneration:

The price to be paid by the Owner to the contractor for the whole of the work done and for the performance of all the obligations undertaken by the contractor under the contract document shall be ascertained by the application of the respective schedule of rates (the inclusive nature of which is more particularly defined by way of application but not of limitation, with clause No. 69.2) and payment to be made accordingly to the work actually executed and approved by the Engineer-in-Charge. The sum so ascertained shall (exception only as and to the extent expressly provided here in) constitute the sole and inclusive of remuneration of the contractor under the contract and no further or other payment whatsoever shall be or become due or payable to the contractor under the contract.

69.2 Schedule of Rates to the Inclusive:

The prices/rates quoted by the contractor shall remain firm till the issue of final certificate and shall not be subject to escalation. Schedule of rates shall be deemed to include and cover all costs, expenses and liabilities of every description and all risks of every kind to be taken in executing, completion and handing over the work to the Owner by the contractor. The contractor shall be deemed to have known the nature, scope, magnitude and the extent of the works and materials required though the contract document may not fully and precisely furnish them. He shall make such provision in the schedule of rates as he may consider necessary to cover the cost of such items of work and materials as may be reasonable and necessary to complete the work. The opinion of the Engineer-in-Charge as to the items of work which are necessary and reasonable for completion of work shall be final and binding on the contractor although the same may not be shown on or described specifically in contract documents.

Generality of this present provision shall not be deemed to cut down or limited in any way because in certain cases it may and in other cases it may not expressly stated that the contractor shall do or perform a work or supply articles or perform with services at his own cost or without addition of payment or without extra charge or works to the same effect or that it may be stated or not stated that the same are included in and covered by the schedule of rates.

69.3 Schedule of rates to cover Constructional Plant, Materials. Labours etc.:

Without in any way limiting the provision of other subclauses the schedule of rates shall be deemed to include the cover the cost of all constructional plant, temporary works (except as provided for herein), pumps, materials, labour, insurance, fuel, stores, and appliances to be supplied by the contractor and all other matters in connection with each items in the schedule of quantities and

the execution of the works or any portion thereof finished complete in every respect and maintained as shown or described in the contract documents or as may be ordered in writing during the continuance of the contract.

69.4 Schedule of Rates to cover Royalties, Rents and Claims:

The schedule of rates shall be deemed to include and cover the cost of all royalties and fees for the articles, processes, protected by letters, patent or otherwise incorporated in or used in connection with the works, also all royalties, rents, and other payments in connection with obtaining materials of whatsoever kind for the works and shall include an indemnity to the owner which the contractor hereby gives against all actions, proceedings, claims, damages, costs and expenses arising from the incorporation in or use on the works of any such articles, processes or charges if levied on materials, equipment or machinery to be brought to site for use on work, shall be borne by the contractor.

69.5 Schedule of Rates to cover taxes and duties:

No exemption or reduction of custom duties, excise duties, sales tax, quay or any port duties, transport charges, stamp duties or Central or State Government or Local Body (or from any other body) or Municipal Taxes or duties, taxes or charges whatsoever will be granted or obtained and all expenses of which shall be deemed to be included in and covered by the schedule of rates. The contractor shall be obtain and pay for all permits or other privileges necessary to complete the work.

69.6 Schedule of Rates to cover Risk of Delay:

The schedule of rates shall be deemed to include and cover the risk of all responsibilities of delay and interference with the contractor's conduct of work which occur from any cause including orders of the owner in the exercise of his powers and on account of extension of time granted due to various and for all other possible or probable causes of delay.

69.7 Schedule of Rates cannot be altered:

For work under unit rate basis no alteration will be allowed in the schedule of rates by reasons of works or any part of them being modified, altered, extended, diminished or omitted. The schedule of rates is of fully inclusive rates which have been fixed by the contractor and agreed to by the Owner and cannot be altered.

- 69.7.1 The schedule of rates to cover for working in operating plant. Contractor's rates shall be deemed to include taking into account that he has to work in operating plant and shall take sufficient care in moving the plants, equipments and materials from one place to another, so that they do not cause any damage to any person or to the property of the owner or to third party including overhead and underground cable/pipe lines. In the event of such damages including eventual loss of production and operation of the plant or services in any plant or establishment as estimated by the owner or ascertained or by the

third party shall be borne by the contractor. Since the work is to be executed for the expansion of the plant, the rate of the contractor shall also deem to include all interference/obstruction/interruption for which no compensation shall be paid to be contractor.

70. Procedure For Measurement/ Billing of Work in Progress:

70.1 All measurements shall be in metric system. All the works in progress will be jointly measured by the representative of the Engineer-in-Charge and the contractor's authorised agent progressively. Such measurements will be got recorded in the measurement book by the Engineer-in-Charge or his authorised representative and signed in token of acceptance by the contractor or his authorised representative.

For the purpose of taking joint measurement the contractor's representative shall be bound to be present whenever required by the Engineer-in-Charge. If, however, he absents for any reason whatsoever the measurements will be taken by the Engineer-in-Charge or his representative and this will be deemed to be correct and binding on the contractor.

70.2 Billing:

The contractor will submit a bill in approved proforma in accordance with the contract terms and the agreed billing schedules in quintuplicate to the Engineer-in-Charge giving abstract and detailed measurement for the various items executed during a month, before the expiry of the first week of the succeeding month. The Engineer-in-Charge shall take or cause to be taken the requisite measurements for the purpose of having the same verified and the claim as far as admissible, adjusted, if possible, before the expiry of 10 days from presentation of the bill.

70.2.1 The bill shall be submitted by the contractor in computerised formats approved by the owner. The bills along-with floppies containing measurement of work, particulars of materials, recoveries etc. have to be submitted to the owner.

70.2.2 For lump-sum contracts, the payment will be according to agreed billing schedule. No adjustment shall be allowed in lump-sum prices for any variations in the quantities, specifications etc. shall take or a cause to be taken the requisite measurement for the purposes of having the same verified and the claim as far as admissible, adjusted, if possible, before the expiry of 10 days from presentation of the bill.

70.3 Secured Advance on Materials:

In case of tenders for completed items of works, contractor may be allowed "Secured Advance" on the security of materials brought to site for execution of the contracted items of work to the extent of 75% of the value of materials which go into the completed works as assessed by the Engineer-in-Charge provided that the materials are of an imperishable nature and that formal

agreement is drawn up with the contractor under which the Owner secures a lien on the materials and is safe guarded against losses due to the contractor postponing the execution of the work or to the improper storage &/or misuse of the materials and against the expenses entitled for their proper watch and safe custody. Recoveries of advances so made would not be postponed until the whole of the work entrusted to the contractor is completed. They should be adjusted from his running account bills for work done as the materials are used, the necessary deductions being made whenever the items of work in which they are used and billed for.

70.4 Dispute in Mode of Measurement:

In case of any dispute as to the made of measurement not covered by the contract to be adopted for any item of work, mode of measurement as per latest Indian Standard Specifications shall be followed.

70.5 Rounding of Amounts:

In calculating the amount of each item due to the contractor in every certificate prepared for payment, sum of less than 50 paisa shall be omitted and the total amount on each certificates shall be rounded off to the nearest, i.e. sum of less than 0.50p shall be omitted and sums of 0.50p and more upto one rupee shall be reckoned as one rupee.

71. LUMPSUMS IN TENDER:

For the item in tender where it includes lumpsum in respect of parts of work, the contractor shall be entitled to payment in respect of the items at the same as are payable under this contract for such items, or if the part of the work in question is not, in the opinion of the Engineer-in-Charge capable of measurement, or determination, the Owner may at his discretion pay the lumpsum amount entered in the tender or a percentage thereof and the certificate in writing of the Engineer-in-Charge shall be final and conclusive against the contractor with regards to any sum payable to him, under the provisions of this clause.

72. RUNNING ACCOUNT PAYMENTS TO BE REGARDED AS ADVANCE:

All Running Account Payment shall be regarded as Payments by way of advance against the final payment only and not as payment for work actually done and completed, and shall not preclude the requiring of 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 of the accruing of any claim by the contractor, nor shall it, conclude, determine or affect in any way the powers of the Owner 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 or affect the contract. The final bill shall be submitted by the contractor within one month from the sate of physical completion of the work, otherwise,

the Engineer-in-Charge's certificate of the measurement and of total amount payable for the work accordingly shall be final and binding on all parties.

73. NOTICE OF CLAIMS FOR ADDITIONAL PAYMENT:

Should the contractor consider that he is entitled to any extra payment or compensation or to make any claims whatsoever in respect of the works arising under the terms of this contract he shall forthwith give notice in writing to the Engineer-in-Charge that he claims extra payment within ten days from the ordering of any work or happening of any event upon which the contractor bases such claims and such notice shall contain full particulars of the nature of such claims with necessary particulars as above within the time above specified shall be an absolute waiver thereof. No omission by the Owner to reject any such claim and no delay in dealing therewith shall be waiver by the Owner of any right in respect thereof.

