



## संपदा विभाग चेन्नै

### निविदा आमंत्रित करने की नोटिस:

भारतीय रिज़र्व बैंक, चेन्नै के “भारतीय रिज़र्व बैंक, मुख्य कार्यालय परिसर, चेन्नई के प्रथम तल पर सहायक सिविल कार्यों सहित मौजूदा भाग स्लैब क्षेत्र का संरचनात्मक सुदृढ़ीकरण, नई एसबीएस (श्रेडिंग और ब्रिकेटिंग) मशीनें उपलब्ध कराने के लिए भारी ड्यूटी फ्लोर फिनिश प्रदान करना।” कार्य के लिए सीमित ई-निविदा (दो भाग) आमंत्रित करता है। निविदा प्रक्रिया केवल एमएसटीसी लिमिटेड के ई-निविदा पोर्टल (<https://www.mstcecommerce.com/eprocn>) के माध्यम से ही की जाएगी। सभी इच्छुक बोलीकर्ताओं (₹ 50 लाख रुपये तक की सिविल, इंटीरियर, फैब्रिकेशन, पेंटिंग के लिए सूचीबद्ध) को निविदा प्रक्रिया में शामिल होने के लिए एमएसटीसी लिमिटेड में उपर्युक्त वेबसाइट के माध्यम से पंजीकरण करना होगा।

### ई-टेंडर का शेड्यूल इस प्रकार है:

a. ई-निविदा नं.	आरबीआई/चेन्नई क्षेत्रीय कार्यालय/एस्टेट/1/25-26/ईटी/77 [एमओपी में स्लैब सुदृढ़ीकरण]
b. कार्य का विवरण	भारतीय रिज़र्व बैंक, मुख्य कार्यालय परिसर, चेन्नई के प्रथम तल पर सहायक सिविल कार्यों सहित मौजूदा भाग स्लैब क्षेत्र का संरचनात्मक सुदृढ़ीकरण, नई एसबीएस (श्रेडिंग और ब्रिकेटिंग) मशीनें उपलब्ध कराने के लिए भारी ड्यूटी फ्लोर फिनिश प्रदान करना।
c. निविदा की अनुमानित लागत	₹ 43.50 लाख (जीएसटी सहित)
d. बयाना जमा राशि	सभी इच्छुक बोलीदाताओं को ₹87,000/- (केवल सत्तासी हजार रुपये) का भुगतान करना होगा।
e. निविदा का प्रकार	बैंक के अनुमोदित ई-निविदा पोर्टल (ऑनलाइन भाग I - तकनीकी-वाणिज्यिक बोली और भाग II - मूल्य बोली) ( <a href="https://www.mstcecommerce.com/eprocn">https://www.mstcecommerce.com/eprocn</a> ) द्वारा
f. एनआईटी पार्टियों को डाउनलोड करने के लिए उपलब्ध की तारीख	07 मई, 2025 से आगे
g. ऑनलाइन जमा करने के लिए ई-निविदा शुरू होने की तिथि <a href="https://mstcecommerce.com/eprocn">https://mstcecommerce.com/eprocn</a>	22 मई 2025 को 11:00 बजे
h. तकनीकी-वाणिज्यिक बोली और मूल्य बोली जमा करने के लिए ऑनलाइन ई-निविदा बंद होने की तिथि।	28 मई 2025 को 11:00 बजे
i. निविदा खोलने की तिथि एवं समय	निविदा का भाग I (तकनीकी-वाणिज्यिक बोली) 28 मई 2025 को 14:30 बजे खोला जाएगा। यदि बोलीदाताओं द्वारा कोई विशेष शर्तें नहीं रखी जाती हैं,

	तो निविदा का भाग II (मूल्य बोली) भी उसके बाद उसी दिन खोला जाएगा अन्यथा भाग II (मूल्य बोली) अगली तारीख पर खोला जाएगा जिसकी सूचना बोलीदाताओं को दी जाएगी।
j. निविदा की वैधता	निविदा के भाग-II के खुलने की तिथि से <b>तीन माह</b> ।
k. लेनदेन शुल्क	एमएसटीसी पोर्टल में सूचित किए अनुसार लेन-देन शुल्क का भुगतान एमएसटीसी लिमिटेड के पक्ष में एमएसटीसी पेमेंट गेटवे /एनईएफटी /आरटीजीएस
l. निविदा आमंत्रित करने वाले प्राधिकारी के कार्मिक के संपर्क विवरण	1. श्री आर वी शिवा(सिविल-प्रबंधक), 044-2539 9108 (तकनीकी प्रश्नों के लिए :मेल आईडी - ( <a href="mailto:rvshiva@rbi.org.in">rvshiva@rbi.org.in</a> ) 2. श्री क्षितिज दहाट , सहायक प्रबंधक, नंबर 044- 2539 9066, (ई-निविदा प्रश्नों के लिए) - मेल आईडी: <a href="mailto:kgdahat@rbi.org.in">kgdahat@rbi.org.in</a> 3. श्री . चिन्नादुरई, सहायक, नंबर 044-2561 9744, (ई-निविदा प्रश्नों के लिए) - मेल आईडी: <a href="mailto:chinnadurais@rbi.org.in">chinnadurais@rbi.org.in</a>

2. पूर्ण विवरण के लिए कृपया निविदा दस्तावेज तकनीकी-वाणिज्यिक बोली (भाग I) और मूल्य-बोली (भाग II) देखें। इसके अलावा शुद्धिपत्र / परिशिष्ट, यदि कोई हो, को बैंक की वेबसाइट [www.rbi.org.in](http://www.rbi.org.in) पर 'निविदाएं' लिंक के तहत और <https://www.mstcecommerce.com/eprocn> पर होस्ट किया जाएगा। बैंक न्यूनतम निविदा को स्वीकार करने के लिए बाध्य नहीं है और किसी भी निविदा को पूर्ण या आंशिक रूप से स्वीकार करने का अधिकार सुरक्षित रखता है। बैंक बिना कोई कारण बताए किसी एक या सभी निविदाओं को अस्वीकार करने का अधिकार भी सुरक्षित रखता है।

**नोट:** यह नोटिस केवल सूचनार्थ प्रकाशित किया जा रहा है और इस सीमित निविदा में कोट करने का खुला आमंत्रण नहीं है। इस निविदा में सहभागिता आमंत्रण से ही की जा सकती है और यह चयनित खरीदार संस्था के सूचीबद्ध संविदाकारों तक सीमित है। अनपेक्षित प्रस्तावों पर विचार नहीं किया जा सकता है। तथापि, जो संविदाकार ऐसी निविदाओं में भाग लेना चाहते हैं वे भविष्य में प्रक्रियानुसार आरबीआई के पास सूचीबद्ध होने के लिए आवेदन कर सकते हैं।

**क्षेत्रीय निदेशक  
भारतीय रिजर्व बैंक  
चेन्नै**



भारतीय रिज़र्व बैंक RESERVE BANK OF INDIA  
संपदा विभाग ESTATE DEPARTMENT  
चेन्नै CHENNAI

**e-TENDER FOR**

**Structural Strengthening of existing part slab area, providing heavy duty floor finish including ancillary civil works at 1st Floor of MOB, Chennai for providing new SBS (Shredding & Briquetting) machines.**

**E-tender No: RBI/Chennai Regional office/Estate/1/25-26 /ET/77 [Slab Strengthening at MOP]**

**Part I (Techno-Commercial Bid)**  
(Containing Section I to Section X)

**Name of the Tenderer:- \_\_\_\_\_**

**Address: \_\_\_\_\_**

\_\_\_\_\_

Date of Notice Inviting Tender (NIT) available to parties for download.	<b>May 07, 2025 onwards</b>
Date of Starting of e-Tender for submission of online Techno-Commercial Bid and price Bid	<b>11:00 Hrs. on May 22, 2025 onwards.</b>
Date of closing of online e-tender for submission of techno-commercial bid & price bid	<b>11:00 Hrs. on May 28, 2025</b>
Date of opening of Tender	Part I (Techno-Commercial Bid) of the tender shall be opened at <b>14:30 Hrs. on May 28, 2025.</b> If no special conditions are put forth by the bidders, Price Bid (Part II) of the e-tenders shall also be opened thereafter on the same day or else the same shall be opened on a subsequent date which shall be intimated to the bidders through e-mail.

### **DISCLAIMER**

Reserve Bank of India, Estate Department, Chennai has prepared this document to give background information on the work to the interested parties. While Reserve Bank of India has taken due care in the preparation of the information contained herein and believe it to be in order, neither Reserve Bank of India nor any of its authorities or any of their respective officers, employees give any warranty or make any representations, express or implied as to the completeness or accuracy of the information contained in this document or any information which may be provided in association with it.

The information is not intended to be exhaustive. Interested parties are required to make their own inquiries and respondents will be required to confirm in writing that they have done so, and they do not rely only on the information provided by RBI in submitting the Tender. The information is provided on the basis that it is non - binding on Reserve Bank of India or any of its authorities or agencies or any of their respective officers, employees, agents or advisors.

Reserve Bank of India reserves the right not to proceed with the work or to change the configuration of the work, to alter the timetable reflected in this document or to change the process or procedure to be applied. It also reserves the right to decline to discuss the matter further with any party expressing interest.

No reimbursement of cost of any type will be paid to persons or entities expressing interest. Any amendments / corrigendum to the tender, if any, issued in future will only be notified on the RBI Website and MSTC Website and will not be published in the newspaper.

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## SCHEDULE OF E-TENDER (SOT)

The Schedule of e-Tender is as follows:

i)	E-Tender No.	<b>E-tender No: RBI/Chennai Regional office/Estate/1/25-26 /ET/77 [Slab Strengthening at MOP]</b>
ii)	Description of work.	<b>Structural Strengthening of existing part slab area, providing heavy duty floor finish including ancillary civil works at 1st Floor of MOB, Chennai for providing new SBS (Shredding &amp; Briquetting) machines.</b>
iii)	Mode of Tender.	E-tender (Online Part I - Techno-Commercial Bid and Part II - Price Bid through <a href="https://www.mstcecommerce.com/eproc">https://www.mstcecommerce.com/eproc</a> ) only.
iv)	Estimated Cost.	<b>₹43.60 lakh excluding Rebate.</b>
v)	Time allowed for completion of the work / Contract Period	<b>3 months</b> from 10 <sup>th</sup> calendar day of issue of work order.
vi)	Defects Liability Period (DLP).	12 months from the date of issuance of Virtual completion certificate.
vii)	Earnest Money Deposit (EMD) .	2% of the 'Estimated Cost' shall be remitted by the intending bidders.
viii)	Retention Money (RM) to be deducted from each RA bill towards DLP	at the rate of 5% of the value of each bill certified.
ix)	Performance Security Bank Guarantee.	For 5% of the accepted 'Contract Amount', valid for the entire period of currency of contract (upto issuance of virtual completion certificate, to be submitted by the Successful bidder only). PBG would also be accepted to be deposited in the form of NEFT for the equivalent amount. However, the amount would not attract any interest.
x)	Liquidated damages.	<b>0.25%</b> of the accepted contract amount per week, subject to a maximum total of <b>10%</b> of the accepted Contract Price.
xi)	Time for Settlement of Bills.	Within 45 days from the date of submission of contractor's bill after joint measurements along with the documents required as per terms and conditions of the contract and as required by the Bank's Engineer-in-charge of the work.
xii)	Interim Bill / Running Account (RA) bill.	Each RA Bill shall be ₹10 Lakh.
xiii)	Release of EMD / Performance Security Guarantees.	EMD remitted by the successful bidder shall be released upon signing the contract agreement and submission of Performance Security Bank Guarantee. The Performance Security Bank Guarantee shall be released by the Bank on issuance of

		virtual completion certificate of the work and settlement of Final bill.
xiv)	Interest on Delayed payment.	Simple interest @ 3 % per annum
xv)	Date of NIT (Notice Inviting Tender) available to parties for download.	<b>May 07, 2025 onwards</b>
xvi)	Date of Starting of e-Tender for submission of on-line Techno-Commercial Bid and price Bid.	<b>11:00 Hrs of May 22, 2025</b>
xvii)	Last date of submission of EMD	<b>11:00 Hrs of May 28, 2025</b>
xviii)	Date of closing of online e-tender for submission of techno-commercial bid & price bid.	<b>11:00 Hrs of May 28, 2025</b>
xix)	Date of opening of Part-I (techno-commercial bid).	<b>14:30 Hrs of May 28, 2025</b>
xx)	Date of opening of Part-II (price bid).	Part II (Price Bid) of the tender shall be opened on the same date or else on a subsequent date which would be intimated to the bidders separately.
xxi)	Transaction fee (non-refundable).	Payment of Transaction fee as mentioned in the MSTC portal (inclusive of GST % as mentioned) through MSTC payment gateway /NEFT/RTGS in favour of MSTC LIMITED.

## **SECTION - I**

### **Important Instructions Regarding E-tender**

This is an e-procurement event of RBI. The e- procurement Service Provider/Contractor is the MSTC Limited.

You are requested to read and understand the Notice Inviting Tender and subsequent corrigenda if any, before submitting your online tender.

#### **Process of E-tender:**

**A) Registration:** The process involves vendor's registration with MSTC e-procurement portal which is free of cost. Only after registration, the vendor(s) can submit his/their bids electronically. Electronic Bidding for submission of Techno-Commercial Bid as well as Price Bid over the internet will be done. The Vendor should possess Class III signing and encryption type digital certificate. Vendors are to make their own arrangement for bidding from a P.C. connected with Internet. RBI is not responsible for making such arrangement. (Bids will not be recorded without Digital Signature).

**SPECIAL NOTE: THE PRICE BID AND THE COMMERCIAL BID HAS TO BE**

**SUBMITTED ON-LINE ONLY AT [www.mstcecommerce.com/eprocn](http://www.mstcecommerce.com/eprocn) (Version 3 )**

1) Vendors are required to register themselves online with

[www.mstcecommerce.com/eprocn](http://www.mstcecommerce.com/eprocn)

Register as Vendor -- Filling up details and creating own user id and password Submit. For further details, go to Download Guide / Video / Registration

Vendors will receive a system generated mail confirming their registration in their email which has been provided during filling the registration form. In case of any clarification, please contact MSTC/ RBI, (before the scheduled time of the e- tender).

#### **Contact details:**

##### **a) Contact person (MSTC) For Vendors:**

HO Central Help Desk: (For vendors)

Phone Number :07969066600

[helpdeskho@mstcindia.in](mailto:helpdeskho@mstcindia.in) (Please mention "HO Helpdesk" as subject while sending emails)

##### **Availability:**

9:30 AM to 5:00 PM on all working days for all Technical issues e-Tenders, System settings etc.

##### **b) Contact person (MSTC)**

1. Shri. Shanmugam - 9176397264

Email id: [nshanmugam@mstcindia.co.in](mailto:nshanmugam@mstcindia.co.in)



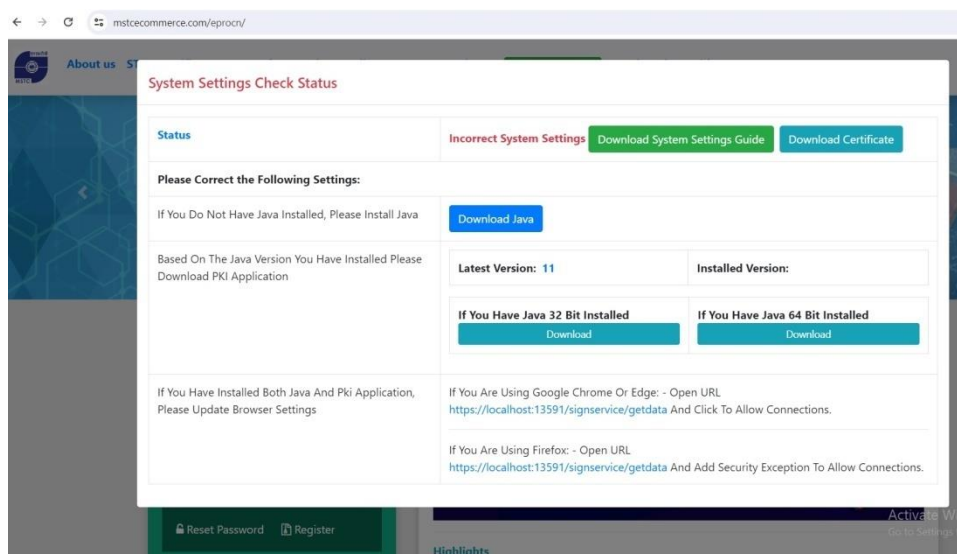
2. Shri. J Damodaran– 9841002253  
Email id: [jdamodaran@mstcindia.co.in](mailto:jdamodaran@mstcindia.co.in)
3. MSTC Help Line:9499054101/2/3/4.  
Email id: [helpdesk@mstcindia.co.in](mailto:helpdesk@mstcindia.co.in)
4. Shri. V Ganesh Moorthy - 044 - 28285000  
**Google hangout ID- (for text chat) -** [mstceproc@gmail.com](mailto:mstceproc@gmail.com)

**c) Contact person at RBI (During Office Hours 10:00 am to 5:30 pm only):**

1. Shri. Kshitij Dahat (Assistant Manager, Estate Department)  
044-2539 9066
2. Shri. Chinna Durai. S (Assistant, Estate Department)  
044- 2561 9744

**B) System Requirement:**

For details, vendor may refer to the **DOWNLOAD SYSTEM SETTING GUIDE** available <https://www.mstcecommerce.com/eprocn/>



**1. Special Note towards Transaction fee:** The vendors shall pay the transaction fee using “Transaction Fee Payment” Link against the specific tender in the “Bid Floor”/through the “Pay Transaction fee” in “Event catalog” through their login. Service Provider / Contractor / Vendor shall have the facility of making the payment either through NEFT or Online Payment. On selecting NEFT, Service Provider / Contractor / Vendor shall generate a challan by filling up a form. Service Provider / Contractor / Vendor shall remit the transaction fee amount as per the details printed on the challan without making change in the same. On selecting Online Payment, Service Provider / Contractor / Vendor shall have the provision of making payment using its Credit / Debit Card / Net Banking. Once the payment gets credited to MSTC’s designated bank account, the transaction fee shall be auto authorized.

**Transaction fee is non-refundable.** A vendor will not have the access to online e- tender without payment of the transaction fee.

**NOTE:** Bidders are advised to remit the transaction fee well in advance before the closing time of the event so as to give themselves sufficient time to submit the bid.

2. Information about tenders / corrigenda shall be sent by email only during the process till finalization of tender. Hence the vendors are required to ensure that their corporate email I.D. provided is valid and updated at the time of registration of vendor with the MSTC Ltd. Vendors are also requested to ensure validity of their class III signing and encryption type of DSC (Digital Signature Certificate).

3. E-tender cannot be accessed after the due date and time mentioned in NIT (Notice inviting tender).

#### 4. Bidding in E-tender:

Note: Vendors are instructed to use **Upload Documents** link in My menu to upload documents in document library. Multiple documents can be uploaded. Maximum size of single document for upload is 5 MB.

Once documents are uploaded in the library, vendors can attach documents through **Attach Document** link against the particular e-Tender. Please note that if the documents are not attached to any e-Tender, the same cannot be downloaded by RBI and it will be deemed that the vendor has not submitted the documents. For further assistance please follow instructions of vendor guide.

a) **Earnest Money Deposit** for a sum of **₹87,000/- (Rupees eighty-seven thousand only)** shall be remitted to Bank Account of Reserve Bank of India on or before **11.00 Hrs. on May 28, 2025**. All the intending bidders are required to submit necessary EMD, E-Tender fees (if any) and Transaction fee separately for the e-tender. Transaction fees (if any) are non-refundable. **No interest will be paid on EMD.**

The account details of RBI, Chennai for NEFT transactions are as follows:

**Beneficiary Name: RBI CHENNAI**

**IFSC: RBIS0CNPA01**

**Account No: 186003001**

Proof of remittance with transaction number (scanned copy) shall be sent to [estatechennai@rbi.org.in](mailto:estatechennai@rbi.org.in).

b) The process involves Electronic Bidding for submission of Techno Commercial Bid as well as Price Bid.

The bidder(s) who have submitted the above fees can only submit their Techno Commercial Bids and Price Bid through internet in MSTC website [www.mstcecommerce.com](http://www.mstcecommerce.com) □ e-procurement □ New Common Portal □ Bid Floor Manager □ live event □ Selection of the live event □ Transaction fee->Common terms->Attach Documents->Price Bid.

**Please Note:** The vendor after successful remittance of the transaction fees and EMD details, will get the attach documents and common terms tab enabled in their login. Post successful completion of this step, the vendors will be allowed to save the lot specific terms and submit their price bid against the lot through the portal or download and upload the excel file for submitting price bids, as the case may be. In case the attach documents and/or saving common terms step is unsuccessful, the tabs for

saving lot specific terms and submitting price bid would be disabled. The status of whether the same is successful/pending would be displayed in the bid status button.

- c) First the vendor needs to fill up the Commercial specification if any and save it. Then the vendor should fill up the Techno-commercial bid. After filling the Techno-Commercial Bid, bidder should click 'save' for recording their Techno-Commercial bid. Once the same is done, the Price Bid link becomes active and the same has to be filled up and then bidder should click on "save" to record their price bid. Then once both the Techno-Commercial bid & price bid has been saved, the bidder can click on the "Final Submission" button to register their bid

**NOTE:** - After clicking the final submission "Delete bid" option would be shown. If the vendor wants to delete the bid after final submission and re-submit the bid, then he/she should click delete bid and resubmit the same and again click final submission.

- d) In all cases, bidder should use their own ID and Password along with Digital Signature at the time of submission of their bid.
- e) During the entire e-tender process, the bidders will remain completely anonymous to one another and also to everybody else.
- f) The e-tender floor shall remain open from the pre-announced date & time and for as much duration as mentioned above.
- g) All electronic bids submitted during the e-tender process shall be legally binding on the bidder. Any bid will be considered as the valid bid offered by that bidder and acceptance of the same by the Buyer will form a binding contract between Buyer and the Bidder for execution of supply/work. Such successful tenderer shall be called hereafter **SUPPLIER/CONTRACTOR**.
- h) It is mandatory that all the bids are submitted with class III signing and encryption type of digital signature certificate otherwise the same will not be accepted by the system.
- i) Buyer reserves the right to cancel or reject or accept or withdraw or extend the tender in full or part as the case may be without assigning any reason thereof.
- j) No deviation of the terms and conditions of the e-Tender document is acceptable. Submission of bid in the e-tender floor by any bidder confirms his acceptance of terms & conditions for the e-Tender.
- k) Unit of Measure (UOM) is indicated in the e-tender Floor. Rate to be quoted should be in Indian Rupee as per UOM indicated in the e-tender floor/tender document.

**Bidders are requested to quote rates without G.S.T / G.S.T & T.C.S (for Rebate items wherever applicable) on 'Works Contract' and the same will be added automatically by the system. Thus, the final total amount shown in the system including G.S.T / G.S.T & T.C.S (wherever applicable) will be the final bid amount / contract amount. No change in quoted rates will be accepted after opening of the e-tender.**

**SECTION – II****FORM OF TENDER/BID**

(To be duly filled and uploaded in the e-tendering portal)

Place:

Date:

Smt. **Uma Sankar**  
Regional Director,  
Reserve Bank of India,  
Estate Department,  
Chennai Office – 600001.

Madam,

Having read and examined the Notice Inviting e-Tender, Specifications & designs, Drawings, Schedule of Quantities, various schedules, General conditions of contract and, Special conditions of contract, General rules and instructions to bidders, clauses and all other contents in the tender document for the work specified in the memorandum hereinafter set out and having examined the site of the works and having acquired the requisite information relating thereto as affecting the tender, I/We hereby offer to execute the works specified in the said memorandum within the time specified in the said memorandum at the rates mentioned in the attached schedule of quantities and in accordance in all respects with the specifications & designs, drawings and instructions in writing referred to in General Conditions of Contract, the Articles of Agreement, Special Instructions, Schedule of Quantities and Special Conditions of Contract and with such materials as are provided for, by and in all other respects in accordance with such conditions so far as they may be applicable.

**Memorandum**

<b>Description of work.</b>	<b>Structural Strengthening of existing part slab area, providing heavy duty floor finish including ancillary civil works at 1st Floor of MOB, Chennai for providing new SBS (Shredding &amp; Briquetting) machines..</b>
<b>Estimated cost (₹).</b>	<b>₹43.60 lakh excluding Rebate</b>
<b>Time allowed for completion of the work / Contract Period.</b>	<b>3 months from 10<sup>th</sup> calendar day of issue of work order.</b>
<b>Earnest Money Deposit (₹).</b>	2% of the 'Estimated Amount' shall be remitted by the intending bidders.
<b>Defects Liability Period (DLP).</b>	12 months from the date of issuance of Virtual completion certificate.
<b>Retention Money (RM) to be deducted from each RA bill towards DLP.</b>	at the rate of 5% of the value of bill certified.

<b>Liquidated damages.</b>	0.25% of the accepted contract amount per week, subject to a maximum total of 10% of the accepted Contract Price.
<b>Interim Bill / Running Account (RA) bill.</b>	Each RA Bill shall be ₹ 10 Lakh
<b>Time for Settlement of Bills.</b>	Within 45 days from the date of submission of contractor's bill after joint measurements along with the documents required as per terms and conditions of the contract and as required by the Bank's Engineer-in-charge of the work.
<b>Interest on Delayed payment.</b>	Simple interest @ 3 % per annum

- 2) We agree to keep the tender open for the validity period of **3 months** and not to make any modification in its terms and conditions during the validity period or any other extended period as agreed mutually.
- 3) Should this tender be accepted, I/ we hereby agreed to abide by and fulfil the terms and provisions of the said Conditions of Contract annexed hereto so far as they may be applicable or in default thereof to forfeit and pay to the RESERVE BANK OF INDIA the amount mentioned in the said conditions.
- 4) I / we agree to deposit a sum equivalent to **2% of the 'Estimated Cost', as Earnest Money Deposit** to the Reserve Bank of India, in the mode specified in the tender, for which the amount is not to bear any interest. The said EMD shall be a guarantee to execute all the works referred to in the tender document upon the terms and conditions contained therein.
- 5) If I/We fail to accept the work order / commence work upon opening the bid as specified, I/ We agree that Reserve Bank of India or its successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said EMD absolutely. I/We shall also submit a Performance Security Bank Guarantee for 5% of the accepted Contract Value, for due fulfilment of the contractual obligations by the contractor. The EMD paid by the us, shall be released without any interest after successful execution of the contract agreement and submission of Performance Bank Security Guarantee for 5% of the accepted Contract Value as provided above.
- 6) Further, I/We agree that in case of forfeiture of Earnest Money Deposit as aforesaid, I/We shall be debarred from participation in the re-tendering process of the work.
- 7) I/We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back-to-back basis. Further that, if such a violation comes to the notice of Reserve Bank of India, then I/We shall be debarred from tendering in Reserve Bank of India in future. Also, if such a violation comes to the notice of Reserve Bank of India before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit.
- 8) I/We hereby declare that I/We shall treat the tender documents, drawings and other records connected with the work as secret/confidential documents and shall not communicate information/derived therefrom to any person other than a person to whom I/We am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the Reserve Bank of India.
- 9) Should this tender be accepted, I/We hereby agree to abide by and fulfil the terms and provisions of the said Conditions of Contract annexed hereto so far as they may be applicable or in default thereof to forfeit and pay to the Reserve Bank of India the amount mentioned in the said conditions.

10) Our bankers are (Name and full address)

(i)	
(ii)	

The names of partners of our firm are:

(i)	
(ii)	

Name of the partner of the firm authorized to sign	
OR	
Name of person having power of Attorney to sign the Contract (certified true copy of the Power of Attorney should be attached)	

Yours faithfully,

**Signature / Digital Signature of the Bidder**

Signatures and addresses of witnesses

	Signature	Address
(i)		
(ii)		

## **SECTION - III**

### **SCOPE OF WORK**

#### **1.1 Description of Work:**

**Structural Strengthening of existing part slab area, providing heavy duty floor finish including ancillary civil works at 1st Floor of MOB, Chennai for providing new SBS (Shredding & Briquetting) machines.**

**1.2** The scope of proposed work shall be as per the schedule of quantities & specifications given in this tender document. The major items of work covered is listed below (in brief):

- a) Dismantling of existing flooring upto the RCC Slab including removal of plaster around the column.
- b) Dismantling and construction of partition brick walls and providing of double leaf doors.
- c) Structural strengthening of the existing part slab area.
- d) Providing heavy duty floor finish of approved make and manufacturer to the first floor are of the SBS (Shredding & Briquetting) machines.

**1.3** It is not the intent to specify completely herein all details of design and construction of the works covered under this enquiry. Scope of work may also include such other related works as indicated in the drawings and /or schedule of quantities although they may not be specifically mentioned in the above paragraphs and all such incidental items of works not specified but reasonably implied and necessary for completion of the job as a whole, as directed by the Engineer-in-Charge and as directed hereunder. All works shall conform in all respects to high standards of engineering, design and workmanship and shall, fulfill the anticipated performance during the CONTRACTOR's guarantee period in a manner acceptable to the Engineer-in-Charge who shall have the power to reject any works or materials which in his judgment are not in full accordance with the specification requirements as directed hereunder.

**1.4** Various works covered in this specification shall include furnishing of all materials, labour, tools plants and equipment, transportation, fabrication, supervision and construction as mentioned herein and as directed by the Engineer-in-Charge.

I/We hereby declare that I/we have read and understood the above information.

**Place**

**Signature / Digital Signature of bidder**

**Date**

## **SECTION - IV**

### **INSTRUCTIONS TO BIDDERS**

E-tenders comprising duly filled in Part I (Techno-Commercial Bid) and Part II (Price Bid) of the tender should be uploaded in MSTC website under RBI Portal for the work of **Structural Strengthening of existing part slab area, providing heavy duty floor finish including ancillary civil works at 1st Floor of MOB, Chennai for providing new SBS (Shredding & Briquetting) machines** not later than **11.00 Hrs on May 28, 2025**.

1. The Bank discourages stipulation of any additional conditions by the bidders. However, in case the bidders wish to include any condition / clarification, it shall be addressed as a special remark. The clarifications / conditions etc, if any will be examined and after discussions with all the bidders, the conditions that are acceptable to the Bank will be intimated to all the bidders.
2. Part I (Techno-Commercial Bid) of the tender shall be opened at **14.30 Hrs on May 28, 2025**. If no special conditions are put forth by the bidders, Part II (Price Bid) of the tender shall also be opened thereafter on the same day or else Part II (Price Bid) shall be opened on a subsequent date which shall be intimated to the bidders.
3. Tenders shall remain valid for acceptance by the Bank for a period of three months from the date of opening of Part I of the tender, which period may be extended by mutual agreement and the bidder shall not cancel or withdraw the tender during this period.
4. Digital Signatures may be used to submit the tender in token of his / their acquainted himself / themselves with the General Conditions of Contract, Specifications, Special Conditions etc as laid down.
5. If any of the document is missing, the tender may be considered invalid by the Bank at its discretion. No advice of any change in rate or conditions after opening of the tender will be entertained.
6. The vendors shall pay the transaction fee vide the procedures listed in **Section - I - 'Guidelines for e-procurement'**.
7. Transaction fee is non-refundable. A vendor will not have access to the online e-tender without making the payment towards transaction fee.
8. Earnest Money Deposit for a sum of 2% of 'Estimated Amount' i.e., ₹87,000 (Rupees eighty-seven thousand only) shall be remitted through NEFT, by all the intending bidders (Account details mentioned below). The intending bidders may also remit the EMD in the form of a Demand Draft or a Bank Guarantee, issued by a scheduled bank, drawn in favour of the Reserve Bank of India, in the format prescribed by the Bank.