74. PAYMENT OF CONTRACTOR'S BILL:

No payment shall be made for works estimated to cost less than Rs. 10,000/- till the whole of the work shall have been completed and a certificate of completion given. But in case of works estimated to cost more than Rs. 10,000/- the contractor, on submitting the bill thereof be entitled to receive a monthly payment proportionate to the part thereof approved and passed by the Engineer-in-Charge, whose certificate of such approval and passing of the sum so payable be final and conclusive against the contractor. This payment will be made after making necessary deductions as stipulated elsewhere in the contract document for materials, security deposit etc. or any statutory recoveries.

Payment due to the contractor shall be made by the Owner, by Crossed Account Payee Cheque forwarding the same to registered office or the notified office of the contractor. In no case will owner be responsible if the Cheque is mislaid or misappropriated by un-authorized person/ persons. In all cases, the contractor shall present his bill duly pre-receipted on proper revenue stamp.

All payment shall be made in Indian Currency.

75. Receipt For Payment:

Receipt for payment made on account of work when executed by a firm, must be signed by a person holding due power of attorney in this respect on behalf of the contractor, except when the contractors are described in their tender as limited company in which case the receipts must be signed in the name of the company by one of its principal officers or by some other persons having authority to give effectual receipt for the company.

76. Completion Certificate:

76.1. Application for completion certificate:

When the contractor fulfils his obligation under clause 69.4 he shall be eligible to apply for completion certificate in respect of the work by submitting the completion documents along with such application for completion certificate.

The Owner or his representative shall normally issue to the contractor the completion certificate within one month after receiving an application therefor from the contractors after verifying from the completion documents and satisfying himself that the work has been completed in accordance with and as set out in the construction and erection drawings, and the contract documents.

The contractor, after obtaining the completion certificate, is eligible to present the final bill for the work executed by him under the terms of contract.

76.2. Completion Certificate:

Within one month of the completion of work in all respects, the contractor, shall be furnished with a certificate by the owner or his representative of such completion but no completion certificate shall be given not shall the work be deemed to have executed until all, scaffolding, surplus materials and rubbish is cleared off the site completely not until the work shall have been measured by the Engineer-in-Charge, whole measurement shall be binding and conclusive. The work will not be considered as complete and taken over by the owner, until all the temporary work, labour and staff colonies etc. constructed are removed and work site cleared to the satisfaction of the Engineer-in-Charge.

If the contractor shall fail to comply with the requirements of this clause on or before the date fixed for the completion of the work, the Engineer-in-Charge may at the expenses of contractor remove such scaffolding, surplus materials and rubbish and dispose off the same as he thinks fit and clean off such dirt as aforesaid, and the contractor shall forthwith pay the amount for all expenses so incurred and shall have no claim in respect of any such scaffolding or surplus materials as aforesaid except for any sum actually realized by the sale thereof.

Completion Certificate shall be in 3 parts as follows:

- (1) Physical/ Mechanical Completion work.
- (2) Satisfactory completion of commissioning of equipment with load.
- (3) Satisfactory completion of guarantee.

The contractor shall clearly indicate the 3 dates separately.

76.3. Completion Documents:

For the purpose of Clause 76 the following documents will be deemed to form the completion documents:

- (i) The technical documents according to which the work was carried out.

- (ii) Three sets of construction drawings showing therein the modification and corrections made during the course of execution and signed by the Engineer-in-Charge.
- (iii) Completion Certificate for embedded and covered –up works.
- (iv) Certificate of final levels as set out for various works.
- (v) Certificate of tests performed for various works.
- (vi) Material appropriation statement to the materials issued by the owner for the works and list of surplus materials returned to the owner's store duly supported by necessary documents.
- (vii) Physical/ Mechanical Completion work.
- (viii) Satisfactory completion of commissioning of equipment with load.
- (ix) Satisfactory completion of guarantee.

The Contractor shall clearly indicate the 3 dates separately.

77. Final Decision And Final Certificate:

Upon the expiration of the period of liability and subject to the Engineer-in-Charge being satisfied that the works have been duly maintained by the contractor during monsoon or such period as herein provided in clause 68.1 and that the contractor has in all respect duly made up all subsidence and performed all his obligations under the contract, the Engineer-in-Charge shall (without prejudice to the right of the Owner to retain the provisions of relevant clause hereof) otherwise give a certificate, herein referred to as the final certificate, to the effect and the contractor shall not be considered to have fulfilled the whole of his obligations under the contract until Final Certificate shall have been given by the Engineer-in-Charge notwithstanding any previous entry upon the work and taking possession, working or using of the same or any part thereof by the Owner.

78. Certificate And Payments No Evidence of Completion:

Except the final certificate no other certificate or payment against a certificate or on general account shall be taken to be an admission by the Owner of the due performance of the contract of any part thereof or of occupancy or validity of any claim by the Contractor.

SECTION – VII

TAXES AND INSURANCE

79. TAXES, DUTIES, OCTROI ETC.

- 79.1. The Contractor shall defray all charges, such as rent, toll local taxes excise duty, other payments and compensations, if any, in connection with the procurement and handling of materials, fabrication and execution of works or any method or process connected with the works or Temporary works.

Sales Tax or any other tax on materials required for the works as also Tax on works contract shall be payable by the Contractor and the Owner will not entertain any claim whatsoever in this regard.

- 79.2. Notwithstanding anything contained elsewhere in the contract, the owner shall deduct at source from the payments due to the contractor, the taxes as required under Section -13-AA of the Orissa Sales Tax Act or as amended from time to time or under any other statute. The amounts so deducted shall be deposited by the Owner with the Sales Tax authorities as per Law. It is for the contractor to deal with the Sales Tax authorities directly in respect of any claim or refund relating to the above deductions and the owner shall not be liable or responsible for any claims or payments or reimbursement in this regard.

80. INSURANCE:

Contractor shall at his own expense carry and maintain insurance with reputed insurance companies to the satisfaction of the Owner as follows:

80.1 Employees State Insurance Act:

The contractor agrees to and does hereby accept full and exclusive liability for compliance with all obligations imposed by the Employees State Insurance Act., 1948, and the contractor further agrees to defend, indemnify and hold Owner harmless from any liability of penalty which may be imposed by the Central, State or Local authority by the reason of any asserted violation by contractor or Sub-contractor of the Employee's State Insurance Act, 1948 and also from all claims, suits or proceeding that may be brought against the Owner arising under, growing out of or by reasons of the work provided for by this contract whether brought by employees of the contractor, by third parties or by Central or State Government authority or any political sub-division thereof.

The contractor agrees to fill in with the Employees State Insurance Corporation, the Declaration Forms and all forms which may be required in respect of the contractor's or sub-contractor's employees, whose aggregate remuneration is Rs. 560.00 per month or less and who are employed in the work provided for or those covered by ESI from time to time under the Agreement. The contractor shall deduct and secure the agreement of the sub-contractor to deduct the employee's contribution as per the first schedule of the Employee's State Insurance Act from wages and affix the employee's

contribution cards at wages payments intervals. The contractor shall remit and secure the agreement of the sub-contractor to remit to the State Bank of India, Employees State Insurance Corporation Account, the employee's contribution as required by the Act. The contractor agrees to maintain all cards and records as required under the Act in respect of employees and payments and the contractor shall secure the agreement of the sub-contractor to maintain such records. Any expenses incurred for the contributions, making contributions or maintaining records shall be to the contractor's or sub-contractor's account.

The Owner shall retain such sum as may be necessary from the total contract value until the contractor shall furnish satisfactory proof that all contribution as required by the Employees State Insurance Act, 1984, have been paid. This will be pending on the contractor when the Employees State Insurance Act is extended to the place of work.

80.2 Workmen Compensation and Employees Liability Insurance:

Insurance shall be affected for all the contractor's employees engaged in the performance of this contract. If any of the work is subject, the contractor shall require the sub-contractor to provide workmen's compensation and employer's liability insurance for the latter's employees if such employees are not covered under the contractor insurance.

80.3 Any other insurance required under Law or Regulations or by Owner:

Contractor shall also carry and maintain any and all other insurance, which he may be required under any law or regulation from time to time. He shall also carry and maintain any other insurance, which may be required by the Owner.

80.4 Accident or Injury to workmen:

The owner shall not be liable for or in respect of any damages or compensation payable at law in respect or in consequence of any accident or injury to any workman or other person in the Employment of the contractor or any sub-contractor save and except an accident or injury resulting from any act or default of the Owner, his agents or servants and the contractor shall indemnify and keep indemnified the Owner against all such damages and compensation (save and except as aforesaid) and against all claims, demands, proceeding, costs, charges and expenses, whatsoever in respect or in relation thereto.

80.5 Transit Insurance:

In respect of all items to be transported by the Contractor to the site of work, the cost of transit insurance should be borne by the contractor and the quoted price shall be inclusive of this cost.

81 DAMAGE TO PROPERTY OR TO ANY PERSON OR ANY THIRD PARTY:

81.1 Contractor's rate shall deem to include taking into account that he has to work in operating plant and shall take sufficient care in moving the plants, equipment and materials from one place to another so that they do not cause

any damage to any person or to the property of the Owner or to a third party including over head and underground cables, pipelines. In the event of such damages including eventual loss of production and operation of the plants or services in any plant or establishment as estimated by the Owner or ascertained or by the third party shall be borne by the Contractor.