**Beneficiary Name: RBI CHENNAI**  
**IFSC: RBIS0CNPA01**  
**Account No: 186003001**



Proof of remittance with transaction number (Scanned copy) shall be attached/ uploaded.

The bidders are also advised to send the proof of remittance with transaction number (scanned copy) to [estatechennai@rbi.org.in](mailto:estatechennai@rbi.org.in).

9. EMD may also be submitted **on or before 11:00 Hrs on May 28, 2025** in the form of a Bank Guarantee in the format approved by the Bank (Proforma attached as Annexure II) at the Estate Department, Reserve Bank of India, Chennai - 600001. A tender which is not accompanied by such EMD will not be considered.
10. EMD of the unsuccessful bidders shall be refunded / returned without any interest.
11. **The successful bidder shall also submit a Performance Security Bank Guarantee for 5% of the accepted Contract Value, valid for the Contract Period (upto the issuance of Virtual Completion Certificate) for due fulfilment of the contractual obligations by the contractor.** The EMD paid by the successful bidder shall be released without any interest after successful execution of the contract agreement and submission of **Performance Bank Security Guarantee for 5% of the accepted Contract Value** as provided above, by the successful vendor.
12. The EMD shall not be accepted in any form other than the one mentioned in the tender notice. The **EMD / Performance Security Bank Guarantee** submitted by the successful bidder shall be forfeited in case the successful bidder fails to commence the work awarded to her / him / them within the prescribed time limit.
13. The Reserve Bank of India does not bind itself to accept, the lowest or any tender and reserve to itself the right to accept or reject any or all the tenders, either in whole or in part, without assigning any reasons for doing so. The Earnest Money will be refunded to the bidder if his tender is not accepted but without any interest. Under no circumstance Earnest Money Deposit will be accepted in the form of fixed deposit receipt of Bank or Insurance Guarantee or cheque.
14. The successful bidder shall indemnify the Employer against all risks by obtaining and keeping in force / currency throughout the Contract Period, necessary Insurance Policies of appropriate value including Contractors All Risk Policy, Workmen Compensation Policy, Third Party Liability Policy etc as per Clause 25 of the General Conditions of the Contract.
15. On receipt of intimation from the Employer of the acceptance of her / his / their tender, the successful bidder shall be bound to execute the contract and within fourteen days thereof, the successful bidder shall sign an agreement in accordance with the draft agreement and the Schedule of Conditions but the written acceptance by the Reserve Bank of India of a tender will constitute a binding contract between the Reserve Bank of India and the person so bidding, whether such formal agreement is or is not subsequently executed.
16. In addition to the Performance Security Bank Guarantee for 5% of the accepted 'Contract Value' as per Clause 11 here as above, as a further security for the due fulfilment of the contract by the Contractor, 5% of the value of the work done will be deducted by the Employer from each payment to be made to the Contractors towards **Retention Money**. This Retention Money to be deducted plus the Performance Security Bank Guarantee for 5% of the accepted Contract Value submitted by the

successful bidder will be termed as 'Total Security Deposit'. Performance Security Bank Guarantee for 5% of the accepted 'Contract Value' as per Clause 11 above and Retention Money, will be released by the Employer after upon issuance of Virtual completion certificate. The amounts retained by the Employer shall not bear any interest.

17. Any compensation or other sums of money payable by the Contractor to the Employer under the terms of this Contract may be deducted from the 'Total Security Deposit' if the amount so permits and the Contractor shall, unless such deposit has become otherwise payable, within ten days after such deduction make good in cash the amount so deducted.
18. The Contractor shall not assign the Contract. He shall not sublet any portion of the Contract, except with written consent of the Employer. In case of breach of these conditions, the Employer may serve a notice in writing on the Contractor rescinding the Contract whereupon the security deposit shall stand forfeited to the Employer.
19. The Contractor shall carry out all the work strictly in accordance with drawings (if any), details, specifications and instructions of the Bank's Engineer.
20. A Schedule of Probable Quantities in respect of each work and specifications accompany these Instructions to Bidders. The Schedule of Probable Quantities is liable to alteration by omissions, deductions or additions at the discretion of the Bank. Each tender should contain not only the rates but also the value of each item of work entered in a separate column as mentioned in the MSTC Portal and all the items should be totalled in order to show the aggregate value of the entire tender.
21. The bidder must obtain for himself on his own responsibility and at her / his / their own expenses all the information, which may be necessary for the purpose of making a tender and for entering into a contract and must examine the drawings (if any) and must inspect the site of the work and acquaint herself / himself / themselves with all local conditions, means of access to the work, nature of the work and all matters appertaining thereto.
22. The rates quoted in the tender, for each item shall include all charges for clearing of site, before commencement as well as after completion, double scaffolding, centring, boxing, staging, planking, plant and equipment, storage sheds, watching and lighting by night as well as day including Sundays and holidays, temporary plumbing and electricity supply arrangements (water and electricity may be made available at the available sources by the Bank within the office premises, but drawing the same to the required locations is the responsibility of the contractor, protection of the public and safety of walls, buildings and all other erections, matters or things and the Contractor shall take down and remove any or all such centering, scaffolding, staging, etc, as occasion shall require or when ordered so to do and fully reinstate and make good all matters and things disturbed during the execution of work and to the satisfaction of the Bank's Engineer. The rates quoted, for each item shall be deemed to be for the finished work, to be measured at site. The rates shall also be firm and shall not be subject to exchange variations, labour conditions, fluctuations in road / railway freights or any conditions whatsoever.
23. **The rates for all items in Part II (Price Bid) shall be without G.S.T. on 'Works Contract' and the same will be added automatically by the system. In addition**

**to the G.S.T., T.C.S. also will be automatically added by the system for any rebate item mentioned in the SOQ. Total amount, including G.S.T, for all items excluding rebate items, will be the total 'Contract Amount'.**

24. Each invoice / bill shall indicate amongst other things, the contractor's PAN and G.S.T Registration Number. The Contractor shall also produce to the Bank adequate proof of remittance of G.S.T within a reasonable time from remittance. The contract value will also be subject to TDS / TCS / TDS under GST / Withholding Tax / any other tax, as per statutes.
25. The Contractor should note that unless otherwise stated, the tender is strictly on item rates basis and attention is drawn to the fact that rates for each and every item should be correct, workable and self-supporting. The quantities in the Schedule of Quantities approximately indicate the total extent of work but may vary to any extent and may even be omitted thus altering the aggregate value of the Contract. However, during actual execution of work, if the quantities of any of the items of work exceeds by more than 25% of the tender quantities, the quantities of such items executed, by the authority of the Bank's Engineer and with the concurrence of the employer, in excess of 25% of the tender quantity, shall be considered as an extra item of work for which the Contractors shall submit fresh rates supported by rate analysis worked on the actual cost basis, based data provided in the current DAR published by CPWD from time to time, with 15% towards establishment charges, contractor's overheads and profit. The rates for all such items of work, being current ones, will not be eligible for price adjustment due to increase or decrease in prices of materials and labour rates as per escalation formula, if any, given in the tender. If any of the items of work is omitted from the accepted tender at the sole discretion of the employer, the contractor shall not be entitled to any claim on this account.
26. Time allowed for carrying out the work is **3 months**, which shall be strictly observed by the Contractor, and it shall be reckoned from the 10<sup>th</sup> **day of issue of written order to commence the work.**
27. The work shall throughout the stipulated period of the contract be proceeded with all due diligence and if the Contractor fails to complete the work within the specified period, he shall be liable to pay compensation as defined in Clause 27 of the General Conditions of the Contract. The bidder shall before commencing the work prepare a detailed work programme which shall be approved by the employer.
28. Tenders will be considered only from list of contractors empanelled by the Bank in the trades concerned.
29. The Contractor shall not be entitled to any compensation for any loss suffered by him on account of delays in commencing or executing the work, whatever the cause of delays may be, including delays arising out of modifications to the work entrusted to him or in any sub-contract connected therewith or delays in awarding contracts for other trades of the project or in commencement or completion of such works or in procuring Government controlled or other building materials or in obtaining water and power connections for construction purposes or for any other reason whatsoever and the Employer shall not be liable for any claim in respect thereof. The Employer does not accept liability for any sum besides the tender amount, subject to such variations as are provided for herein.

30. The successful bidder is bound to carry out any items of work necessary for the completion of the job even though such items are not included in the quantities and rates. Schedule of instructions in respect of such additional items and their quantities will be issued in writing by the Bank's Engineer with the prior consent in writing of the Employer.
31. The successful bidder must co-operate with the other Contractors appointed by the Employer so that the work shall proceed smoothly with least possible delay, to the satisfaction of the Bank's Engineer.
32. The Contractor must bear in mind that all items of the work shall be carried out, strictly in accordance with the specifications made by the Bank's Engineer, in compliance to the requirements of the local public authorities and to the requirements of the Bank. No deviation on any account will be permitted.
33. The successful bidder should make his own arrangement to obtain all materials required for the work. The materials as far as procurable shall be first / premium quality, conforming to relevant Indian standards.
34. The successful bidder is bound to purchase required materials for which 'Basic Price' has been stipulated under the item, from the manufacturer / supplier approved and selected by the Bank and at the rate approved by the Bank from time to time.
35. For items where 'Basic Price' of materials is stipulated, only the difference in the basic price specified in the tender and actual price (**excluding G.S.T., local transportation, any other charges like conveyance, loading, unloading & handling charges for delivery at the site etc - bidders may consider these factors while quoting the rate**), approved by the Bank shall be considered and **15% towards O.H.C & C.P shall be allowed on such difference. The contractor shall take prior approval of the Bank for 'Basic Price' before procurement of such items and produce Cash Bill / Tax Invoice towards procurement of such materials.**
36. The Contractor shall only use materials of the makes / manufacturers specified in the list of material of approved make / brand / manufacturer contained in the e-tender clauses, with the approval of the Bank's Engineer.
37. Electricity and water shall be provided free of cost for execution of the work at one point within the premises. The Contractor shall make their own arrangements for conveying the same to the required locations. The contractor shall, however, take care to ensure that no undue wastage of electricity & water is caused. Necessary safety measures shall be taken by the contractor to avoid any mishap. The contractor shall be penalized by the Bank if any laxity on his part is observed in this matter.
38. The Contractor shall strictly comply with the provisions in the Safety & Fire Safety Codes annexed hereto.
39. IS Code numbers wherever mentioned in the tender shall be the latest version as on the date of opening of tenders.

40. EMD / 'Total Security Deposit' ('Performance Security Bank Guarantee' + 'Retention Money') of the successful bidder will be forfeited if he / they fail to comply with any conditions of the Contract.
41. The bidder must obtain for himself at his own responsibility and at his own expense all the information which may be necessary for the purpose of making a tender and for entering into a contract and must examine the drawings (if any), inspect the site of the work, acquaint himself with all local conditions, means of access of the work, nature scope of the work and all matters pertaining thereof.
42. If there is any discrepancy between the description of the item in the General Specifications and the detailed descriptions in the Schedule of Quantities of the same item, the later shall prevail.
43. The contractor shall abide by and fulfil all requirements laid down under the Building and Other Construction Workers (R&E&CS) Act, 1996 and Buildings & Other Construction Workers Welfare Cess Act 1996 (BOCWWC) and the rules framed there-under.
44. Clarifications if any with respect to General Conditions, Special Conditions, Scope of work, specifications, drawings (if any) or any other matter required for completing the tender shall be obtained from the Bank, during working hours of the Bank, before submitting the tenders. Once a tender is submitted, the matter will be decided according to terms & conditions in the tender, in the absence of such authentic pre-clarification in writing.
45. The contractor shall abide by and fulfil all requirements laid down under the Contract Labour (Regulation and Abolition) Act, 1970 and the rules framed there-under. The contractor shall submit to the Bank the maximum number of Labourers to be engaged on a single day in the job. Any subsequent increase should be informed to the Bank without delay. If the number of labourers employed for the job are twenty or more, the contractor shall obtain required license from the Regional Labour Commissioner. The contractor should ensure payment of minimum wages to all his labourers / workmen staff employed by him. He shall submit a certificate to the effect that, he has actually paid all the dues of all the labourers of all designations / descriptions engaged by him for completion of the awarded job / work / project, at the rate, which is not less than that prescribed under Minimum Wages Act, 1948, including its amendments and they have complied with the provisions of CLRA Act, with regard to providing essential amenities to the contract labour. Further, he may facilitate Bank's representative(s) to verify and certify the veracity of such certificate.
46. The Contractor shall not disclose directly or indirectly any information, materials and details of the Bank's infrastructure / systems / equipment etc, which may come to the possession or knowledge of the Contractor during the course of discharging its contractual obligations in connection with this agreement, to any third party and shall at all times hold the same in strictest confidence. The Contractor shall treat the details of the contract as private and confidential, except to the extent necessary to carry out the obligations under it or to comply with applicable laws. The Contractor shall not publish, permit to be published, or disclose any particulars of the works in any trade or technical paper or elsewhere without the previous written consent of the Employer. The Contractor shall indemnify the Employer for any loss suffered by the Employer as a result of disclosure of any confidential information. Failure to observe

the above shall be treated as breach of contract on the part of the Contractor and the Employer shall be entitled to claim damages and pursue legal remedies.

The Contractor shall take all appropriate actions with respect to its employees to ensure that the obligations of non-disclosure of confidential information under this Agreement is fully satisfied.

The Contractor's obligations with respect to non-disclosure and confidentiality will survive the expiry or termination of this agreement for whatever reason.

47. a) The contractor / agency shall be solely responsible for full compliance with the provisions of "the Sexual Harassment of women at workplace (Prevention, Prohibition and Redressal) Act, 2013". In case of any complaint of sexual harassment against its employee within the premises of the Bank, the complaint will be filed before the Internal Complaints Committee constituted by the Contractor / Agency and the Contractor / Agency shall ensure appropriate action under the said Act in respect of the complaint.
- b) Any complaint of sexual harassment from any aggrieved employee of the contractor against any employee of the Bank shall be taken cognizance of by the Regional Complaint Committee constituted by the Bank.
- c) The contractor shall be responsible for any monetary compensation that may need to be paid in case the incident involves the employees of the contractor, for instance any monetary relief to the Bank's employee, if sexual violence by the employee of the contractor is proved. The contractor shall be responsible for educating its employees about prevention of sexual harassment at workplace and related issues.
- d) The contractor shall provide a complete and updated list of its employees who are deployed within the Bank's premises.

#### **COVID-19 Precautions to be followed**

48. **Contractor should ensure that the instructions/ directions issued by Central as well as State Government, and also by the Bank in connection with Covid-19 Pandemic are followed scrupulously by the workmen deployed at the Bank. Workmen from containment area or under quarantine should not be deployed for work. Further, you are required to closely monitor the staff deployed to the Bank and in case of any staff/family member of staff is found 'COVID' infected, action to be taken to replace the staff at once. Staff should be sensitized to follow strict social distancing norms while they remain deployed. You shall provide them with necessary gloves, masks, sanitizer, etc., and personal protective equipment (PPE), if necessary, at no extra cost to the Bank. Further, you shall indemnify and keep indemnified the Bank from any financial/ legal liability arising out of your failure, fault or negligence in complying with the above instructions. Any hindrance to the work due to COVID-19 pandemic or any other reasons shall be intimated to the bank's engineer.**

I /we hereby declare that I / we have read and understood the above instructions, terms and conditions, etc. provided for guidance of tenderers and have accordingly quoted my/our rates.