81.2 Contractor shall also be responsible for making good to the satisfaction of the Owner any loss or any damage to all structures and properties belonging to the Owner or being executed or procured or being procured by owner or by other agency within the premises of all the work or Owner. If such loss or damages is due to fault and or the negligence or willful acts or omission of the contractors, his employees, agents, representatives or sub-contractors.

81.3 The contractor shall indemnify and keep the owner harmless of all claims for damages to property other than owner's property arising under or by reason of this contract if such claims result from the fault and/ or negligence or willful acts or omission of the contractor, agents, representative or sub-contractor.

82 DEMURRAGE DUES:

The contractor shall pay demurrage charges incurred by the Owner because of the contractor's failure to load or unload any goods or materials within the time allowed by the Railway and/ or Transport Agency for such loading or unloading as charges incurred by the contractor within the permissible time as also charges due on consignments booked by or to him. In case the contractor fails to pay these charges, these charges shall be deducted from any sums, which may be due or become due to the contractor in terms of this contract and/ or any other contract.

SECTION – VIII LABOUR LAWS AND ARBITRATION

83 LABOURER LAWS:

Contractor shall comply with any and all laws, ordinances, regulations and decision of courts (which shall be deemed to be a part of this Agreement) concerning the health, sanitary arrangements, wages, welfare, safety and employment of any and all of his workers upon the Project or any portion thereof and shall exclusively bear the consequences of failure to comply therewith Contractor shall Indemnify and hold Engineer and Owner harmless from any claims, fines or penalties which may be made against Engineer or Owner as result of Contractor's failure to fulfil these obligations.

Without limiting the generality of the foregoing, Contractor shall fully comply with.

The contractor shall obtain clearance from the Labour Department regarding the compliance of the labour laws on 6 monthly basis and submit to the owner for record.

- (i) No labour below the age of 18 (eighteen) years shall be employed on the work.
- (ii) The contractor shall not pay less than what is provided under law to labourers engaged by him on the work.
- (iii) The contractor shall at his expense comply with all labour laws and keep the Owner indemnified in respect thereof .
- (iv) The contractor shall pay equal wages for men and women in accordance with applicable labour laws.
- (v) If the contractor is covered under the contractor labour (Regulation and Abolition) Act, he shall obtain a licence from licensing authority (i.e. office of the labour commissioner) by payment of necessary prescribed fee and the deposit, if any, before starting the work under the contract.
- (vi) The Contractor shall employ labour in sufficient numbers either directly or through sub-contractors to maintain the required rate of progress and of quality to ensure workmanship of the degree specified in the Contract and to satisfaction of the Engineer-in-Charge. The contractor shall not employ in connection with the works any person who has not completed his 18 (eighteen) years of age.
- (vii) The Contractor shall furnish to the Engineer-in-Charge the distribution return of the number and description, by trades of the work people

employed on the works. The Contractor shall also submit on the 4th and 19th of every month to the Engineer-in-Charge a true statement showing in respect of the second half of the preceding month and the first half of the current month (1) the accidents that occurred during the said fortnight showing the circumstance-under which they happened and the extent of damage and injury caused by them and (2) the number of female workers who have been allowed Maternity benefit as provided in the Maternity Benefit Act 1961 or Rules made thereunder and the amount paid to them.

- (viii) The contractor shall comply with the provisions of the payment of Wages Act 1936, Minimum Wages Act 1938, Employees Liability Act 1928, Workmen's Compensation Act, 1923, Industrial Dispute Act 1947, the Maternity Benefit Act 1961, Employees Provident Fund Act, 1952 and Contract Labour regulation and abolition Act 1937, Employment of Children Act 1938 or any modifications thereof or any other law relating thereto and rules made thereunder from time to time.
- (ix) The Engineer-in-Charge shall on a report having been made by an Inspecting Officer as defined in Contract Labour (Regulation and Abolition) Act 1970 have the power to deduct from the moneys due to the Contractor any sum required or estimated to be required for making good the loss suffered by a worker or Workers by reason of non-fulfillment of the Conditions of the Contractor for the benefit of workers, non-payment of wages or of deductions made from his or their wages which are not justified by the terms of the Contract or non-observance of the said regulations.
- (x) The Contractor shall indemnify the Owner against any payments to be made under and for the observance of the provisions of the aforesaid Acts without prejudice to his right to obtain indemnity from his sub-contractors. In the event of the contractor committing a default or breach of any of the provisions of the aforesaid Acts as amended from time to time, of furnishing any information or submitting or filling any Form/Register/Slip under the provisions of these Acts which is materially incorrect then on the report of the inspecting Officers the Contractor shall without prejudice to any other liability pay to the owner a sum not exceeding Rs. 50.00 as liquidated damages for every default, breach of furnishing, making submitting, filling materially incorrect statement as may be fixed by the Engineer-in-Charge and in the event of the contractor's default continuing in this respect the liquidated damages may be enhanced to Rs. 50.00 per day of default subject to a maximum of one percent of the estimated cost of the works put to tender. The Engineer-in-Charge shall deduct such amount from bills or security deposit of the Contractor and credit the same to the welfare fund constituted under these acts. The decision of the Engineer-in-Charge in this respect shall be final and binding.

84 Implementation Of Apprentices Act 1961:

The contractor shall comply with the provisions of the Apprentices Act 1961 and the Rules and orders issued thereunder from time to time. If he fails to do so, his failure will be a breach of the contract and the Engineer-in-Charge may, at his discretion, cancel the contract. The contractor shall also be liable for any pecuniary liability arising of any violation by him of the provisions of the Act.

85 Contractor to Indemnify the Owner:

85.1 The contractor shall indemnify the Owner and every member, Officer and employee of the owner, also the Engineer-in-Charge and his staff against all actions, proceedings, claims, demands costs and expenses whatsoever arising out of or in connection with the matter referred to in clause 81 and elsewhere and all actions, proceedings, claims demands costs and expenses which may be made against the Owner for or in respect of or arising out of any failure by the contractor in the performance of his obligations under the contract. The Owner shall not be liable for or in respect of any demand or compensation payable by law in respect or in consequence of any accident or injury to any workman or other person in the employment of the contractor or his sub-contractor and contractor shall indemnify and keep indemnified the Owner against all such damage and compensation and against all claims, damages, proceedings, costs, charges and expenses whatsoever thereof or in relation thereto.

85.2 Payment of Claims and Damages:

Should the Owner have to pay any money in respect of such claims or demands as aforesaid the amount so paid and the cost incurred by the Owner shall be charged to and paid by the Contractor and the contractor shall not be at liberty to dispute or question the right of the Owner to make such payments notwithstanding the same may have been made without his consent or authority or in law or otherwise to the contrary.

85.3 In every case in which by virtue of the provisions of section 12, sub-section (i) of workmen's compensation Act, 1923 or other applicable provision of Workman Compensation act or any other act, the Owner is obliged to pay compensation to workman employed by the contractor in execution of the works, the Owner will recover from the contractor the amount of the compensation so paid, and without prejudice to the rights of Owner under section 12, sub-section (2) of the said act. Owner 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. The Owner shall not be bound to contest any claim made under section 12 sub-section (I) of the said Act except on the written request of the contractor and upon his giving to the Owner full security for all costs for which the Owner might become liable in consequence of contesting such claims.

86. Health and Sanitary Arrangements For Workers:

- 86.1 In respect of all labour directly or indirectly employed in the works for the performance the contractor's part of this agreement, the contractor shall comply with or cause to be complied with all the rules and regulations of the local sanitary and other authorities or as framed by the Owner from time to time for the protection of health and sanitary arrangements for all workers.
- 86.2 The contractor shall provide in the labour colony all amenities such as Electricity, water and other sanitary and health arrangements. The Contractor shall also provide necessary surface transportation to the place of work and back to the colony for their personnel accommodated in the labour colony.

87. Arbitration:

All disputes or differences whatsoever which shall at any time arise between the parties hereto touching or concerning the works or the execution or maintenance thereof of the contract or the rights touching or concerning the works or the execution or maintenance thereof of this contract or the construction meaning operation or effect thereof or to the rights or liabilities of the parties or arising out of or in relation thereto whether during or after completion of the contract or whether before or after determination, fore closure or breach of the contract (other than those in respect of which the decision of any person is by the contract expressed to be final and binding shall after written notice by either party to the contract to the other of them and to the Appointing Authority hereinafter mentioned be referred for adjudication to a sole Arbitrator to be appointed as hereinafter provided.

For the purpose of appointing the sole Arbitrator referred to above, the Appointing Authority will send within thirty days of receipt of the notice, to the contractor a panel of three names of persons.

The contractor shall on receipt of the names as referred selected any one of the person names to be appointed as a sole Arbitrator and communicate his name to the Appointing Authority within thirty days of receipt of the names. The appointing Authority shall there upon without any delay appoint the said person as the sole Arbitrator. If the contractor fails to communicate such selection as provided above within the period specified, the Appointing Authority shall make the selection and appoint the selected person as the sole Arbitrator.

If the Arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacate his office due to any reason whatsoever sole Arbitrators shall be appointed as aforesaid. The work under the contract shall, however continue during the arbitration proceedings.

The Arbitrator shall be deemed to have entered on the reference on the date he issues notices to both the parties fixing the date of the first hearing.

The Arbitrator may, from time to time, with the consent of the parties, enlarge the time for making and publishing the award.