Place:

**Signature / Digital Signature of tenderer**

Date:

## **SECTION - V**

### **GENERAL CONDITIONS OF THE CONTRACT (GCC)**

#### **The Conditions Hereinbefore referred to**

Interpretation of Clauses	1. In the contract (as hereinafter defined) constructing these Conditions, the specifications, Schedule of Quantities and Contract Agreement, the following words an expression shall have the meaning therein assigned to them except where the subject or context otherwise requires:
(a) 'Employer'	Shall mean The Reserve Bank of India and shall include its assigns and successors.
(b) 'Contractor' in the case of a partnership firm	"Contractor" shall mean ..... and ..... partners in the name and style of ..... .....and having a place of business at .....and shall include the partners for the time being of the said firm the legal representatives of a deceased partner.
In the case of Individual	"Contractor" shall mean Shri ..... ..... trading in the name and style of ..... ..... .....and shall include its heirs, successors and legal representatives.
In the case of company	"Contractor" shall mean ..... ..... a company incorporated under ..... 19..... / 20..... and having its registered office at ..... ..... and shall include his successors and assigns.
(c) 'Engineer'	Shall means the person appointed by the Employer to act as Engineer for the purpose of the contract and named as such in the conditions.
(d) 'Site'	Shall mean the site of the contract works including any building and erection thereon and any other land (inclusively) as aforesaid allotted by the Employer for the Contractor's use.
(e) 'This Contract'	Shall mean the Articles of Agreement, the Special conditions, the Conditions (part I and II), the Tender, the letter of acceptance, the Appendix / SOT, the Schedule of quantities and Specification and such further documents as may be expressly incorporated in the letter of acceptance or article of agreement attached hereto and duly signed.
(f) 'Specification'	Means the specification of the works included in the Contract and any modification thereof or addition thereto made or submitted by the Contractor and approved by the Engineer.
(g) 'Bill of Quantities'	Means the priced and completed bill of quantities forming the part of Tender.
(h) 'Tender'	Means The Contractor's priced offer to the Employer for the execution and completion of the works and remedying of any defects therein in

- accordance with the provisions of the contract, as accepted by the letter of acceptance.
- (i) 'Letter of acceptance' of Means the formal acceptance by the employer of the tender.
- (f) 'Notice in writing' in Or written notice shall mean a notice in written, typed or printed characters sent (unless delivered personally or otherwise 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 when in the ordinary course of post, it would have been delivered.
- (f) 'Act of Insolvency' of Shall mean any Act of insolvency as defined by the Presidency Town Insolvency Act or the Provincial Insolvency Act or any Act amending such original.
- (g) 'Net Prices' If in arriving at the contract amount the Contractor shall have added to or deducted from the total of the items in the Tender any sum, either as a percentage or otherwise, then the net price of any item in the tender shall be the sum arrived at by adding to or deducting from the actual figure appearing in the Tender as the price of that item a similar percentage or proportionate sum provided always that in determining the percentage or proportion of the sum so added or deducted by the Contractor the total amount of any Prime Cost items and provisional sums of money shall be deducted from the total amount of the tender. The expression "net rates" or "net prices" when used with reference to the contract or accounts shall be held to mean rates or prices so arrived at.
- (h) 'The Works' Shall mean **Structural Strengthening of existing part slab area, providing heavy duty floor finish including ancillary civil works at 1st Floor of MOB, Chennai for providing new SBS (Shredding & Briquetting) machines.** as provided herein.

**Note:** Words imparting persons include firms and corporation. Words imparting the singular also include the plural and vice versa where the context requires.

- Scope of Contract 2. The contractor shall carry out and complete the said work in every respect in accordance with this Contract and with the directions of and to the satisfaction of Bank's Engineer. The Bank's Engineer may in his absolute discretion and from time-to-time issue further drawing and / or written instructions, details directions and explanations which are hereafter collectively referred to as "Bank's Instructions" in regard to: -
- The variation or modification of the design, quality or quantity of works or the addition or omission or substitution of any work.
  - Any discrepancy in the Drawings (if any) or between the Schedule of Quantities and / or Drawings (if any) and / or Specification.
  - The removal from the site of any material brought thereon by the Contractor and the substitution of any other material, therefore.
  - The removal and / or re-execution of any works executed by the Contractor.
  - The dismissal from the works of any persons employed thereupon.
  - The opening up for inspection of any work covered up.
  - The amending and making good of any defects under clause 21 hereof.
- The Contractor shall forthwith comply with and duly execute any work comprised such Bank's Engineer's instructions provided always that verbal instructions directions and explanations given to the



	<p>Contractor or his representative upon the works by the Bank's Engineer's shall, if involving a variation, be confirmed in writing by the Contractor within seven days, and if not dissented from in writing within a further seven days by Bank's Engineer's such shall be deemed to be Bank's Engineer's instructions within the scope of the Contract.</p>
Variations to be approved by the Employer	<p>3. The Contractor shall submit a statement of variations giving quantity and rates duly supported by analysis of rates, vouchers, etc. The rates on scrutiny and final acceptance by Employer shall form a supplementary tender. The Employer shall not be liable for payment of such variations until these statements are sanctioned by it.</p>
Drawings, Schedule of Quantities and Agreement	<p>4. The Contract shall be executed in duplicate and the Bank's Engineer, the Employer and the Contractor shall be entitled to one executed copy of each for his use. The Contractor on the signing hereof shall be furnished by the Bank's Engineer free of cost one copy of each of the said Drawings (if any) and of the specification and one copy of all further Drawings (if any) issued during the progress of the works. Any further copies of such Drawings (if any) required by the Contractor shall be paid for by him. The contractor shall keep one copy of all Drawings (if any) on the works and the Bank's Engineer, or his representative shall at all reasonable times have access to the same. Before the issue of the final certificate to the Contractor he shall forthwith return to the Bank's Engineer all Drawings (if any) and Specifications.</p>
Contractor to provide everything necessary at his cost	<p>5. The contractor shall provide at his cost everything necessary for the proper execution of the work according to the intent and meaning of the drawing. Schedule of quantities and specification taken together with whether the same may or may not be particularly shown or described therein provided that the same can reasonably be inferred there from and it the contractor finds any discrepancy in the drawings (if any) or between the drawings (if any) schedule of quantities and specifications he shall immediately and in writing refer same to the Bank's Engineer who shall decide which is to be followed.</p>
Authorities, notices, and patents	<p>6. The contractor shall conform to the provisions of any Act of the legislature relating to the works and to the regulations and bye-laws of any authority, and of any water, electric supply and other companies and / or authorities with whose, systems the structure is proposed to be connected, and shall, before making any variations from the drawings (if any) or Specifications that may be necessitated by so conforming, give to the Bank's Engineer written notice, specifying the variation proposed to be made and the reason for making it and apply for instruction thereon. In case the Contractor shall not within ten days receive such instructions, he shall proceed with the work conforming to the provisions, regulations, or by-laws in question, and any variation so necessitated shall be dealt with under Clause 18 hereof.</p> <p>The Contractor shall bring to the attention of the Bank's Engineer all notices required by the said Acts, regulations or byelaws to be given to any authority and pay to such authority, or to any public office all fees that may be properly chargeable in respect of the works and lodge the receipts with the Bank's Engineer.</p> <p>The contractor shall indemnify the Employer against all claims in respect of patent rights, and shall defend all action arising from such claims, and shall himself pay all royalties, license fees, damages, cost and charges of all and every sort that may be legally incurred in respect thereof.</p>
Setting out of works.	<p>7. The Contractor shall set out the works and shall be responsible for the true and perfect setting out of the same and for the correctness of the positions, levels, dimensions, and alignment of all parts thereof and got approved prior to proceeding of the work. If the contractor fails in their</p>

		role, any errors/defects it shall be rectified at his own expense to the satisfaction of the Bank's Engineer.
Materials workmanship conform description	& to	8. All materials and workmanship shall so far as procurable be of the respective kinds described in the Schedule of Quantities and/or Specifications and in accordance with the Bank's Engineer's instructions, and the Contractor shall upon the request of the Bank's Engineer furnish him with all invoices, accounts, receipts, and other vouchers to prove that the materials comply therewith. The Contractor shall arrange for and/or carry out test of any materials, as per relevant IS provisions through the reputed laboratories prior to use in the work, if so desired by the Bank. The contractor shall arrange for manufactures' test certificate for any material which Bank may require from time to time before the execution using intended material. <b>The testing of material (Third Party Test) shall be carried out through a Government / Approved Laboratory and the testing charges, as per actuals shall be reimbursed by the Bank on production of vouchers / paid receipt.</b>
Contractor's superintendence and representative on the works.		9. The Contractor shall give all necessary personal superintendence during the execution of the works, and as long thereafter as the Bank's Engineer may consider necessary until the expiry of the "Defects Liability Period" stated in the Appendix hereto/SOT. The Contractor shall also during the whole time the works are in progress employ a competent, qualified and experienced Engineer who shall be constantly in attendance at the works while the men are at work. Any directions explanation, instructions or notices given by the Bank's Engineer to such representative shall be held to be given to the Contractor.
Dismissal workmen.	of	10. The Contractor shall on the request of the Bank's Engineer immediately dismiss from the works any person employed thereon by him who may, in the opinion of the Bank's Engineer, be incompetent or misconduct himself and such persons shall not be again employed on the works without the permission of the Consultant.
Access to works		11. The Employer, the Bank's Engineer and their respective representatives shall at all reasonable times have free access to the work and / or to the workshops, factories or other places where materials are lying or from which they are being obtained and the Contractor shall give every facility to the Employer, the Bank's Engineer and their representatives necessary for inspections and examination and test of the materials and workmanship. No person not authorized by the Employer or the Bank's Engineer except the representatives of public authorities shall be allowed on the works at any time.
Assistant Manager / Manager		12. The term Assistant Manager (Tech.) / Manger (Tech.) shall mean the person appointed and paid by the employer. The contractor shall afford the Assistant Manager (Tech) / Manager (Tech) every facility and assistance for inspecting the works and materials and for checking and measuring the works and materials. The Assistant Manager (Tech) / Manger (Tech.) or any representative of the Employer shall have power to give notice to the Contractor or to his representative of non-approval of any work or materials. The work will from time to time be examined by the Assistant Manager (Tech) / Manger (Tech.) but such examination shall not in any way exonerate the Contractor from the obligation to remedy any defects which may be found to exist at any stage of the works after the same is completed. Subject to the limitation of this clause the Contractor shall take instructions only from the Bank's Engineer.

Assignment and Subletting	13. The whole of the works included in the Contract shall be executed by the contractor and the Contractor shall not directly or indirectly transfer, assign or under-let the Contract or any part / share thereof or any interest therein without the prior written consent of the Employers and no undertaking shall relieve the Contractor from the full and entire responsibility of the Contract or from active superintendence of the works during their progress.
Alterations, additions, omission etc.	14. No alteration, omission or variation shall vitiate this Contract but in case the Bank's Engineer thinks proper at any time during the progress of the works to make any alterations in, or additions to, or omissions from, the works or any alteration in the kind or quality of the materials to be used therein and shall give notice thereof in writing under its hand to the Contractor. The Contractor shall alter, add to, or omit from, as the case may be, in accordance with such notice, but the Contractor shall not do any work extra to or make any alterations or additions to or omissions from the works or any deviation from any of the provisions of the Contract, Stipulation, Specification or Contract Drawings (if any) without the previous consent in writing of the Bank's Engineer and the value of such extras, alterations, additions or omissions shall in all cases be determined by the Bank's Engineer with the prior approval in writing of the Employer in accordance with the provisions of Clause 17 hereof, and the same shall be added to or deducted from the Contract Amount, as the case may be.
Schedule Quantities.	15. The Schedule of Quantities, unless otherwise stated shall be deemed to have been prepared in accordance with the Standard Method of Measurement. Any error in description or in quantity or in omission of items from the Schedule of Quantities shall not vitiate this contract but shall be rectified and the value thereof, as ascertained under Clause 18 hereof, shall be added to, or deducted, from the Contract Amount (as the case may be) provided that no rectification of errors, if any, shall be allowed in the Contractor's Schedule of Rates.
Sufficiency Schedule quantities	16. The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the prices stated in the Schedule of Quantities and / or the Schedule of Rates and Prices which rates and prices shall cover all his matters and things necessary for the proper completion of the works.
Measurement works	17. The Bank's Engineer may from time to time intimate to the Contractor and the Employer that he requires the works to be measured and the Contractor shall forthwith attend or send a qualified Agent to assist the Bank's Engineer or the Bank's Engineer's representative or the Assistant Manager (Tech)/ Manger (Tech.) in taking such measurements and calculations and to furnish all particulars or to give all assistance required by any of them. Should the Contractor not attend or neglect or omit to send such Against then the measurement taken by the Bank's Engineer or a persons approved by him shall be taken to be correct measurements of the works. Such measurements shall be taken in accordance with the Mode of Measurements detailed in the Specifications. The Contractor or his Agency may at the time of measurement take such notes and measurements as he may require. All authorized extra works, omissions and all variations made without the Bank's Engineer 's knowledge, of subsequently sanctioned by him in writing (with the prior approval in writing of the Employer) shall be included in such measurements.
Prices for extras etc. ascertainment of	18. The Contractor may, when authorized, and shall, when directed, in writing by the Bank's Engineer with the approval of the Employer add to, omit from, or vary the works shown upon the drawings (if any), or described in the specifications, or included in the Schedule of quantities, but the Contractor shall make no addition, omission or variation without

such authorization or direction. A verbal authority or direction by the Bank's Engineer shall, if confirmed by them in writing within seven days, be deemed to have been given in writing.

No claim for an extra shall be allowed unless it shall have been executed under provisions of Clause 6 hereof or by the authority of the Bank's Engineer with the concurrence of the employer as herein mentioned. Any such extra is herein referred to as authorized extra and shall be made in accordance with the following provisions.

- a) (i) The net rates or prices in the original tender shall determine the valuation of the extra work where such extra work is of similar character and executed under similar conditions as the work priced therein.  
(ii) Rates for all items, wherever possible, should be derived out of the rates given in the Priced Schedule of Quantities.
- b) The net prices of the original tender shall determine the value of the items omitted if omissions vary the conditions under which any remaining items of works are carried out, the prices for the same shall be valued under sub-clause (c) hereof.
- c) Where the extra works are not of similar character and / or executed under similar conditions as aforesaid or where the omissions vary the conditions under which any remaining items of works are carried out or if the amount of any omissions or additions relative to the amount of the whole of the contract works or to any part thereof shall be such that in the opinion of the Bank's Engineer the net rate of price contained in the Priced Schedule of Quantities or tender or for any item of the works involves loss or expense beyond that reasonably contemplated by the Contractor or is by reason of such omission or addition rendered unreasonable or inapplicable, the Bank's Engineer shall fix such other rate or price as in the circumstances it shall think reasonable and proper with the prior approval in writing of the Employer.
- d) Where extra work cannot be properly measured or valued the contractor shall be allowed day work prices as the net rates stated in the tender of the Priced Schedule of Quantities or, if not so stated, then in accordance with the local day work rates and wages for the districts provided that in either case, vouchers specifying the daily time (and if required by the Bank's Engineer, the workman's names) and materials employed be delivered for verification to the Bank's Engineer or his representative at or before the end of the week following that in which the work has been executed.
- e) The measurement and valuation in respect of the contract shall be completed within the "Period of final measurements" stated in the Appendix / SOT or if not stated then within three months of the completion of the Contract works as defined in clause 22 hereof.
- f) It is further, clarified that for all such authorized extra items where rates cannot be derived from tender, the contractor shall submit rates, supported by rate analysis worked on the "actual cost basis", plus 15% towards establishment charges, contractor's overheads, and profit. Such items will not be eligible for escalation.