The Arbitrator shall give a separate award in respect of each dispute or difference and shall give a reasoned and speaking award/ awards.

The venue of arbitration shall be at Bhubaneswar. However, if the situation so warrants, it may, as and when required, be held at the place where the site of work is situated.

The fees, if any, of the Arbitrator shall, if required to be paid before the award is made and published be paid half and half by each of the parties. The costs of the reference and of the award including the fees, if any of the Arbitrator shall be in the discretion of the Arbitrator who may direct to and by whom and in what manner, such costs or any part thereof shall be paid may fix or settle the amount of costs to be so paid.

The award of the arbitrator shall be final and binding on both the parties.

Subject to aforesaid, the provisions of the Arbitration Act 1940 or any statutory modification or re-enactment thereof and the rules made thereunder, and for the time being in force shall apply to the arbitration proceeding under this clause.

For Public Sector Enterprises guidelines as per the circular of BPE No. 15/9/86-BPE (FIN) dated 30.03.89 as amended time to time will be followed.

88. Jurisdiction/ Governing Laws:

(a) Jurisdiction:

For all disputes arising of this contract, the jurisdiction shall be lie under the jurisdiction of direct courts in the respective areas in the State of ORISSA (India) only.

(b) Governing Laws:

The contract shall be governed by and constructed according to the laws in force in INDIA.

SECTION – IX SAFETY CODE

89. GENERAL:

Contractor shall adhere to safe construction practice and guard against hazardous and unsafe working conditions and shall comply with Owner's safety rules as set forth herein. Prior to start of construction, contractor will be furnished copies of Owner's 'Safety Code' for information and guidance, if it has been prepared.

90. SAFETY REGULATIONS:

90.1. In respect of all labour, directly or indirectly employed in the work for the performance of contractor's part of this agreement, the contractor shall at his own expense arrange for all the safety provisions as per (i) Safety codes of CPWD & Indian Standards Instructions (ii) The electricity Act, (iii) The Mines Act, and (iv) Regulations. Rules and orders made thereunder and such other acts as applicable.

90.2. The contractor shall observe and abide by all fire and safety regulations of the Owner. Before starting construction work, contractor shall consult Owner's Safety Engineer or Engineer-in-Charge and must make good to the satisfaction of the Owner any loss or damage due to fire to any portion of the work done under this contract or to any of the Owner's existing property.

91. First Aid and Industrial Injuries:

(i) Contractor shall maintain first aid facilities for his employees and those of his subcontractors.

(ii) Contractors shall make outside arrangements for ambulance service and for treatment of industrial injuries. Name of those providing these services shall be furnished to Owner prior to start of constructions and their telephone numbers shall be prominently posted in Contractor's field office.

(iii) All critical industrial injuries shall be reported promptly to owner, and a copy of Contractor's report covering each personal injury requiring the attention of a physical shall be furnished to the Owner.

92. General Rules:

Smoking within the Battery Areas, rank farm, or dock limits is strictly prohibited. Violators of the "No Smoking" rules shall be discharged immediately.

93. Contractor's Barricades:

(i) Contractor shall erect and maintain barricades required in connection with his operation to guard or protect.

- (a) Excavations.
 - (b) Hosting Areas.
 - (c) Areas adjudged hazardous by Contractor's or Owner's Inspectors.
 - (d) Owner's existing property subject to damage by Contractor's operation.
 - (e) Rail road unloading spots.
- (ii) Contractor's employees and those of his sub-contractors shall become acquainted with Owner's barricading practice and shall respect the provisions thereof.
 - (iii) Barricades and hazardous areas adjacent to but not located in normal routes of travel shall be marked by red flasher lanterns at nights.

94. Scaffolding:

- (i) Suitable scaffoldings should be provided for workmen for all works that cannot safely be done from the ground or from solid construction except such short period works as can be done safely from ladders. When a ladder is used a 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 in 4 (1 horizontal and 4 vertical).
- (ii) Scaffolding or staging more than 4 metres above the ground or floor swing on suspended from an overhead support or erected with stationary support shall have a guard rail properly attached, bolted, braced and otherwise retarded at least one metre high above the floor or platform of such scaffolding or staging and extending along with entire length of the outside and ends thereof with only such openings 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.
- (iii) Working platform, gangways and stairways should be so constructed that they should not sag unduly or unequally and if the height of the platform of gangway or the stairway is more than 4 metres above ground level or floor level, they should be closely boarded, should have adequate width and should be suitably fastened as described in (ii) above.
- (iv) Every opening in the floor of a building or in a working platform be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be 1 metre.
- (v) 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 9 metres in length. The width between the side rails in run ladder shall in no case be less than 30 cm. For ladder up to and including 3 metres in length; for longer ladders this width should be

increase at least 15 mm for each additional metre of length. Uniform step spacing shall not exceed 30 cms. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites of work shall be so stacked or placed as to cause danger or inconvenience to any person or public. The contractor shall also provide all necessary fencing and lights to protect the workers and staff from accidents, and shall be bound to bear the expenses of defence of every suit, action or other proceedings of law that may be brought by any 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 or action or proceedings to any such person or which may with the consent of the contractor be paid to compromise any claim by any such person.

95. Excavation and Trenching:

All trenches 1.2 metres or more in depth, shall at all times be supplied with at least one ladder for each 50 M length or fraction thereof.

Ladder shall be extended from bottom of the trench to at least 1 metre above the surface of the ground. The sides of the trenches which are 1.5 metres in depth shall be stepped back to give suitable slope, or securely held by timber bracing, so as to avoid the danger of sides to collapse. The excavated materials shall not be placed within 1.5 metres of the edge of the trench or half of the trench width whichever is more. Cutting shall be done from top to bottom. Under no circumstances undermining or under-cutting shall be done.

96. General Safety:

- (i) Before any demolition work is commenced and also during the process of the demolition work.
 - (a) All roads and open areas adjacent to the work site shall either be closed or suitably protected.
 - (b) No electric cable or apparatus which is liable to be a source of danger shall remain electrically charged.
 - (c) All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.
- (ii) All necessary personal safety equipment as considered adequate by the Engineer-in-Charge, should be kept available for the use of the persons employed at the site and maintained condition suitable for immediate use and the contractor should take adequate steps to ensure proper use of equipment by persons concerned as outlined below:

- (a) Workers employed on mixing asphalt materials, cement and lime mortars shall be provided with protective footwear and protective gloves.
- (b) Those engaged in white washing and mixing or stacking of cements bags or any materials which are injurious to the eyes shall be provided with protective goggles.
- (c) Those engaged in welding and cutting works, shall be provided with protective face and eye –shields, hand gloves etc.
- (d) Stonebreakers shall be provided with protective goggle and protective clothing and seated at sufficiently safe intervals.
- (e) When workers are employed in sewers and manholes which are in use, the contractor shall ensure that the manhole cover are opened and are 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 board to prevent accident to the public.
- (f) The contractor shall not employ men below the age of 18 years and women on the work of painting with products containing lead in any form. Wherever men above the age of 18 years are employed on the work of lead painting, the following precautions should be taken:
 - (1) No paint containing lead or lead products shall be used except in the form paste or readymade paint.
 - (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 dry rubbed and scrapped.
 - (3) Overalls shall be supplied by the Contractor to the workmen and adequate facilities shall be provided to enable the working painters to wash them on cessation of work.
- (iii) When the work is done near any place where there is a risk of drowning all necessary safety equipment shall be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision should be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.
- (iv) Use of hoisting machines and tackles including their attachments anchorage and supports shall conform to the following standard or conditions:
 - (a) These shall be of good mechanical construction, sound materials and adequate strength and free from patent defect and shall be kept in good working order.
 - (b) Every rope used in hoisting or lowering materials or as means of suspension shall be of durable quality and adequate strength and free from patent defects.

- (c) 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 which or give signals to the operator.
- (d) In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or lowering 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 marked with the 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.
- (e) In case of department 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 it verified by the Engineer-in-Charge.
- (v) Motors, gears, transmission lines, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safe-guards. Hoisting appliances should be provided with such means as to reduce to the minimum the accidental descent of the load, adequate precaution should be taken to reduce to the minimum the risk of any part or parts 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 should be provided. The workers shall not wear any rings, watches and carry keys or other materials, which are good conductors or electricity.
- (vi) All scaffolding, ladders and other safety devices mentioned or described herein shall be maintained in safe conditions and no scaffoldings, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of works.
- (vii) These safety provisions should be brought to the notice of all concerned by displaying on a notice board at a prominent place at the work spot. The person responsible for compliance of the safety code shall be named therein by the contractor.
- (viii) The 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 welfare officer Engineer-in-Charge or safety Engineer of the Administration or their representatives.
- (ix) Notwithstanding the above clauses there is nothing in these to exempt the contractor from the operations of any other Act or rules in force in the Republic of India. The works throughout, including any temporary works, shall be carried out in such a manner as not to interfere in any way whatsoever with the traffic on any roads or footpaths at the site or in vicinity thereto or any existing works whether the property of the Administrations or of a third party.

97. Care in handling Inflammable gas:

The Contractor has to ensure all precautionary measures and exercise utmost care in handling the inflammable gas cylinder/ inflammable liquids/ paints etc. as required under the law and/ or as advised by the fire authorities of the Owner.

98. Temporary Combustible Structures:

Temporary combustible structures will not be built near or around work site.

99. Precautions Against Fire:

The Contractor will have to provide Fire Extinguisher/ Fire Buckets and drums at work site as recommended by Engineer-in-Charge. They will have to ensure all precautionary measures and exercise utmost care in handling the inflammable gas cylinders/ inflammable liquid/ paints etc. as advised by Engineer-in-Charge. Temporary combustible structures will not be build near or around the work-site.

100. Explosives:

Explosives shall not be stored or used on the works or on the site by the contractor without the permission of the Engineer-in-Charge in writing and then only in the manner and to the extent to which such permission is given. When explosives are required for the works they shall be stored in a special magazine to be provided at the cost of the contractor in accordance with the Explosive Rules. The contractor shall obtain the necessary licence for the storage and the use of explosives and all operations in which or for which explosives are employed shall be at sole risk and responsibility of the contractor and the contractor shall indemnify the owner against any loss or damage resulting directly or indirectly therefrom.

101. Mines Act:

101.1 Safety Code: The contractor shall at his own expense arrange for the safety provisions as required by the Engineer-in-Charge in respect of all labour directly employed for performance of the works and shall provide all facilities in connection therewith. In case the Contractor fails to make arrangements and provides necessary facilities as aforesaid. The Engineer-in-Charge shall be entitled to do so and recover the costs thereof from the Contractor.

101.2 Failure to comply with Safety code or the provisions relating to report on accidents and to grant of maternity benefits to female worker shall make the Contractor liable to pay Company liquidated damages an amount not exceeding Rs. 50/- for each default or materially incorrect statement. The decision of the Engineer-in-Charge in such matters based on reports from the Inspecting Officer or from representatives of Engineer-in-Charge shall be final and binding and deductions for recovery of such liquidated damages may be made from any amount payable to the Contractor from all the provisions of the Mines Act 1952 or any statutory modification's or re-enactment thereof the time being in force and any Rules and Regulations made thereunder in respect of all the

persons employed by him under this contractor and shall indemnify the Owner from and against any claim under the Mines Act or the rules and regulations framed thereunder by or on behalf of and persons employed by him or otherwise.

102. Preservation of Peace:

The Contractor shall taken requisite precautions and use his best endeavors to prevent any riotous or unlawful behaviour by or amongst his workmen and other employed on the works and for the preservation of peace and protection of the inhabitants and Security of property in the neighborhood of the work. In the event of the Owner requiring the maintenance of a special Police force at or in the vicinity of the site during the tenure of works, the expenses thereof shall be borne by the Contractor and if paid by the Owner shall be recoverable from the Contractor.

103. Outbreak of Infectious Diseases:

The Contractor shall remove from his camp such labour and their families as refuse protective inoculation and vaccination when called upon to do so by the Engineer-in-Charge's Representative. Should Cholera, Plague or other infectious diseases break out the Contractor shall burn the huts, bedding clothes and other belonging of or used by the infected parties and promptly erect new huts on healthy sites as required by the Engineer-in-Charge failing which within the time specified in the Engineer's requisition, the work may be done by the Owner and the cost thereof recovered from the Contractor.

104. Treatment of Contractor's Staff in Company's Hospital:

The Contractor and his staff, other than labourers and their families requiring medical aid from the Owner's hospitals and dispensaries will be treated as private patients and charged accordingly. The contractor's labourers and their families will be granted from treatment in the Owner's hospitals and dispensaries where no other hospitals or dispensaries are available provided the contractor pays the cost of medicines dressing and money accordingly to the normal scale as also additional charges if any for special examination e.g. X- Ray etc.

105. Use of Intoxicants:

The sale of dent spirits or other intoxicating beverages upon the work in any of the buildings, encampments or tenements owned, occupied by or within the control of Contractor or any of his employee is forbidden and the contractor shall exercise his influence and authority to the utmost extent to secure strict compliance with this condition.

In addition to the above, the contractor shall abide by the safety code provision as per CPWD safety code and Indian Standard Code framed from time to time.

PROFORMA FOR BANK GUARANTEE FOR EARNEST MONEY DEPOSIT

(To be executed on non-judicial stamped paper of appropriate value)

B. G. No. _____

Date: _____

1. WHEREAS M/s National Aluminium Company Limited (A Government of India Enterprise), having its Corporate Office at NALCO BHAWAN, P-1 Nayapalli, Bhubaneswar (hereinafter called "The Company Owner" which expression shall unless repugnant to the subject or context includes its legal representatives, successors and assigns) has issued tender paper vide its Tender No.for -----
----- (hereinafter called "the said tender") to M/s.(hereinafter called the said Tenderer(s)) which expression shall unless repugnant to the subject or context includes their legal representatives, successors and assigns and as per terms and conditions of the said tender, the tenderer shall submit a Bank guarantee for Rs.(Rupeesonly) towards earnest money in lieu of cash.
2. WEBank having its branch office atdo hereby undertake to pay the amount due and payable under this guarantee without any demur, merely on a demand from the Company stating that in the opinion of the company which is final and binding, the amount claimed is due because of any withdrawal of the tender or any material alteration to the tender after the opening of the tender by way of any loss or damage caused to or would be caused or suffered by the Company by reason of any breach by the said tenderer(s) of any of the terms and conditions contained in the said tender or failure to accept the letter of Intent Agreement or that the amount covered under this Guarantee is forfeited. Any such demand made on the Bank by the owner shall be conclusive as regards the amount due and payable by the Bank under this guarantee, However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.....(Rupees.....only).
3. We undertake to pay to the Company any money so demanded notwithstanding any dispute or disputes raised by the tenderer (s) in any suit or proceeding pending before any office, court or tribunal relating thereto our liability under this present guarantee being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder. Our liability to pay is not dependent or conditional on the owner proceeding against the tenderer.
4. The guarantee herein contained shall not be determined or affected or suspended by the liquidation or winding up, dissolution or change of constitution or insolvency of the said tenderer(s) but shall in all respect and for all purposes be binding and operative until payment of all money due or liabilities under the said contract(s)/ Order(s) are fulfilled.
5. WEBank Ltd. further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the finalisation of the said tender and that it shall continue to be enforceable till the said tender is

finally decided and order placed on the successful tenderer(s) and or till all the dues of the company under or by virtue of the said tender have been fully paid and its claims satisfied or discharged or till a duly authorised officer of the company certifies that the terms and conditions of the said tender have been fully and properly carried out by the said tenderer (s) and accordingly discharges the guarantee.

6. That the Owner Company will have full liberty without reference to us and without affecting this guarantee to postpone for any time or from time to time. The exercise of any of the power of the owner under the tender.
7. Notwithstanding anything contained herein before, our liability shall not exceed Rs.....(Rupees.....only) and shall remain in force till.....Unless a demand or claim under this Guarantee is made on us within three months from the date of expiry we shall be discharged from all the liabilities under this guarantee.
8. We.....Bank, lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Company in writing. We further undertake to keep this Guarantee renewed from time to time on the request of Tenderer (s).

Date.....
Corporate Seal of the Bank

.....Bank
By its constitutional Attorney

Signature of duly
Authorised person
On behalf of the Bank
With seal & signature code

Note: BGs to be furnished from any of the banks listed earlier.

BANK GUARANTEE FOR SECURITY DEPOSIT

(To be executed on non-judicial stamped paper of appropriate value)

B. G. No. _____

Date: _____

1. In consideration of National Aluminium Company Limited (A Government of India Enterprise), having its office at _____ (hereinafter called “ The Company Owner” which expression shall unless repugnant to the subject or context includes its legal representatives, successors and assigns) having agreed to exempt M/s. (Hereinafter called “the said Contractor (s)/ Seller(s)” which expression shall unless repugnant to the subject or context includes their legal representatives, successors and assigns) from the demand under the terms and conditions of Contract(s)/ Order(s) No. dt. of cash security deposit for the due fulfillment by the said contractor(s) seller(s) of the terms and conditions contained in the said Contract(s)/Order(s), on production of Bank Guarantee for Rs. (Rupees.....only).
2. We Bank having its branch office at do hereby agree and undertake to pay the amount due and payable under this guarantee without any demur, merely on a demand from the Company stating that in the opinion of the company which is final and binding, the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the Company by reason of any breach by the said Contractor(s)/seller(s) of any of the terms and conditions contained in the said contract(s) or ders(s) or by reasons of the said Contractor(s)/ Seller(s) failure to perform the said Contract(s)/ Order(s) including defect liability obligations or that the amount covered under this guarantee is forfeited. Any such demand made on the Bank by the owner shall be conclusive as regards the amount due and payable by the Bank under this guarantee, However, our liability under this guarantee shall be restricted to an amount not exceeding Rs..... (Rupees.....only).
3. We undertake to pay to the Company any money so demanded notwithstanding any dispute or disputes raised by the contractor (s)/ Seller(s) in any suit or proceeding pending before any office, court or tribunal relating thereto our liability under present guarantee being absolute and unequivocal. The payment so made by us under this bond shall be valid discharge of our liability for payment there under. Our liability to pay is not dependent or conditional on the owner proceeding against the Contractor(s)/ Seller(s).
4. The guarantee herein contained shall not be determined or affected or suspended by the liquidation or winding up, dissolution or change of constitution or insolvency of the said Contractor(s)/ Seller(s) but shall in all respect and for all purposes be binding and operative until payment of all money due or liabilities under the said contract(s)/ Order(s) are fulfilled.
5. We 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 Contract(s)/ Order(s) and that it shall continue to be enforceable till all the dues of the company under or by virtue of the said Contract(s)/Order(s) have been fully paid and its claims satisfied or discharged or till a duly Authorised officer of the company certifies that the terms and conditions of the said Contract(s)/Order(s) have been fully

and properly carried out by the said contractor(s) and accordingly discharges the guarantee.