- g) The Contractor should note that unless otherwise stated the tender is strictly on item rate basis and his attention is drawn to the fact that rates for every item should be correct, workable and self-supporting. The quantities in the Schedule of Quantities approximately indicate the total extent of work but may vary to any extent and may even be omitted thus altering the aggregate value of the contract. However, during the actual execution of the work if the quantities exceeds by more than 25% of the tender quantities, the quantity of such items executed, by the authority of the Engineer of the project and with the concurrence of the employer, in excess of 25% of the tender quantity shall be considered as extra item of work for which contractor shall submit fresh rates supported by rate analysis worked on actual cost basis +15% towards the establishment charges ,contractors overhead & profit .The rates for all such items of work ,being current ones, will not be eligible for price adjustment due to increase or decrease in prices or materials and labour rates as per escalation formula, if any ,given in the tender .If any of the items of work is omitted from the accepted tender at the sole discretion of employer ,the contractor shall not be entitled to any claim on this account.

Unfixed materials when taken into account to be the property of the Employer.

19. Where in any Certificate (of which the Contractor has received payment), the Bank's Engineer has included the value of any unfixed materials intended for and / or placed on or adjacent to the works such materials shall become the property of the Employer and they shall not be removed except for use upon the works, without the written authority of the Bank's Engineer. The Contractor shall be liable for any loss of or damage to, such materials.

Removal of improper works

20. The Bank shall, during the progress of the works, have power to order in writing from time to time the removal of the works within such reasonable time or times as may be specified in the order, or any materials which in the opinion of the Bank's Engineer are not in accordance with the Specifications or the instructions of the Bank's Engineer , the substitution of proper materials, and the removal and proper re-execution of any work executed with materials or workmanship not in accordance with the Drawings (if any) and Specifications or instruction and the Contractor shall forthwith carry out such order at his own cost. In case of default on the part of the contractor to carry out such order, the Employer shall have the power to employ and pay other persons to carry out the same; and all expenses consequent thereon, or incidental thereto, as certified by the Bank's Engineer shall be borne by the Contractor or may be deducted by the Employer from any money due, or that may become due, to the Contractor.

Defects after virtual completion.

21. Any defect, shrinkage, settlement or other faults which may appear within the "Defects Liability Period" stated in the Appendix hereto/SOT or, if none stated, **then within twelve months** after the virtual completion of the works, arising in the opinion of the Bank's Engineer from materials or workmanship not in accordance with the contract, shall upon the directions in writing of the Bank's Engineer and within such reasonable time as shall be specified therein, be amended and made good by the Contractor, at his own cost and in case of default the Employer may employ and pay other persons to amend and make good such defects, shrinkage, settlement or other faults, and all damages loss and expenses consequent thereon or incidental thereon or incidental there to shall be made good and borne by the Contractor and such damage, loss and

expenses shall be recoverable from him by the Employer or may be deducted by the Employer, upon the Bank's Engineer 's Certificate in writing from any money due or that may become due to the Contractor, or the Employer may in lieu of such amending and making good by the Contractor deduct from any moneys due to the Contractor a sum, to be determined by the Bank's Engineer equivalent to the cost of amending such work and in the event of the amount retained under Clause 32 hereof being insufficient, recover the balance from the Contractor, together with any expenses the Employer may have incurred in connection therewith.

Should any defective work have been done or material supplied by any sub-contractor employed on the works who has been nominated or approved by the Bank's Engineer as provided in Clauses 13 and 23 hereof, the Contractor shall be liable to make good in the same manner as if such work or material had been done or supplied by the Contractor and been subject to the provisions of this Clause and Clause 2 hereof. The Contractor shall remain liable under the provisions of this Clause notwithstanding the signing of any Certificate or the passing of any accounts, by the Bank's Engineer.

Certificate of virtual completion & defects liability period.

22. The works shall not be considered as completed until the Bank's Engineer has certified in writing that they have been virtually completed. The Defects Liability Period shall commence from the date of such Certificate.

Nominated Sub-Contractor.

23. All Specialists, Merchants, Tradesmen and other executing any work of supplying and fixing any goods for which prime cost prices or provisional sums are included in the Schedule of Quantities and/or specification who may be nominated or selected by the Bank's Engineer are hereby declared to be Sub-Contractors employed by the Contractor and are herein referred to as nominated Sub-Contractors.

No nominated Sub-Contractor shall be employed on or in connection with the works against the Contractor shall make reasonable objections or (Save where the "Bank's Engineer and Contractor shall otherwise agree) who will not enter into a Contract providing.

- a) That the nominated Sub-Contractor shall indemnify the Contractor against the same obligations in respect of the Sub-Contract as the Contractor is under in the respect of this Contract.
- b) That the nominated Sub-Contractor shall indemnify the Contractor against claims in respect of any negligence by the Sub-Contractor, his servants or agents or any misuse by him or them of any scaffolding or other plants, the property of the contractor or under any Workman's Compensation Act in force.
- c) Payment shall be made to the nominated Sub-Contractor within fourteen days of his receipt of the Bank's Engineer 's Certificate provided that before any Certificate is issued, the Contractor shall upon request furnish, to the Bank's Engineer proof that all nominated Sub-Contractor's accounts, included in previous Certificates have been duly discharged, in default whereof the Employer may pay the same upon a certificate of the Bank's Engineer and deduct the amount thereof from any sums due to the Contractor. The exercise of this power shall not create privacy of contract as between Employer and Sub-Contractor.

Other persons employed by Employer

24. The Employer reserves the right with the concurrence of the Bank's Engineer to use premises and any portions of the site for the execution of any work not included in this Contract which it may desire to have carried out by other persons and the Contractor shall allow all reasonable

Insurance in respect  
to damages to  
persons and  
property

facilities for the execution of such work but shall not be required to provide any plant or material for the execution of such work except by special arrangement with the Employer. Such work shall be carried out in such manner as not to impede the progress of the works included in the Contract and the Contractor shall not be responsible for any damage or delay which may happen to or occasioned by such work.

25. The Contractor shall be responsible for all injury or damage to persons, animals or things and for all damage to property which may arise from any factor omission on the part of the Contractor or any Sub-Contractor or any nominated Sub-Contractor or any of their employees. The liability under this clause shall cover also, inter-alia any damages to structures, whether immediately adjacent to the works or otherwise; any damage to roads, streets, footpaths, bridges as well as damage caused to the buildings and other structures and works forming the subject matter of this contract. The contractor shall also be responsible for any damage caused to the building and other structures and works forming the subject, matter of this contract due to rain, wind, frost or other inclemency of weather. The contractor shall, indemnify and keep indemnified the Employer and hold him harmless in respect of all and any loss and expenses arising from any such injury or damage to persons or property as aforesaid and also against any claim made in respect of injury or damage, whether under any statute or otherwise and also in respect of any award or compensation or damage consequent upon such claims.

The Contractor shall, at his own expense, effect and maintain till issue of the virtual completion certificate under this contract, with an insurance company approved by the Employer, an **All Risk Policy for Insurance for the full amount of the contract** including earthquake risk in the joint names of the employer and the contractor (the name of the former being placed first in the policy) against all risk policy for contractors and deposit such policy or policies with the employer before commencing the works. The contractor shall reinstate all damage of every sort mentioned in this Clause so as to do delivery of the whole of the works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damage to property of third parties.

The Contractor shall also indemnify and keep indemnified the Employer against all claims which may be made against the Employer by any person in respect of anything which may arise in respect of the works or in consequence thereof and shall at his own expense, effect and maintain until the virtual completion of the contract, with an Insurance Company approved by the employer a policy of Insurance in the joint names of the Employer and the Contractor (name of the former being placed first in the policy) against such risk and deposit such policy or policies before commencement of the works. **The minimum limit of the coverage under the policy shall be Rs. 2 lakh per person for any one accident or occurrence and Rs. 5 lakhs in respect of damage to property for any one accident or occurrence subject to an overall ceiling of Rs 10 lakh.** The contractor shall also indemnify the employer against all claim which may be made upon the Employer, whether under the **Workmen's Compensation Act** or any other statute in force, during the currency of this contract or at Common Law in respect of any employee of the contractor or of Sub-Contractor and shall at his **own expense** effect and maintain until the virtual completion of the contract or with an Insurance Company, approved by the Employer, a policy of insurance against such risks and deposit such policy or policies with the Employer from time to time during the currency of this contract.

In default of the contractor insuring as providing above, the employer may so insure and may deduct the premiums paid from any moneys due or which may become due to the contractor.

The contractor shall be responsible for any liability which may not be covered by the Insurance Policies referred to above and also for all other damages to any person, animal or defective carrying out of this contract, whatever, may be the reasons due to which the damage shall have been caused.

The contractor shall also indemnify and keep Indemnified the Employer against all and any costs, charges or expenses arising out of any claim or proceedings relating to the works and also in respect of any of damage or compensation arising there from.

Without prejudice to the other rights of the employer against contractor in respect of such default, the employer shall be entitled to deduct from any sums payable to the contractor the amount of any damages, compensation costs, charges and other expenses paid by the employer, and which are payable the contractor under this clause.

The Contractor shall upon settlement by the insurer pursuant to a policy taken under this clause, proceed with due diligence to re-build or repair the works destroyed or damaged. In this event all the monies received from the Insurer in respect of such damage shall be paid to the Contractor and the contractor shall not be entitled to any further payment in respect of the expenditure incurred for re-building or repairing of the materials or goods destroyed or damaged.

The contractor, in case of re-building or reinstatement after damage shall be entitled to such extension of time for completion as the Bank's Engineer may deem fit, but shall, however, not be entitled to reimbursement by the employer of any shortfall or deficiency in the amount finally paid by the insurer in settlement of any claim arising as set out herein.

Without prejudice to his liability under this clause, the contractor shall also cause all nominated sub-contractors to effect, for their respective portions of the works, similar policies of insurance in accordance with the provisions of this clause and shall produce or cause to produce to the employer such policies. The contractor shall not permit a **nominated sub-contractor to commence work at the site unless the said insurance policies are submitted.** In the event of failure of the sub-contractor to take out such a policy of insurance before commencing the works at the site, the contractor shall be responsible for any claim or damage attributable to the said sub-contractor.

Date of commencement and completion.

26. The Contractor shall be allowed admittance to the site on the "Date of Commencement" stated in the Appendix hereto/SOT, or such later date as may be specified by the Bank's Engineer and he shall thereupon and forthwith begin the works and shall regularly proceed with and complete the same (except such painting or other decorative work as the Bank's Engineer may desire to delay on or before the "Date of Completion" stated in the Appendix /SOT subject nevertheless to the provisions for extension of time hereinafter contained.

Liquidated Damage for non-completion

27. If the Contractor fails to complete the works within the stipulated time as in the Appendix/SOT or within any extended time under Clause 28 hereof and the Bank's Engineer certifies in writing that in his opinion the same ought reasonably to have been completed the Contractor shall pay the Employer the sum named in the Appendix /SOT as "Liquidated Damages" for the period during which the said work shall so remain incomplete and the employer may deduct such damages from any moneys due to Contractor.



Delay and extension of time	28. If in the opinion of the Bank's Engineer the works be delayed (a) by force majeure or (b) by reason of any exceptionally inclement weather or (c) by reason of proceedings taken or threatened by or dispute with adjoining or neighbouring owners or public authorities arising otherwise than through the Contractor's own default or (d) by the works of delays of other Contractors or Tradesmen engaged or nominated by the Employer or the Bank's Engineer and not referred to in the Schedule of Quantities and / or Specification or (e) by reason of Bank's Engineer's instructions as per Clause 2 hereof or (f) by reason of civil commotion, local combination of workmen or strike or lockout affecting any of the building trades or (g) in consequences of the Contractor not having received in due time necessary instructions from the Bank's Engineer for which he specifically applied in writing or (h) from other causes which the Bank's Engineer may certify as beyond the control of contractor or (i) in the event, the value of work exceed the value of the priced Scheduled of Quantities owing to variation, the Bank's Engineer may with previous approval in writing of the Employer make a fair and reasonable extension of time for completion of the Contract Works; in case of such strike or lockout the Contractor shall nevertheless constantly use his endeavours to prevent delay and shall do all that may reasonably be required to the satisfaction of the Bank's Engineer to proceed with work.
Failure by contractor to comply with Bank's Engineer's instructions	29. If the Contractor after receipt of written notice from the Bank's Engineer requiring compliance within ten days fails to comply with such further drawings (if any) and / or Bank's Engineer instructions the Employer may employ and pay other persons to execute any such work whatsoever that may be necessary to give effect thereto, and all costs incurred in connection therewith shall be recoverable from the Contractor by the Employer on the Certificate of the Bank's Engineer as a debt or may be deducted by him from any money due to the Contractor.
Termination of Contract by the Employer	30. If the contractor being an individual or a firm commits any "act of insolvency", or shall be adjudged an insolvent or being an incorporated Company shall have an order for compulsory winding up made against it or pass an effective resolution for winding up voluntarily or subject to the supervision of the Court and the Official Assignee or the Liquidator in such acts of insolvency or winding up, as the case may be, shall be unable within seven days after notice to him requiring him to do so, to show to the reasonable satisfaction of the Bank's Engineer that he is able to carry out and fulfil the Contract and to give security therefore, if so required by the Bank's Engineer . Or if the Contractor (whether an individual, firm or incorporated Company) shall suffer execution or other process of Court attaching property to be issued against the Contractor. Or shall suffer any payment under this Contract to be attached by or on behalf of any of the creditors of the Contractor. Or shall assign or sublet this Contract without the consent in writing of the Employer first had and obtained. Or shall charge or encumber this Contract or any payments due of which may become due to the Contractor hereunder. Or if the Bank's Engineer shall certify in writing to the Employer that the Contractor, <ul style="list-style-type: none"> <li>i. Has abandoned the Contract, or</li> <li>ii. Has failed to commence the works, or has without any lawful excuse under these Conditions suspended the progress of the works for fourteen days after receiving from the Bank's Engineer's notice to proceed or</li> </ul>

- iii. Has failed to proceed with the works with such due diligence and failed to make such due progress as would enable the works to be completed within the time agreed upon or
- iv. Has failed to remove materials from the site or to pull down and replace work for seven days after receiving the Bank's Engineer's written notice that the said materials or work were condemned and rejected by the Bank's Engineer under these conditions, or
- v. Has neglected or failed persistently to observe and perform all or any of the acts, matters of things by this Contract to be observed and performed by the Contractor for seven days after written notice shall have been given to the Contractor requiring the Contractor to observe or perform the same.

Then and in any of the said cases the Employer may, notwithstanding any previous waiver, after giving seven days' notice in writing to the Contractor, determine the Contract, but without thereby affecting the powers of the Bank's Engineer or the obligations and liabilities of the contractor, the whole of which shall continue in force as fully as if the Contract had not been so determined, and as if the works subsequently executed had been executed by or on behalf of the Contractor. And further, the Employer by his agents or servants may enter upon and take possession of the works and all plant, tools, scaffolding, sheds, machinery steam and other power utensils and materials lying upon the premises or the adjoining lands or roads, and use the same as its own property or may employ the same by means of his own servants and workmen in carrying on and completing the works or by employing any other Contractor or other person or persons to complete the works, and the Contractor shall not in any way interrupt or do any act, matter or thing to prevent or hinder such other Contractor or other person or persons employed for completing and finishing of the work using the materials and plant for the works. When the works shall be completed or as soon thereafter as convenient the Bank's Engineer shall give a notice in writing to the Contractor to remove his surplus materials and plant, and should the Contractor fail to do so within a period of fourteen days after receipt thereof by him, the Employer may sell the same by public auction, and give credit to the Contractor for the net amount realized. The Bank's Engineer shall thereafter ascertain and certify in writing under his hand what (if anything) shall be due or payable to or by the Employer, for the value of the said plant and materials so taken possession of by the Employer and the expense or loss which the Employer shall have been put to in procuring the works to be completed and the amount, if any, owing to the Contractor and the amount which shall be so certified shall thereupon be paid by the Employer to the Contractor or by the Contractor to the Employer, as the case may be, and the Certificate of the Bank's Engineer shall be final and conclusive between the parties.

Termination  
Contracts  
Contractor

of  
by  
31. If the payment of the amount payable by the Employer under Certificate of the Bank's Engineer shall be in arrears and unpaid for thirty days after notice in writing requiring payment of the amount as aforesaid shall have been given by the Contractor to the Employer, or if the Employer interferes with or obstructs the issue of any such Certificate, or if the Employer shall repudiate the Contractor, or if the works be stopped for three months under the order of the Bank's Engineer or the Employer or by any injunction or other order of any Court of Law, then and in any of the said cases the Contractor shall be at Liberty to determine the Contract by notice in writing to the Employer through the Bank's Engineer , and he shall be entitled to recover from the Employer, payment for all works executed and for any loss he may sustain upon any plant or

materials supplied or purchased or prepared for the purpose of the Contract.

Certificates payments and In arriving at the amount of such payment the net rates contained in the Contractor's original Tender shall be followed or where the same may not apply valuation shall be made in accordance with Clause 18 hereof.

32.(a) The Contractor shall be paid by the Employer from time to time by instalments under Interim Certificates to be issued by the Bank's Engineer to the Contractor on account of the works executed when in the opinion of the Bank's Engineer, work to the approximate value named in the Appendix / SOT as 'Value of work for Interim Certificates' (or less at the reasonable discretion of the Bank's Engineer) has been executed in accordance with this Contract, subject, however, to a retention of the percentage of such value named in the Appendix hereto/SOT as 'Retention Percentage for Interim Certificates' until the total amount retained shall reach the sum named in Appendix / SOT as 'Total "Retention Money" after which time instalments shall be up to the full value of the work subsequently so executed and fixed in the building. The Bank's Engineer may in his discretion include the Interim Certificate such amount as he may consider proper on account of materials delivered upon the site by the Contractor for use in the works. And when the works have been virtually completed and the Bank's Engineer shall have certified in writing that they have been completed, the Contractor shall be paid by the Employer in accordance with the Certificate to be issued by the Bank's Engineer the sum of money named in the Appendix / SOT as 'Instalment after Virtual Completion' being a part of the said Total Retention money. And the Contractor shall be entitled to the payment of the final balance in accordance with the Final Certificate to be issued in writing by the Bank's Engineer at the expiration of the period referred to as the 'Defect Liability Period' in the Appendix hereto/SOT from the date of Virtual Completion or as soon as after the expiration of such period as the works shall have been finally completed and all defect made good according to the true intent and meaning hereof whichever shall last happen, provided always that the issue by the Bank's Engineer of any Certificate during the progress of the works or at or after their completion shall not relieve the contractor from his liability under Clause 2 and 21 not relieve the contractor of his inability in cases of fraud, dishonesty, or fraudulent concealment relating of the works or material or to any matter dealt with in the Certificate, and in case of all defects and insufficiencies in the works or materials which a reasonable examination would not have disclosed. No certificate of the Bank's Engineer shall of itself be conclusive evidence that any works or materials to which it relates are in accordance with the Contract neither will the Contractor have a claim for any amounts which the Bank's Engineer might have certified in any interim bill and paid by the Employer, and which might subsequently be discovered as not payable and in this respect the Employer's decision shall be final and binding.

(b) The Contractor has to submit along with his all running account bills and final bill, a statement showing the details as well as the quantities of cement, steel and other building materials procured by him up to the date of the bill for verification of the same before settlement of such bills by the Bank.

(c) The Bank's Engineer shall have power to withhold any Certificate if the works or any parts thereof are not being carried out to his satisfaction.

(d) The Bank's Engineer may make any correction in any previous Certificate which shall have been issued by him.

		<p>(e) No certificate of payment shall be issued by the Bank's Engineer if the Contractor fails to insure the works and keep them insured till the issue of the Virtual Completion Certificate.</p> <p>(f) Payment upon the Bank's Engineer's Certificate shall be made within the periods named in the Appendix /SOT as 'Period for honour of Certificates' after such Certificates have been delivered to the Employer.</p>
Delayed Payment		<p>33. Any amounts payable by the Employer to the Contractor in pursuance of any certificate given by the Bank's Engineer hereunder shall, if not paid within the 'Period of honouring certificates' named in the Appendix / SOT, carry interest at the rate named in the Appendix/ SOT as the 'Rate of Interest for delayed payment' from the date upon which such sum ought to have been paid by the Employer until the payment.</p>
Matters to be finally determined by Bank		<p>34. The decision, opinion, direction, Certificate (except for payment) with respect to all or any of the matters under Clause 2 (a), 2(b), 4, 7, 12, 20, 28 (a, c, d, e, f) hereof (which matters are herein referred to as excepted matters) shall be final and conclusive and binding on the parties hereto and shall be without appeal. Any other decision, opinion, direction, certificate or valuation of the Bank's Engineer or any refusal of the Bank's Engineer to give any of the same, shall be subject to the right of Arbitration and review under Clause 35 hereof in the same way in all respects (including the provisions as to opening the reference) as if it were a decision of the Bank's Engineer.</p>
Settlement of disputes through arbitration		<p>35. All disputes and difference of any kind whatever arising out of or in connection with the contract or the carrying out of the works (whether during the progress of the works or within 12 months from the date of virtual completion of work and whether before or within 12 months of determination abandonment or breach of contract) shall be referred to giving inter-alia full details of the matter under dispute like quantities, rates, amount claimed and the reason thereto, and settled by the Bank who shall state its decision in writing. Such decision may be in the form of a Final Certificate or otherwise. The decision of the Bank with respect to any of the exempted matter shall be final and without appeal as stated in Clause 34 hereof. But if the contractor be dissatisfied on any other matter, the contractor may within 28 days after receiving notice of such decision upon, shall submit in writing for arbitration. Such written notice shall specify the matters, which are in dispute of difference of which such written notice has been given. If both the parties agree, a single arbitrator would be appointed for the purpose. In case no agreement could be reached on the appointment of single arbitrator, both the parties will nominate one person each as an arbitrator on their behalf. The two arbitrators nominated by the parties shall nominate one more person to act as third arbitrator or umpire.</p> <p>The Arbitrator or Arbitrators shall have power to open, review and revise any certificate, opinion, decision, requisition or notice, save in regard to the exempted matters, referred to in the preceding Clause, and to determine all matters in dispute which shall be submitted to arbitration and of which notice shall have been given as aforesaid.</p> <p>The arbitrator or Arbitrators shall make his or their award within one year (or such further extended time as may be decided by him or them with the consent of the parties) from the date of entering on the reference. In case during the arbitration proceedings the parties mutually settle, compromise their dispute of difference, on the parties filling their joint memorandum of the settlement of compromise, the arbitrator or the arbitrators as the case may be, shall make an award in terms of such settlement of compromise.</p>

	<p>Upon any such reference, the decision on the cost incidental to the reference and award respectively shall be in the discretion of the Arbitrator or Arbitrators as the case may be, who may determine the amount thereof or direct the same to be taxed as between party and party and shall direct by whom and whom and in what matter the same shall be borne and paid.</p> <p>This submission shall be deemed to be a submission to arbitration within the meaning of the Indian Arbitration and Conciliation Act, 1996 or any statutory modification thereof. The award of the Arbitrator or Arbitrators shall be final and binding on the parties. It is agreed that the Contractor shall not delay the carrying out of the works by reason of any such matter, question or dispute being referred to arbitration, but shall proceed with the works with all due diligence and shall until the decision of the Arbitrator or Arbitrators is given, abide by the decision of the Bank. No award of the Arbitrator or Arbitrators shall relieve the Contractor of his obligations to adhere strictly to the Bank's instructions with regard to the actual carrying out of the works. The Employer and the Contractor hereby also agree that arbitration under this clause shall be a condition precedent to any right of action under the contract.</p>
Right of Technical Scrutiny of Final Bill.	<p>36. The Employer shall have a right to cause a technical examination of the works by any of the persons or organization as appointed by the employer and the final bill of the Contractor including all supporting vouchers, abstracts, etc. If because of these examinations or otherwise any sum is found to have been overpaid or over certified it shall be lawful for the Employer to recovery the sum from any payment due to the Contractor for this works or any other works being carried out by the contractors elsewhere under the RESERVE BANK OF INDIA.</p>
Employer entitled to recover compensation paid to workmen.	<p>37. If, for any reason, the Employer is obliged, by virtue of the provisions of the Workmen's Compensation Act, 1923, or any statutory modification or re-enactment thereof to pay compensation to a workman employed by the Contractor in execution of the works, the Employer shall be entitled to recover from the Contractor the amount of compensation so paid, and without prejudice to the rights of the Employer under the said Act. The Employer shall be at liberty to recover such amount or any part thereof by deducting it form the security deposit or from any sum due by the Employer to the Contractor under this contract or otherwise. The Employer shall not be bound to contest any claim made against it under the said Act, except on the written request of the contractor and upon his giving to the Employer for all cost for which the Employer might become liable in consequence of contesting such claim.</p>
Abandonment of works.	<p>38. If at any time after the acceptance of the tender, the Employer shall for any reasons whatsoever not require the whole or any part of the works to be carried out, the Bank's Engineer shall give notice in writing to the Contractor who shall have no claim to any payment of compensation or otherwise whatsoever on account of any profit or advantage which he might have derived from the execution of the whole works.</p>
Right of Employer to terminate the contract in the event of death of contractor if individual	<p>39. Without prejudice to any of the right or remedies under this Contract, if the Contractor being an individual, dies, the Employer shall have the option of terminating the Contract without incurring any liability for such termination.</p>
Marginal Notes.	<p>40. The Marginal Notes and in the catch lines hereto and in the annexures hereto are meant only for convenience of reference and shall not in any way be taken into account in the interpretation of these present and the annexures hereto.</p>

## **SECTION – VI**

### **SPECIAL CONDITIONS OF THE CONTRACT (SCC)**

- 1) The work shall be carried out on the 1<sup>st</sup> Floor and Ground Floor of the Main Office Building of the Reserve Bank of India, Chennai - 600001 and hence it shall be ensured that the work is executed with least disturbance to the staff of the office along with the adherence of all security protocols.
- 2) Wherever contractors propose to use equivalent make, the same shall be done with prior approval of Banks Engineer in writing. Any additional expenditure and time due to this shall be solely on contractor's account and no claims whatsoever shall be entertained in this regard.
- 3) The contractor shall submit a properly planned & prepared work programme to the Bank before commencement of the work to enable the Bank to intimate other agencies in advance for smooth working, progress and coordination and the time schedule in the work programme should be strictly adhered to.
- 4) **3 months period** for completion of the work mentioned in the tender is inclusive of holidays, Sundays and Saturdays falling within in the contract period. However, if the Contractors wish to work on Saturdays / Sundays / beyond office hours of the Bank, they shall be permitted to work with prior permission of the Bank. The contractors shall comply with statutory requirements to work on holidays at their own risk & cost and indemnify the Bank for any risks associated with it.
- 5) The Contractors shall be responsible for safety & security of their materials / labour & fire safety at all the times as per the Safety & Fire Safety Codes provided hereof.
- 6) Mode of measurement shall be as prescribed in General Specification of Works. Wherever it is not specifically stated it shall be as per IS 1200.
- 7) The contractor shall furnish A-4 size, computerized sheets printed in the format of a conventional Measurement Book (MB), duly machine numbered pages and with a provision for inserting MB number. The contractors shall incorporate necessary corrections in these sheets as directed by Bank's Engineer. After incorporating the corrections, the contractor shall submit revised copies. All pages of the finalized, computerized MB sheets, after due check / test check measurements shall have full signature with date of the authorized official of the contractor. The measurement sheets approved as 'final' shall be bound in the form of a MB at the cost of the Contractor and submitted to the Bank.

### **Terms of payment**

- 8) Payment shall be made based on the progress of work and on completed items of work on the basis of standard measurements mentioned in the tender. There shall be interim Bills / RA Bills for completed works and each RA Bill shall be **₹10 lakh** as mentioned in the SOT. Advance for the work, materials to be purchased/ purchased shall not be paid.

9) The contractor shall use only approved brands of first quality materials as given in the Section VII-b. No claim of the contractor shall be entertained in this regard and the decision of the Bank's Engineer shall be final.

10) The bidders shall quote their rates taking in to account all the above instructions and all other conditions of the contract.

I /we hereby declare that I / we have read and understood the above instructions, terms and conditions, etc. provided for guidance of tenderers and have accordingly quoted my/our rates.

Place:

**Signature / Digital Signature of tenderer**

Date:

## **SECTION – VII a**

### **TECHNICAL SPECIFICATIONS**

#### **Introduction**

The technical specification of work covers execution and completion of the work of **Structural Strengthening of existing part slab area, providing heavy duty floor finish including ancillary civil works at 1st Floor of MOB, Chennai for providing new SBS (Shredding & Briquetting) machines.** in accordance with drawings (if any) and specifications prepared by the Bank's Engineer and to the satisfaction of the Bank's Engineer.

#### **7.1 Quality**

Materials to be used for the work shall confirm to relevant BIS Codes as far as procurable & best quality of their respective kinds as specified herein and shall be of approved make and shall comply strictly with the tests prescribed hereinafter or, where tests are not laid down, with the requirements of the latest edition of the relevant Indian standards approved by the Engineer.

#### **7.2 Inspection and testing**

Materials before used in the Works shall be subjected to inspection and testing as provided in the Conditions of Contract and elsewhere in the Specifications. The cost of all samples for all tests as per relevant Standards shall be deemed to be included in the Contract rates. No materials shall be used in the works unless they have first been approved by the Engineer or his representative.

#### **7.3 Samples**

Samples of all materials proposed to be used or incorporated in the works and to be supplied by the Contractor may be called for at any time by the Engineer or his Representative.

#### **7.4 Independent tests.**

Independent tests and analysis of any of the materials may be made from time to time by a Testing House or Analyst appointed by the Engineer / Employer in order to check the supplier's works tests and analysis. The frequency, the procedure for the testing and acceptance criteria will be as stated in the respective I S codes. The contractor shall at his own expenses supply and deliver to a Testing House or Analyst such materials as may be directed by the Engineer. Should the result of any test be unsatisfactory to the Engineer or his representative, the materials represented will be rejected. The testing of material (Third Party Test) shall be carried out through a Government / Approved Laboratory and the testing charges, as per actuals shall be reimbursed by the Bank on production of vouchers / paid receipt.

Wherever testing facilities are not available in India, the contractors shall submit the manufacturers' batch test certificates of the batch of material(s) used in the work.

#### **7.5.1 Dismantling and removing the existing flooring, screed concrete and filling in the sunken / raised portions in the bathroom and toilet:**

##### **a) Scope of work under this item.**

The scope of work under this item is for carefully dismantling and removing the existing ceramic tile / Kota / Kadapa / Granite slab flooring along with, bed mortar & screed concrete below and filling in the sunken portions, to expose the R.C.C slab below and masonry / R.C.C walls on the sides of the sunken portions, shifting and stacking the salvageable materials removed at location(s) shown by the Bank's Engineer within the Bank's Premises. The scope of work shall also include, disposing off the debris and



non-salvageable items and carting them away from the Bank's premises etc. Approximate average quantity of the portions to be dismantled:

- i) SBS machine area - 65 Cum
- ii) Select columns - 0.10 Cum
- iii) Sunken / raised portion removal for the area of the Bathroom - 1.90 Cum

**b) Mode of measurement.**

The item shall be considered as 1 Job and shall be paid for as one L.S amount. No deductions shall be made, and no additional payment shall be made for variation in quantity. Bidders shall inspect the site and measure / assess the actual quantity, if so required, before quoting the rate. The finishes such as wall dado, plaster etc., over the surfaces of the floor / slab shall not be measured under any other items and is deemed to be included in this item of dismantling.