6. WeBank further agree with the Company that the company shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Contract(s)/ Order(s) or to extend the time of performance by the said Contractor(s) Seller(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Company against the said Contractor(s)/ Seller(s) and to forbear or enforce any of the terms and conditions relating to the said Contract(s)/ Order(s) and we shall not be relieved from our liability by reason of any such variations, or extension being granted to the said Contractor (s)/ Seller(s) or for any forbearance, act or omissions on the part of the Company or any indulgence by the Company to the said Contractor(s)/ Seller(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have affect of so relieving us.
7. Notwithstanding anything contained herein before, our liability shall not exceed Rs.....(Rupees.....only) and shall remain in force till.....Unless a demand or claim under this Guarantee is made on us within three months from the date of expiry we shall be discharged form all the liabilities under this guarantee.
8. We.....Bank, lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Company in writing. We further undertake to keep this Guarantee renewed from time to time at the request of Contractor(s)/ Sellers(s).

Date.....

.....Bank

Corporate Seal of the Bank

By its constitutional Attorney

Signature of duly
Authorised person
On behalf of the Bank
With seal & signature code

BGs to be furnished from any of the banks listed as per Annexure.

**PROFORMA FOR CONTRACT CUM PERFORMANCE GUARANTEE BY SELLER/
CONTRACTOR.**

(To be executed on non-judicial stamped paper of appropriate value)

B. G. No.....

Date.....

1. WHEREAS National Aluminium Company Limited (A Government of India Enterprise) having its office at(hereinafter referred to as “The Company/Owner” which expressions shall unless repugnant to the subject or context includes its legal representatives, successors and assigns) has entered into a contract with M/s. / has placed a purchase order on M/s.....(hereinafter referred to as “Contractor(s)/ Seller(s)” which expression shall unless repugnant to the subject or context includes their legal representatives, successors and assigns) foron the terms and conditions as set out inter alia, in the Company’s contract No./ P.O. No.dateand various documents forming part thereof hereinafter referred to as the “said contract” which expression include all amendments, modifications and/ or variations thereto and where as the Contractor(s)/ Seller(s) has agreed for due execution of the entire contract and guarantees its performance including any parts executed through any other agencies/ subcontractors.

AND WHEREAS one of the conditions of the “said contract” is that “contractor(s)/seller(s) shall furnish to the owner a Bank Guarantee from a bank for% (.....percent) of the total value of the “said contract” against due and faithful performance of the “said contract” including defect liability obligations” and the performance guarantee obligations of the contractor(s)/seller(s) for execution/ supplies made under the “said contract.”

2. WeBank having its branch office atdo hereby agree and undertake to pay the amount due and payable under this guarantee without any demur merely on a demand from the Company stating that in the opinion of the Company, which is final & binding, the amount claimed is due by reason of default made by the Contractor(s)/ Seller(s) in performing any of the terms & conditions of the said Contract including defect liability obligations, in fulfilling the performance guarantee obligation or loss or damage caused to or would be caused to or suffered by the Company by reason of any breach by the said Contractor (s)/ Seller(s) of any of the terms & conditions of the contract. Any such demand made on the Bank by the owner shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However our liability under this guarantee shall be restricted to Rs.(Rupees.....only).
3. We undertake to pay to the Company any money so demanded notwithstanding any dispute or disputes raised by the contractor(s)/ Seller(s) in any suit or proceeding pending before any office, court or tribunal relating thereto our liability under this present guarantee being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under. Our liability to pay is not dependent or conditional on the owner proceeding against the Contractor(s)/ Seller(s).

4. The guarantee herein contained shall not be determined or affected or suspended by the liquidation or winding up, dissolution or change of constitution or insolvency of the said Contractor(s)/ Seller(s) but shall in all respect and for all purposes be binding and operative until payment of all money due or liabilities under the said contract(s)/ Order(s) are fulfilled.
5. WeBank 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 Contract(s)/ Order(s) and that it shall continue to be enforceable till all the dues of the company under or by virtue of the said Contract(s)/Order(s) have been fully paid and its claims satisfied or discharged or till a duly authorised officer of the Company certifies that the terms and conditions of the said Contract(s)/Order(s) have been fully and properly carried out by the said contractor(s) and accordingly discharges the guarantee.
6. WeBank further agree with the Company that the company shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Contract(s)/ Order(s) or to extend the time of performance by the said Contractor(s) Seller(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Company against the said Contractor(s)/ Seller(s) and to forbear or enforce any of the terms and conditions relating to the said Contract(s)/ Order(s) and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor (s)/ Seller(s) or for any forbearance, act or omission on the part of the Company or any indulgence by the Company to the said Contractor(s)/ Seller(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have affect of so relieving us.
7. Notwithstanding anything contained herein before, our liability shall not exceed Rs.....(Rupees.....only) and shall remain in force till.....Unless a demand or claim under this Guarantee is made on us within three months from the date of expiry we shall be discharged form all the liabilities under this guarantee.
8. We.....Bank, lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Company in writing. We further undertake to keep this Guarantee renewed from time to time at the request of Contractor(s)/ Sellers(s).

Date.....

Corporate Seal of the Bank

.....Bank

By its constitutional Attorney

Signature of duly

Authorised person

On behalf of the Bank

With seal & signature code

BGs to be furnished from any of the banks listed as per Annexure.

BANK GUARANTEE FOR ADVANCE PAYMENT

(To be executed on non-judicial stamped paper of appropriate value)

B. G. No. _____

Date: _____

1. In consideration of National Aluminium Company Limited (A Government of India Enterprise), having its office at _____(hereinafter called “ The Company Owner” which expression shall unless repugnant to the subject or context includes its legal representatives, successors and assigns) having agreed to make an advance payment of Rs.....(Rupees.....only) to M/s. (hereinafter called “the said Contractor (s)/ Seller(s)” which expression shall unless repugnant to the subject or context includes their legal representatives, successors and assigns) from the demand, terms and conditions of Contract/Order dated.on production of a bank guarantee of equivalent amount.
2. WeBank having its branch office atdo hereby agree and undertake to pay the amount due and payable under this guarantee without any demur, merely on a demand from the Company stating that in the opinion of the Company which is final and binding, the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the Company by reason of non-payment / adjustment of any part of the said advance or any dues to the company or any breach by the said Contractor(s)/seller(s) of any of the terms and conditions contained in the said contract(s) orders(s) or by reasons of the Contractor(s)/ Seller(s) failure to perform the said Contract(s)/ Order(s). Any such demand made on the Bank by the owner shall be conclusive as regards the amount due and payable by the Bank under this guarantee, However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.....(Rupees.....only).
3. We undertake to pay to the Company any money so demanded notwithstanding any claim dispute or disputes raised by the contractor (s)/ Seller(s) in any suit or proceeding pending before any office, court or tribunal relating thereto our liability under this present guarantee being absolute and unequivocal. The payment so made by us under this bond shall be valid discharge of our liability for payment thereunder. Our liability to pay is not dependable or conditional on the owner proceeding against the Contractor(s)/ Seller(s).
4. The guarantee herein contained shall not be determined or affected or suspended by the liquidation or winding up, dissolution or change of constitution or insolvency of the said tenderer(s) but shall in all respect and for all purposes be binding and operative until payment of all money due or liabilities under the said tenderer(s) are fulfilled.
5. WeBank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the finalisation of the said tenderer(s) and that it shall continue to be enforceable till the said tender is finally decided and order placed on the successful tender and/or till all the dues of the company under or by virtue of the said tender have been fully paid and its claims satisfied or discharged or till a duly authorised officer of the Company certifies that the terms and conditions of the said Contractor(s)/ Order(s) have been fully and properly carried out by the said tenderer(s) and accordingly discharges the guarantee.

6. That the owner/Company will have fully liberty without reference to us and without affecting this guarantee to postpone for any time or from time to time the exercise of any of the power of the owner under the tender.
7. Notwithstanding anything contained herein before, our liability shall not exceed Rs.....(Rupees.....only) and shall remain in force till.....Unless a demand or claim under this Guarantee is made on us within three months from the date of expiry we shall be discharged form all the liabilities under this guarantee.
8. We.....Bank, lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Company in writing. We further undertake to keep this Guarantee renewed from time to time on the request of the Contractor(s)/ Seller(s).

Date.....

.....Bank

Corporate Seal of the Bank

By its constitutional Attorney

Signature of duly
Authorised person
On behalf of the Bank
With seal & signature code

- i) BGs to be furnished from any of the banks listed as per Annexure.
- ii) Address of Corporate Office should be referred in case of Foreign BG.

LIST OF STANDARDISED BANKS

SCHEDULED PUBLIC SECTOR BANKS (INDIAN)

1. State Bank of India.
2. State Bank of Bikaner and Jaipur
3. State Bank of Hyderabad
4. State Bank of Indore.
5. State Bank of Mysore.
6. State Bank of Patialia.
7. State Bank of Saurashtra
8. State Bank of Travancore.
9. Allahabad Bank
10. Andhra Bank
11. Bank of Baroda.
12. Bank of India
13. Bank of Maharashtra
14. Canara Bank
15. Central Bank of India
16. Corporation Bank
17. Dena Bank
18. Indian Bank
19. Indian Oversea Bank
20. Oriental Bank of Commerce
21. Punjab National Bank
22. Punjab and Sid Bank
23. Syndicate Bank
24. Union Bank of India
25. *United Bank of India (Deleted)*
26. UCO Bank
27. Vijaya Bank.

LIST OF STANDARDIED BANKS

SCHEDULED PRIVATE SECTOR BANKS (INDIAN)

1. Vyasa Bank
 2. UTI Bank Ltd.
 3. SBI Commercial & International Bank Ltd.
 4. ICICI Banking Corporation Bank Ltd.
 5. HDFC Bank Ltd.
 6. IDBI Bank Ltd.
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SCHEDULED FOREIGN BANKS

1. American Express Bank Ltd.
 2. ANZ Grindlays Bank Plc
 3. Bank of American NT & SA
 4. Bank of Tokyo Ltd.
 5. Banque Nationale de Paris
 6. Barclays Bank Plc
 7. Citi Bank N.A.
 8. Deutsche Bank A.G.
 9. Hongkong & Shanghai Banking Corporation.
 10. Standard Chartered Bank
 11. The Chase Manhattan Bank Ltd.
 12. Dresdner Bank AG.
-

**DETAILS OF WORKS OF SIMILAR NATURE & MAGNITUDE CARRIED OUT
DURING THE LAST 5 YEARS**

Sl. No.	Name of work done	Estimated cost	When started	When completed	Date of Completion As per contract.	Remarks
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- Note :** 1. In the remarks column, please state whether the works stated above are carried out by you in the name of the Firm in which the present Bid is submitted or any other names, if later, state relationship of the firm and also a copy of the Partnership Deed.
2. Please enclose the true copy of the certificate issued by the authorities, if any.

Signature of Bidder

Name of Work:

Name of Tenderer:

CONCURRENT COMMITMENTS OF THE TENDERER

Full Postal Address of Client & Name of Officer-in-Charge	Description of the work	Value of contract	Date of commencement of work	Scheduled Completion period	Percentage Completion as on date	Expected date of completion	Remarks if any

SIGNATURE OF BIDDER

NAME OF WORK:

NAME OF TENDERER:

DETAILS OF EQUIPMENT, TOOLS & TACKLES

Tenderer shall submit herein details of equipment, tools, tackles, etc required to perform the work and shall note in each case whether the same is (a) already owned by tenderer and available for use on this contract (b) anticipated to be hired by Contractor or (c) anticipated to be purchased by Contractor, in case of (a) anticipated (b) and (c) Location of hirer or supplier shall be stated.

Sl. No.	Description, Make & Capacity	Year of Manufacture	Category (a) or (b) or (c) below	Location	Remarks
(1)	(2)	(3)	(4)	(5)	(6)

1. Contractor agrees to augment the above chart with additional number/ categories of equipment, if required to complete the work within the agreed time schedule of completion and directed by the Engineer-in-charge.
2. In case of hiring of equipment from other agencies, copies of the arrangements made with the hirer/ supplier shall have to be furnished.

(Signature of Bidder)

**DETAILS OF MINIMUM MANPOWER PROPOSED TO BE
DEPLOYED ON THIS WORK**

Sl. No.	Details of Manpower	No.	Remarks
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Note : Please furnish the above details in two categories – To be deployed by (I) Contractor and (ii) Sub- contractors.

Minimum manpower deployment shall be based broadly as above and will be modified as mutually agreed to suit the detailed construction programme jointly worked out; further if any additional man power is required for completion of work in time, the same shall be provided by you as directed by Engineer without any extra cost.

The manpower proposed to be deployed in the work needs to be given quarter wise separately for direct personnel of the contractor and the manpower proposed to be deployed through the sub-contractors.

(Signature of Bidder)

**ORGANISATION CHART SHOWING NO. OF QUALIFIED
ENGINEERS & SUPERVISORY PERSONNEL ETC.**

Sl. No.	Details of personnel to be deployed on this work	No.
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Note: Names and short resume of their experiences may also be given for key personnel.

The tentative chart of your site organisation as above furnished by you shall be subject to variation to suit the construction programme/ requirement and as directed by Owner/ Engineer.

(Signature of Bidder)

LIST OF PROPOSED SUB CONTRACTORS

Sl. No.	Name of sub-contractor	Description of work or trade	Amount (Rs.)
------------	---------------------------	---------------------------------	--------------

-
- 1) Types of work executed by the sub-contractors.
 - 2) The particulars of clients where the sub-contractors did the works.
 - 3) Approximate value of the work carried by the sub-contractors in the last 3 years.

(Signature of Bidder)

PPROGRESS BILLINGS

(Bidder's anticipated progress billing month by month to be inserted here)

Tentative construction schedule indicating the expected dates of start of activity is to be given by the contractor. This schedule shall be updated within specified milestones from time to time depending upon the availability of fronts equipment and priorities fixed by Engineer. Contractor shall submit within 15 days of the date of letter of intent programme/ schedule for supply of items covering all phases of work including design, procurement, manufacture, assembly, fabrication, testing, transportation, erection, testing at site and commissioning matching the overall completion schedule.

The billing as well as all the connected documents shall be computerized.

(Signature of Bidder)

NAME OF WORK

NAME OF TENDERER :

INFORMATION ABOUT TENDERERS (FORM – H)

- 1.0. In case of Individual:
 - 1.1. Name of Business:
 - 1.2. Whether his business is registered:
 - 1.3. Date of Commencement of Business:
 - 1.4. Whether he pays Income Tax over Rs. 10,000/- per year:
- 2.0. In case of Partnership:
 - 2.1. Name of Partnership with qualification:
 - 2.2. Whether the Partnership is Registered:
 - 2.3. Date of Establishment of firm:
 - 2.4. If each of the partners of the firm pays Income Tax over Rs. 10,000/- a year and if not, who of them pays the same.
- 3.0. In case of Limited Liability Company or Company Limited by Guarantees:
 - 3.1. Amount of paid of capital:
 - 3.2. Name of Directors:
 - 3.3. Date of Registration of Company:
 - 3.4. Copies of the Balance Sheet of the Company of the last two years:

Copies of audited Profit & Loss Account and the Balance sheet shall be enclosed in case of Individuals, partnerships as well as limited companies for the last 3 years.

(Signature of Bidder)
Name & Address of the Bidder

NAME OF WORK:

NAME OF TENDERER:

LIST OF ENCLOSURES (FORM– I)

The tenderer is required to enclose the following documents as part of his tenderer.

1. Power of attorney of the signatory to the tender.
2. Income Tax/ Sales Tax Clearance Certificate in the proforma prescribed by the Govt. of India.
3. Documents showing annual turnover for similar works for the past two years such as annual report, profit and loss account etc.
4. Solvency Certificate by Nationalized Schedule Bank.

(Signature of Bidder)

** In absence of Income Tax Clearance Certificate tenderer may not be awarded the work tendered for as per Central Govt. Directives.

NAME OF WORK:

NAME OF TENDERER:

EXCEPTION AND DEVIATION (FORM – J)

As pointed out in the NIT/ LIT, tenderer may stipulate here exceptions and deviations to the tender conditions, if considered un-avoidable.

Sl. No.	Page No. of tenderer document	Sl. No. of tender document	Subject	Deviation
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(Signature of Bidder)

AMENDMENT TO GCC

Sl No	Clause No	Brief Description of Clause	Modification
01	2.3	Power Supply	<p>i) Clause No. 2.3.1 of General Condition of Contract stands modified to the following extent:</p> <p>The cost of construction power appearing in the 12th & 13th line as Rs 1.00 per kwh shall be read as Rs. 4.30 (Rupees four and thirty paise only) per kwh.</p> <p>ii) Clause No. 2.3.10 of General Condition of Contract stands modified to the following extent:</p> <p>The state Electricity Inspector appearing in the second line shall be read as 'Central Electricity Authority at Chennai'.</p>
02	2.4	Land for contractor's Field office, Godown and Workshop	<p>Clause No. 2.4 of General Condition of Contract modified to the following extent:</p> <p>"The owner shall provide land to the Contractor for their offices, godown and workshop."</p>
03	2.5	Land for Residential Accommodation	<p>Clause No. 2.5 of General Condition of Contract modified to the following extent:</p> <p>"The land for residential accommodation for staff and labour may be made available to Contractor outside plant boundary limit."</p>
04	22	Extension of time	<p>The word "any one" appearing in the end of the second para of Clause No. 22.0 shall be read as "OWNER".</p>
05	52.3.6	Return of unutilized/ surplus materials and scrap/ wastage	<p>i) The words "SAIL, Bhubaneswar stockyard rate" appearing in 3^d line of first para shall be replaced by "Landed cost."</p> <p>ii) The words "Rs. 7000.00 per tonne" appearing in last line of first para shall be replaced by "twice the landed cost of materials."</p>
06	53 (xv)	Conditions for issue of materials	<p>The contents of the sub-clause No. 53 (xv) shall stand deleted and replaced with the following:</p> <p>"For the free issue materials, the following norms shall be adopted:</p> <p>i) For issue of materials within plant boundary-wall limit, the Contractor shall submit only indemnity bond for the entire value of the materials issued to them free of cost as Clause 53 (ix) of GCC.</p>