## **7.5.2 FORM WORK / SHUTTERING**

**a) General**

The form work shall consist of shores, bracings, sides of beams and columns, bottom of slabs etc. including ties, anchors, hangers, inserts etc. complete which shall be properly designed and planned for the work. The false work shall be so constructed that up and down vertical adjustment can be made smoothly. Wedges may be used at the top or bottom of timber shores, but not at both ends, to facilitate vertical adjustment or dismantling of form work.

**b) Design of Form Work**

The design and engineering of form work (if any) as well as its construction shall be the responsibility of Contractor. If so instructed, the drawings and calculations for the design of the form work shall be submitted well in advance to the Engineer-in-Charge for approval before proceeding with work, at no extra cost to the Bank. Engineer-in-Charges approval shall not however, relieve Contractor of the full responsibility for the design and construction of the form work. The design shall take into account all the loads vertical as well as lateral that the forms will be carrying including live and vibration loadings.

**c) Tolerances**

Tolerances are a specified permissible variation from lines, grade or dimensions given in drawings. No tolerances specified for horizontal or vertical building lines or footings shall be constructed to permit encroachment beyond the legal boundaries.

**d) Type of Formwork**

**(i) General**

Form work may be of timber, plywood, metal, plastic or concrete. For special finishes, the formwork may be lined with plywood, steel sheets, oil tempered hard board etc. Sliding forms and slip forms may be used with the approval of Engineer-in-Charge. Forms shall conform to the shapes, lines, grades and dimensions including camber of the concrete as called for in the drawings. Ample studs, waler braces, straps, shores etc. shall be used to hold the forms in proper position without any distortion whatsoever until the concrete has set sufficiently to permit removal of forms. Forms shall be strong enough to permit the use of immersion vibrators. In special cases, from vibrators may also be used. The shuttering shall be close boarded. Timber shall be well seasoned, free from sap, shakes, loose knots, worm holes, warps or other surface defects in contact with concrete. Faces coming in contact with concrete shall be free from adhering grout, plaster, paint, projecting nails, splits or other defects. Joints shall be sufficiently tight to prevent loss of water and fine material from concrete.

**(ii) Plywood:**

Plywood shall be used for exposed concrete surfaces, where called for. Sawn and wrought timber may be used for unexposed surfaces. Inside faces of forms for concrete surfaces which are to be rubbed finished shall be planed to remove irregularities or unevenness in the face. Form work with lining will be permitted.

All new and used form lumber / plywood shall be maintained in a good condition with respect to shape, strength, rigidity, water tightness, smoothness and cleanliness of surfaces. Form lumber unsatisfactory in any respect shall not be used and if rejected by Engineer-in-Charge shall be removed from the site.

Formwork, during any stage of construction showing signs of distortion or distorted to such a degree that the intended concrete work will not conform to the exact contours indicated on the drawings, shall be repositioned and strengthened. Poured concrete affected by the faulty formwork, shall be entirely removed and the formwork corrected prior to placing new concrete.

As an alternate the contractor may also use steel formwork the exposed concrete surfaces.

**e) Other important aspects**

Forms shall be so designed and constructed, if directed by Engineer-in-Charge, that they can be stripped in the order required and their removal do not damage the concrete. Face formwork shall provide true vertical and horizontal joints, conforming to the architectural features of the structure / slab as to location of joints and be as directed by Engineer-in-Charge.

Where exposed smooth or rubbed concrete finishes are required, the forms shall be constructed with special care so that the desired concrete surfaces could be obtained which require a minimum finish.

Forms shall not be removed from freshly placed concrete until it has set, or at least 12 hours, or as time as per the specifications mentioned by the Manufacturer towards micro concrete whichever is later. They shall be carefully removed in such a manner that no damage is done to the edges of the pavement. After the forms have been removed, the slab edges shall be cleaned and **any limited honey-combed areas pointed up with 1:4 cement and sand mortar**, after which the sides of the slab shall be covered with wet hessian for curing all at Contractor's own expenses. Slabs with excessive honeycombing as a result of inadequate compaction shall be removed up to the nearest transverse joints.

The supply of forms shall be sufficient to permit their remaining in place for minimum 12 hours after the concrete has been placed. Any unevenness in the form work particularly the top will affect riding quality. After removing the form, the edge shall be protected from damage till concrete attains enough strength.

**f) Setting of Forms:**

The forms shall be jointed neatly and shall be set with exactness to be required grade and alignment. Both before and after the forms are placed and set, the sub-base under the forms shall be thoroughly tamped in an approved manner. Sufficient rigidity shall be obtained to support the forms in such a position that during the entire operation of compacting and finishing of concrete they shall not at any time deviate more than 2 mm from a straight edge 3 m in length. Forms which show a variation from the required rigidity or alignment and levels shown in the drawing, shall be reset or removed, as directed. The length and number of stakes shall be such as to maintain the forms at the correct line and grade. All forms shall be cleaned and oiled each time before they are used. Forms shall be set ahead of the actual placing of concrete for the entire day's work.

**g) Removal of Forms**

Contractors shall record on the drawings or a special register, the date upon which the concrete is placed in each part of the work and the date on which the shuttering / form work is removed there from. In no circumstances shall forms be struck until the concrete reaches a strength of the at least twice the stress due to self-weight and any construction erection loading to which the concrete / micro concrete may be subjected at the time of striking formwork with the approval of Engineer-in-Charge.

**h) Reuse of Forms:**

Before reuse, all forms shall be thoroughly scraped, cleaned, nails removed, holes that may leak suitably plugged and joints examined and when necessary repaired and the inside retreated to prevent adhesion, to the satisfaction of Engineer-in-charge. Warped lumber shall be resized. Contractor shall equip himself with enough shuttering to complete the job in the stipulated time.

**i) Method of measurement for form work:**

Unless specified in the BOQ / SOQ no separate measurement for formwork will be taken including battens, screws, nails etc.,

**j) Rate**

The rate for formwork shall be included in the quoted concrete rate. No separate payment shall be made for formwork provided.

The form work shall also include the following:

- ✓ Splayed edges, notching, allowance for overlaps and passing at angles, sheathing battens, strutting, bolting, nailing, wedging, easing, striking and removal.
- ✓ All supports, struts, braces, wedges as well as mud sills, piles or other suitable arrangements to support the form work.
- ✓ Bolts, wire, ties, clamps, spreaders, nails or any other items to hold the sheathing together and Dressing with oil to prevent adhesion.
- ✓ Erecting, centering, oiling, shuttering materials, transport, de-shuttering and removal of materials from site and labour required for all such operations etc.

**7.5.3 READY MIX CONCRETE (RMC)**

Generally, Ready Mix Concrete shall conform to latest revision of IS: 4926. Further the following are the requirements for supply of RMC for the proposed work.

**a) General**

For concreting of the slab and column / stub column, only Ready-Mix Concrete (RMC) manufactured at the approved RMC plant, where batching is done by automation, shall only be used. The mix design specified in the schedule of quantities and approved by Engineer-in-Charge shall only be used for the proposed work. If directed by the Engineer-in-Charge the Contractor, shall mandatorily arrange for the supply of mix design details in advance before start of actual concreting works.

It shall be the responsibility of the contractor to assess and procure the quantity of RMC required for the proposed work including wastages (if any).

Site mixed concrete for very limited quantity where procurement of RMC is not feasible shall be permitted. However, in case of site mixed concrete, permission from Engineer-in-Charge shall be taken prior to commencement of the batching of concrete. The batching of concrete of such concrete shall confirm to the mix design submitted (excepting with the approval of Engineer-in-Charge, where admixture of approved make and manufacturer shall be used).

**b) Transporting, placing, compacting and curing**

Transporting, placing, compacting and curing of RMC concrete shall be in accordance with IS: 456-2000.

**(i) Transporting**

For all RMC Concreting, the concrete after discharge from batching plant and loaded in transit mixers shall be kept continuously agitated while mix is in transit. At destination the mix shall be unloaded into the hoppers of concrete pump.

**(ii) Placing**

The concrete shall be placed at the required location at any height via pump machine, pipe and chute arrangement. The pump machine shall ensure that the RMC be kept continuously agitated till pumping is done to the destination placing point. Manually placing of the concrete by using rakers, etc., shall be done at the end of the chute to spread the Concrete to a uniform thickness. The height of any single lift of concrete shall not exceed 1.5m. For places where the height of pour is more than 1.5m, suitable arrangement shall be made so that segregation and bleeding is avoided. However, any such arrangement should be approved by Engineer-in-Charge.

Each batch of concrete shall be placed in layers. Each layer of concrete shall be compacted fully. Concreting of any portion or section of work shall be carried out in one continuous operation and no interruption of concreting work will be allowed without approval of Engineer-in-Charge. Approved methods / means shall be undertaken by the contractor to protect immature concrete damage by debris, excessive loading, abrasion, vibrations, deleterious ground water, mixing with earth and other materials and other influences, that may impair strength and durability of concreting.

Before starting of placing of concrete contractor will get the concrete pouring programme / planning and its sequence approved by Engineer-in-Charge to avoid any cold joints.

**(iii) Compaction**

External (or) Internal (needle) (or) surface (screed board) vibrators as approved by the Engineer-in-Charge shall be used for compaction of concrete, depending on the thickness of layer to be compacted. As a generally rule of thumb, 40mm dia internal needle type vibrators may be used for the proposed work.

The concrete shall be compacted by use of appropriate diameter vibrator by holding the vibrator in position until:

- a) Air bubble cease to come to surface.
- b) Resumption of steady frequency of vibrator after short period of dropping the frequency, when the vibrator is first inserted.
- c) The tone of the vibrator becomes uniform.

After the compaction is completed, the vibrator should be withdrawn slowly from the concrete so that concrete can flow into the space previously occupied by the vibrator. To avoid segregation during vibration, the vibrator shall only be used in an up and down motion and not be dragged through the concrete nor used to spread the concrete. The vibrator shall be made to penetrate into the entire layer of fresh concrete (upto a maximum depth of 150mm). The vibrator shall be made to operate at regular pattern of spacing to ensure complete compaction.

To secure even and dense surfaces free from aggregate pockets, vibration shall be supplemented by tamping or rodding by hand in the corners of forms and along the form surface while the concrete is plastic.

It shall be the responsibility of the contractor to have sufficient number of spare vibrators kept readily available and accessible to the place of deposition of concrete to assure adequate vibration in case of breakdown of those in use.

Plain concrete also shall be vibrated whenever and wherever directed by Engineer-in-Charge to achieve full compaction, using needle vibrator and screed vibrators as necessary.

#### **(iv) Curing**

Curing shall be started at the earliest by spreading wet jute cloth (hessian) and cover top with impervious sheet and subsequently cured with spraying water. Also, curing by ponding of water and replenishing water as required may also be adopted. In inaccessible area to start with, curing be started by spraying curing compound before starting membrane curing.

The contractor shall deploy necessary skilled manpower towards entire concreting work.

#### **(v) Placing temperatures**

During extreme hot weather, the concreting shall be done as per procedures set out in IS:7861, parts I & II.

The placing temperature of concrete shall be as low as possible in warm weather and care shall be taken to protect freshly placed concrete from overheating by sunlight in first few hours of its laying. The time of day selected for concreting shall be chosen so as to minimize placing temperatures before concreting work commences. Any extra cost so as to minimize placing temperatures (like adding ice flakes, blocks) shall be borne by the contractor only.

#### **(vi) Defective concrete**

Should any concrete be found honey combed or in any way defective as in the opinion of the Engineer-in-Charge, such concrete shall on the instruction of the Engineer-in-Charge be cut out / demolished by the contractor and made good at his own expense.

#### **(c) Construction Joints / Cold Joints**

Construction joints / Cold Joints in all concrete work shall be avoided or shall be specifically made to the required slope as directed by Engineer-in-Charge. Where vertical joints are required, these shall be shuttered as directed and not allowed to take the natural slope of the concrete.

Before fresh concrete is placed against a vertical joint, the old concrete shall be chipped / sand blasted, cleaned and moistened 24 hours before placing the new concrete. All standing water should be removed and dried with compressor air. Neat cement slurry mixed with polymer modification shall be applied on the chipped/ sand blasted surface and mortar of the same water cement ratio as the concrete and 10mm thick applied. Where required suitable expansion joints shall also be provided as directed by the Engineer-in-Charge.

#### **(d) Exposed Faces, Holes and Fixtures**

On no account shall concrete surfaces be patched or covered up or damaged concrete rectified or replaced until the Engineer-in-Charge has inspected the works and issue written instructions for rectification. Failure to observe this procedure will render that portion of the works liable to rejection; in which case it shall be treated as a work which has failed to meet specified strength requirements.

Holes required in filler boards etc., for embedding the dowels, tie bars, reinforcement etc., shall be done according to the drawing (if any) or as instructed by the Engineer-in-Charge.



**(e) Cracks**

If cracks develop in the concrete construction which in the opinion of the Engineer-in-Charge may be detrimental to the strength of the construction, the contractor at his own expense shall test the slab, column, beams etc... If under such tests and test loads imposed the cracks develop further, the contractor shall dismantle the construction / part construction, carry away debris, replace the construction and carry out all consequential works thereto, without any extra payment.

If any cracks develop in the concrete construction, which in the opinion of the Engineer-in-Charge are not detrimental to the strength of the construction, the contractor at his own expense shall grout the cracks with **polymer cement grout** of approved make and manufacturer and as approved by Engineer-in-Charge at his own expense and risk and shall make good to the satisfaction of the Engineer-in-Charge the surface finish which in the opinion of the Engineer-in-Charge has suffered damage either in appearance or stability owing to such cracks. The decision of the Engineer-in-Charge as to the extent of the liability of the Contractor in the above matter shall be final and binding.

**(f) Submission of documents of RMC manufacturer**

Following document shall be submitted by the contractor from the approved RMC manufacturer to Bank

- 1) Design Mix (M-30 grade)
- 2) Manufacturer's Test certificate for cement and plasticizer.
- 3) Lab test certificates for all ingredient of concrete.
- 4) Delivery docket / challan sheet mentioning the grade of concrete, quality of ingredient used, slump, transit mixer vehicle no. placement location, time of concrete production and placing etc..

**(g) Pumping Operations of concrete.**

The pump wherever used should be as near the placing area as practicable, and the entire surrounding area shall have adequate bearing strength to support concrete delivery pipes. Chute Lines from pump to placing area should be laid out with a minimum of bends. Standby power and pumping equipment should be provided to replace initial equipment, should breakdown occur.

The placing rate should be estimated so that concrete can be ordered at an appropriate delivery rate.

As a final check, the pump should be started and operated without concrete to be certain that all moving parts are operating properly. A grout mortar should be pumped into the lines to provide lubrication for the concrete, but this mortar shall not be used in placement.

When the form is nearly full and there is enough concrete in the line to complete the placement, the pump shall be stopped and a conical go-devil inserted and shall be forced through the line by water under pressure to clean it out. The go-devil should be stopped at a safe distance from the end of the line so that the water in the line will not spill into the placement area. At the end of placing operation, the line shall be cleaned in reverse operation.

Any excess grout mortar/ plump concrete etc., left at placement area or other areas at site, while concreting shall be cleared off by the contractor at this own cost.