Sl No	Clause No	Brief Description of Clause	Modification
			<p>ii) For the materials which are issued to out side plant boundary like township etc., the contractor shall furnish Bank Guarantee equivalent to 20% of value of materials and indemnity bond for the 80% value of the materials.</p> <p>iii) For materials taken out side Damanjodi/ Angul to the vendor's shop, 100% Bank Guarantee against value of the materials will be submitted by the vendor before taking of the materials.</p> <p>iv) The Indemnity Bond and the Bank Guarantee shall remain valid till the material account is totally settled. “</p>
07	60 (d)	Alterations in Specifications and Design and Extra Works	The words “including equipment hire charges at Schedule hourly/ daily rates” appearing in 7 th and 8 th line shall be replaced by the words “including equipment hire charges prevalent at site at the time of execution.”
08	60	Alterations in Specifications and Design and Extra Works	Add new sub-clause 60 (e) as follows: “the quoted prices/ rates indicated in Schedule of Rates shall remain firm for all variations in contract value within range of (+) 50% and (-) 25% for the entire duration of the contract. In case the actual contract value varies from the awarded contract value beyond the above mentioned limit then adjustment to contract value shall be made in accordance with procedure specified in proforma for adjustment for increase/ decrease in contract value enclosed as per Annexure.”
09	76.3 (ii)	Completion documents	<p>Clause No. 76 (ii) of General Condition of Contract shall be replaced by:</p> <p>“Six sets of construction drawings showing therein the modifications and corrections made during the course of execution of the work (As built drawing) duly approved by Engineer-in-charge and one set of reproducible on polyester film/ in Soft copy in CD.”</p>
10	80.1	Employees State Insurance Act	Delete the word “whose aggregate remuneration is Rs.560.00 per month or less and” appearing in the 3 ^d & 4 th line of the 2 nd para of this sub clause.

Sl No	Clause No	Brief Description of Clause	Modification
11	New sub-clause	---	Add a new clause designated as Sub-clause 80.6 - Statutory Provisions after existing clause No. 80.5: “80.6- Statutory Provisions: The contractor shall comply with all relevant and applicable statutory provisions in respect of the workers engaged by him at his cost and above stipulations are only indicative and are not exhaustive.”
12	83 (viii)	Labour Laws	<p>Clause 83 (vii) of GCC shall be modified to following extent: Add the words <i>‘all relevant statutes at their own costs including’</i> between the words <i>“provisions of”</i> and <i>“the payment of Wages Act 1936”</i> appearing in the first line of this sub-clause.</p> <p>Provided further that:</p> <ol style="list-style-type: none"> The payment of minimum wages to contract labour shall be as per the rates notified by the Central Govt. as per Minimum Wage Act, 1948 and as adopted by the NALCO Management from time to time plus any additional element and statutory dues thereon. The minimum wage as notified by the Chief Labour Commissioner (Central) has a variable component as Special Allowance which is linked to average AICPI for Industrial workers, which keeps on changing every six months. The contractor has to absorb all such variations due to increase in Minimum wage in their quoted price, and no claim whatsoever on this account shall be entertained. Where the minimum wages notified by the concerned State Government are higher than the rates notified by Central Government, the State Government rates should apply in concerned <i>scheduled employment</i> as long as the same remains higher than the Central Government rates. The classification on workers in different categories will be as per the notification issued by the Central Government fixing the minimum wages for the above scheduled appointment.

Sl No	Clause No	Brief Description of Clause	Modification
13	New Clause	Jurisdiction/ Governing Law	<p>Add a new clause designated as sub-clause 88 (c) after existing clause No. 88 (b).</p> <p>All the works that will be carried out inside the factory premises shall attract the provisions of factory act for the contract labourers engaged therein.</p> <p>The contractor, before commencement of work will arrange medical examination at his cost and shall submit the certificate of fitness in respect of the workers in the prescribed form from the nearby District HQ hospital or any Govt. hospitals for his workers, who will be handling or working with hazardous substance.</p> <p>In respect of contracts having more than one year, the medical check up of such workers shall have to be repeated by the contractor on completion of every one year.</p>
14	79	Taxes & Duties, Octroi etc.	<p>Add a new clause designated as sub-clause 79.3 after existing sub-clause No. 79.2 as follows:</p> <p>The rates quoted by the tender will cover all the taxes, duties and levies as applicable on the date of bid/ revised bid (if any).</p> <ul style="list-style-type: none"> - In case of any imposition of new taxes by Govt. notification at a later date, same shall be reimbursed to the contractor against submission of authentic document towards payment of such taxes by them. - In case of revision of rate of Works Contract Tax by Govt. notification, same shall be reimbursed to the contractor against submission of documentary evidence towards payment of such extra amount by them.
15	74	Payment of Contractor's Bill	<p>Insert the following after the last para:</p> <p>“However, owner prefers to release the payment due to the contractor electronically. The e-payment facility is available under INTERNET mode through company banker as well as in EFT/RTGS mode through Reserve Bank of India, which is available only at designated centers. The contractor shall submit duly filled Bank Mandate form in duplicate with due authentication from their banker to avail e-payment facility. The prescribed mandate form is appended as Appendix to GCC.”</p>

(To be submitted in duplicate)

MANDATE FORM FOR ELECTRONIC PAYMENT THROUGH INTERNET & RBI

To
National Aluminium Company Limited,

Dear Sir,

Sub: Authorization for release of payment due from NALCO, _____ through
Electronic fund transfer(RBI-EFT)/Internet / RTGS.
Refer Order No.....dt.....and/or Tender/Enquiry/Letter No.....dt.....

(Please fill in the information in CAPITAL LETTERS. Please TICK wherever it is applicable)

1. Name of the Party :
2. Address of the party :
.....
.....
City :.....Pin Code:.....
E-mail Id:
Permanent Account Number :.....

3. Particulars of Bank:

Bank Name		Branch Name	
Branch Place		Branch City	
Pin Code		Branch Code	
MICR No			
(9 Digits code number appearing on the MICR Band of the cheque supplied by the Bank. Please attach Xerox copy of a cheque of your bank for ensuring accuracy of the bank name, branch name and code number)			
Account Type	Savings ف	Current ف	Cash Credit ف
Account Number(as appearing in the Cheque Book)			
RTGS / IFSC Code			

4. Date from which the mandate should be effective :

I hereby declare that the particulars given above are correct and complete. If any transaction is delayed or not effected for reasons of incomplete or incorrect information, I shall not hold National Aluminium Company Limited responsible. I also undertake to advise any change in the particulars of my account to facilitate updation of records for purpose of credit of amount through RBI EFT / Internet / RTGS.

Place:

Date:

Signature of the party/Authorized Signatory

Certified that particulars furnished above are correct as per our records.

Bank's Stamp:

Date:

(Signature of the Authorized Official from the Banks)

N.B. : RBI EFT / RTGS facilities Centre:
New Delhi, Chandigarh, Kanpur, Jaipur, Ahmedabad, Mumbai, Nagpur, Hyderabad, Bangalore, Chennai,
Trivandrum, Kolkata, Bhubaneswar, Guwahati, Patna.

N.B. : RTGS charges if any, is to be borne by the party.

(To be submitted in duplicate)

MANDATE FORM FOR ELECTRONIC PAYMENT THROUGH INTERNET

To
National Aluminium Company Limited,

Dear Sir,

Sub: Authorisation for release of payment due from NALCO, _____ through
Electronic fund transfer by Internet Mode .
Refer Order No.....dt.....and/or Tender/Enquiry/Letter No.....dt.....

(Please fill in the information in CAPITAL LETTERS. Please TICK wherever it is applicable)

1. Name of the Party :
2. Address of the party :
.....
.....
City :.....Pin Code:.....
E-mail Id:
Permanent Account Number :.....

3. Particulars of Bank:

Bank Name			Branch Name										
Branch Place			Branch City										
Pin Code			Branch Code										
Account Type	Savings ف		Current ف	Cash Credit ف									
Account Number(as appearing in the Cheque Book)													
Please attach Xerox copy of a cheque of your bank for ensuring accuracy of the bank name, branch name and code number .													

4. Date from which the mandate should be effective :

I hereby declare that the particulars given above are correct and complete. If any transaction is delayed or not effected for reasons of incomplete or incorrect information, I shall not hold National Aluminium Company Limited responsible. I also undertake to advise any change in the particulars of my account to facilitate updation of records for purpose of credit of amount through Internet.

Place:

Date:

Signature of the party/Authorized Signatory

Certified that particulars furnished above are correct as per our records.

Bank's Stamp:

Date:

(Signature of the Authorized Official from the Banks)