**(h) Programme Planning for the Concreting works**

Proper planning of concrete supply, pump locations, line layout, placing sequence and the entire pumping operation shall be made in advance by Contractor and informed to the Engineer-in-Charge. The concrete production, transportation and placing shall be planned in such a manner that duration between addition of water during mixing and

placing of concrete in desired location is well within time limits prescribed by the RMC manufacturer, however this is subjected to fulfillment of slump and other properties of concrete as specified elsewhere in the tender or as approved by the Engineer-in-Charge at the time of approval of design mix. On failure to adhere to time schedule by the supplier the Engineer-in-Charge may reject the concrete.

**(j) Mode of measurement for Ready Mixed Concrete (RMC) supplied**

**(i) General**

Concrete Work as actually done shall be measured for payment, subject to the tolerances unless otherwise stated hereinafter. Any work done extra over the specified dimensions shall not be measured for payment.

- a) Linear dimensions shall be measured in full centimetres except for the thickness of slab which shall be measured to the nearest half centimetre.
- b) Areas shall be worked out to the nearest 0.01 sqm.
- c) Cubic contents shall be worked out to the nearest 0.01 cum.

**(ii) Deductions**

No deductions shall be made for the following:

- a) Ends of dissimilar materials e.g., joists, beams, posts, girders, rafters, purlins, trusses, corbels, steps etc. upto 500 sq cm. in cross section.
- b) Opening upto 0.1 sqm. (1000 sq cm)
- c) Volume occupied by reinforcement.
- d) Volume occupied by pipes, conduits, sheathing etc. not exceeding 25 sq cm. each in cross sectional area. Nothing extra shall be paid for leaving and finishing such cavities and holes

**(iii) Delivery Docket / Challan Information for RMC Truck**

- I. The following information, list not exhaustive, shall be included in the delivery ticket to accompany the load / truck of RMC by the contractor to the Bank:

- (a) Name or number of the ready-mixed concrete depot
- (b) Serial number of the ticket
- (c) Date
- (d) Truck number
- (e) Name of the Purchaser
- (f) Name and location of site
- (g) Grade or mix description of the concrete
- (h) Specified target workability
- (i) Minimum cement content (if specified)
- (j) Type of cement and grade (if specified)
- (k) Maximum free water-cement ratio (if specified)
- (l) Nominal maximum size of aggregate
- (m) Generic Type or name of any chemical and mineral admixtures included.
- (n) Quantity of concrete in Cu.m
- (o) Time of loading
- (p) Signature of the plant operator

- II. On site the following information shall be added:

- (a) Time of arrival on site.
- (b) Time when discharge was completed.
- (c) Any water/admixture added by the supplier to meet the specified workability.
- (d) Any extra water /admixture added at the request of the Engineer-in-Charge of the concrete, or his representative, and his signature.
- (e) Pouring location.

(f) Signature of the Engineer-in-Charge or his representative conforming discharge of the load.

**(k) Method of measurement for payment**

Measurement Quantity of concrete (either hand mixed or RMC) shall be in Cubic meter (cum) i.e length x width x thickness of Slab / Beam / Column casted shall be measured as per the final finished surfaces to a proper gradient and alignment at site computed on the basis of length, width and thickness.

Excess/less cement used for design mix is payable/recoverable separately.

Wastage, spillover, wastage due to pump blockage etc. shall not be considered for payment.

No claim by contractor would be entertained based on Quantity of concrete in Cubic meter (cum) delivered at site based on RMC delivery docket / challan.

Rejected concrete shall not be paid and no claim by contractor would be entertained on this regard.

**(m) Rate**

The rate is inclusive of the cost of labour and materials involved in all the operations as described above. Rate shall include slump cone test of concrete as directed by Engineer-in-Charge.

**(n) CUBE TEST for compressive strength of concrete (M-30 grade) - Mandatory lab test at NABL accredited laboratory.**

One sample (consisting of three cubes 15x15x15 cm shall be taken for every **20 cum** or **as often as considered necessary by the Engineer-in-Charge**. The test of concrete cubes shall be carried out in accordance with relevant IS Codal provisions. Test shall be carried out on concrete at 28 days. However, if the Engineer-in-Charge directs the contractor to conduct any additional tests for compressive strength at 7 days, the contractor shall execute the same. A register of cubes shall be maintained at the site of work. The casting of cubes, concrete used for cubes and all other incidental charge, such as curing, carriage to the testing laboratory shall be borne by the contractors. **The testing fee** for the cubes, if any, shall be reimbursed separately by the Bank against the receipts of original test cost.

**(p) ACCEPTANCE CRITERIA - 28 days' Test**

(a) The average of the strength of three specimen (called as accepted sample) be accepted as the compressive strength of the concrete provided the strength of any individual cube shall neither be less than 70% nor higher than 130% of the specified strength.

(b) If the actual average strength of accepted sample is less than specified strength but not less than 70% of the specified strength, the concrete may be accepted at reduced rate at the discretion of Engineer-in-Charge.

(c) If the actual average strength of accepted sample is less than 70% of specified strength, the Engineer-in-Charge shall reject the defective portion of work represented by sample and nothing shall be paid for the rejected work. Remedial measures necessary to restore the PQC (pavement quality slab) shall be taken at the risk and cost of contractor. Further, the Engineer-in-Charge may also order additional tests (tests like Rebound Hammer, compressive strength from cylindrical core extracted etc.,) to be carried out to ascertain if the strength has been achieved. All the charges in connection with these additional tests shall be borne by the contractor only.



#### **7.5.4 FINISHING CONCRETE SLAB BY VACUUM DEWATERING METHOD**

##### **a) Scope of work**

Vacuum dewatering method shall be used to remove excess water from the laid concrete and filter pad and suction mat shall be laid on the freshly laid concrete which will not allow cement paste to flow out, and the suction pump are then started immediately to remove the excess water.

The suction time shall normally be 20 to 30 minutes or as directed by the Engineer-in-Charge thus enabling removal of 15 to 25% of water content and making the surface hard enough to enable to carry the floating operation.

The top surface after removal of mat shall be floated with a mechanical skim floater with trowelling blade to enable the top surface to grind and give a uniform water resistance surface on top.

Under no circumstances neat cement be sprinkled directly on concrete surface to absorb bleed water as surface scaling may occur later.

Similarly, water should not be applied between trowelling operations as it may cause surface weakness. Minimum two passes shall be carried out. The surface shall then be watered and cured.

##### **b) Method of measurement for VDF**

Unless otherwise specified, no separate measurement is considered for VDF and is deemed to be included in the RMC concrete measurement.

##### **c) Rate**

The rate quoted for RMC concrete mentioned herein is deemed to include the rate for providing VDF flooring. Also, the rate is inclusive of the cost of labour and materials, power trowels involved in all the operations as described above.

#### **7.5.5 MICRO CONCRETE**

##### **a) Scope of the work under this item**

Supplying, providing and casting ready to use free-flowing non-shrink cementitious 'Micro Concrete' of atleast M30 grade (i.e, compressive strength of concrete at 28 days to be 30 MPa) of approved make and manufacturer and as per the manufacturers specification for casting / repairing the structural elements like RCC column for thickness of upto 150mm complete and as per the directions of the Engineer-in-Charge. The micro concrete shall be mixed with aggregates of 10mm and downsize and cast in place. The mixing of the micro concrete shall be strictly in accordance with the manufacturers specifications and mixing shall be carried with electrical mixer with required RPM only.

##### **b) Method of Measurements of Micro concrete**

The amount of Micro concrete cast / poured in place shall be measured by the actual number of Bags (in Kgs) used for the repair work. The same shall be checked with the theoretical consumption in terms of number of Bags of the Micro concrete based on the actual volume of the repair carried out to the nearest integer and theoretical density of the micro concrete. The lower of the two shall be considered towards measurement of Micro concrete.

##### **c) Rates for Micro concrete**

The rate shall include the cost of all materials and labour required for all above operations including chipping unsound concrete, cleaning of transport, wastage, placing, pouring the Micro concrete etc.,

**Note:**

1) Cost of shuttering, Cost of centering and propping with steel / timber members shall be deemed to be considered under the rate quoted for this item. No extra claim shall be entertained.

## **7.5.6 REINFORCEMENT**

### **a) Scope of work under this item**

The scope of work of work under this item is for providing, cutting, straightening, bending, fabricating and placing in position approved make and quality TMT / HYSD steel reinforcement of various diameters with yield stress not less than Fe-500 and conforming to IS-1786, for the structural strengthening of the slab.

### **b) Steel**

Mild steel, rounds conforming to IS: 432, HYSD bars conforming to IS: 1139, Cold twisted bars conforming to IS: 1786. Any other steel specified for reinforcement shall conform in every respect to the latest relevant Indian Standard Specifications and shall be of tested quality under the ISI Certification scheme. In case of epoxy coated rebars, the same shall conform to IS 13620. Manufacturers certificate shall be produced for epoxy coated rebars.

All reinforcing work for concrete work shall be executed in conformity with the drawings supplied and instructions given by the Engineer and shall be generally carried out in accordance with the relevant Indian Standard Specifications.

### **c) Inspection and Testing**

Every bar shall be inspected before assembling on the works and any defective, brittle, excessive rusted or burnt bars shall be removed. Cracked ends of bars shall be cut out.

If directed by the Engineer-in-Charge, specimens sufficient for three Tensile Tests per 20 tonnes of bars and for each different size shall be sampled and tested by the contractor. Batches shall be rejected if the average results of each batch are not in accordance with the specifications.

Further material test certificate for the bars shall be submitted.

### **d) Lapping and splicing**

Laps and splices for reinforcement shall be shown on the drawings. As far as possible bars of the maximum length available shall be used. Laps shown on drawings or otherwise specified by the Engineer-in-Charge will be based on the use by the contractor of bars of maximum length. In case the contractor wishes to use shorter bars, laps shall be provided at the contractors cost in the manner and location approved by engineer.

Only authorized laps shall be measured and paid.

Splices in adjacent bars shall be staggered and the locations of all splices, except those specified on the drawings, shall be approved by the Engineer-in-Charge.

### **e) Spacing, supporting and Cleaning**

1) All reinforcement shall be placed and maintained in the position shown on the drawing.

2) Contractor shall provide approved type supports as specified on the drawings / approved by the Engineer-in-Charge for maintaining the top bars of the slab in position during concreting. All cover blocks shall be concrete (not cement mortar) and of the same strength as that of the surrounding concrete and properly compacted.

3) 18 SWG G.I. wire shall be used as binding wire. All bars crossing one another shall be bound with this wire twisted tight to make the skeleton or network rigid so that the reinforcement is not displaced during placing of concrete.

4) Bars must be cleaned before concreting commences of all scales, rust or partially set concrete which may have been deposited during placing of concrete in previous lift of concrete.

The bars shall be cleaned with dry gunny bags if they are coated lightly with rust or other impurities. On no account shall the bars be oiled or painted no shall mould oil used on the framework be allowed to come in contact with the bars. Cement wash to bars shall not be permitted.

#### **f) Stacking & Storage**

Steel for reinforcement shall be stored in such a way as to prevent distorting and corrosion. The steel for reinforcement shall not be kept in direct contact with ground. Fresh / Fabricated reinforcement shall be carefully stored to prevent damage, distortion, corrosion and deteriorations. Care shall be taken to protect steel from exposure to saline atmosphere during storage, fabrication and use. It may be achieved by treating the surface of reinforcement with cement wash or by suitable methods. Bars of different classifications, sizes and lengths shall be stored separately to facilitate issue in such sizes and lengths to cause minimum wastage in cutting from standard length.

#### **g) Quality**

Steel not conforming to specifications shall be rejected. All reinforcement shall be clean, free from grease, oil, paint, dirt, loose mill, scale, loose rust, dust, bituminous material or any other substances that will destroy or reduce the bond. All rods shall be thoroughly cleaned before being fabricated. Pitted and defective rods shall not be used. All bars shall be rigidly held in position before concreting. No welding of rods to obtain continuity shall be allowed unless approved by the Engineer-in-Charge. If welding is approved, the work shall be carried as per I.S. 2751, according to best modern practices and as directed by the Engineer-in-Charge. In all cases of important connections, tests shall be made to prove that the joints are of the full strength of bars welded. Substitution of reinforcement will not be permitted except upon written approval from Engineer-in-charge.

#### **h) Bending**

All bars shall be accurately bent according to the sizes and shapes shown on the detailed working drawing / bar bending schedules. They shall be bent gradually by machine or other approved means. Reinforcing bars shall not be straightened and re-bent in a manner that will injure the materials. Bars containing cracks or splits shall be rejected. They shall be bent cold, except bars of over 25 mm. in diameter which may be bent hot if specifically approved by the Engineer-in-Charge. Bars incorrectly bent shall be used only after straightening and re-bending be such as shall not, in the opinion of the Engineer-in-Charge, injure the material. No reinforcement bar shall be bent when in position in the work without approval, whether or not it is partially embedded in hardened concrete. Bars having kinks or bends other than those required by design shall not be used.

**i) Bending at Construction Joints:**

Where reinforcement bars are bent aside at construction joints and afterwards bent back into their original position, care should be taken to ensure that at no time the radius of the bend is less than 4 bar diameters for plain mild steel or 6 bar diameters for deformed bars. Care shall also be taken when bending back bars to ensure that the concrete around the bar is not damaged.

**j) Method of measurement for reinforcement for Reinforcement works:**

The total weight of steel in Kgs for each diameter shall be for the quantity mentioned in the Schedule of Quantities / drawings (if, any) or as instructed by Engineer-in-Charge and shall also include stirrups, ties, spacer bars, chairs and any other steel works specified as reinforcements but excluding welding and cover blocks. Only authorized laps, hooks as specified in the drawing / schedule of quantities or as instructed by the Engineer-in-charge shall be paid for. Any laps and hooks provided by the contractor other than authorised as per approved bar bending schedule / instructions of the Engineer-in-Charge will be considered to have been provided by the contractor for his own convenience and shall not be measured for payment.

Reinforcement as detailed in schedule of quantities / as executed on approved laps by the Engineer-in-Charge shall be measured for payment, by measuring the provided reinforcement linearly as per the cutting length nearest to a centimetre shown in bar bending schedule submitted by the contractor / as approved by the Engineer-in-Charge and weight calculated based on the standard weights as per IS1786, as indicated in the following table:

Nominal size in mm	6	8	10	12	16	20
Cross Sectional area in mm <sup>2</sup> .	28.30	50.30	78.60	113.10	201.20	314.00
Mass / Weight in Kg / RM	0.222	0.395	0.617	0.888	1.580	2.470

No allowance shall be made/ be measured in the weight for rolling margin. If weight of bar(s) found to be more than the standard weights, the measurement / payment shall be restricted to the standard weights as above.

The cost of steel used by the contractor in the reinforcement of slabs, beams, columns etc. will be paid as per the contract rate of reinforcement quoted only upto the extent shown in the drawings.

Pins, chairs, spacers shall be provided by the contractor wherever required as per drawing and bar bending schedule and as directed by the Engineer-in-Charge and shall be measured for payment.

**Note:**

The rate quoted shall include the cost of all materials and labour required for all above operations including transport, wastage, straightening, cutting, bending, binding and the binding wire required.

**k) Rate**

The rate quoted for steel work shall be inclusive of the cost of labour and materials, involved in all the operations as described above.

**7.5.7 SUPPLYING AND PROVIDING HEAVY DUTY FLOOR FINISH****a) Scope of work under this item**

The scope of work of work under this item is for supplying and providing heavy duty UCRETE floor finish over the newly laid slab as mentioned herein.

**b) Prerequisites of underlying base substrate.**

The substrate must be structurally stable under all operating conditions likely to be encountered. If directed by the Engineer-in-Charge, a Moisture barrier membrane (LDPE/HDPE Sheet of minimum 300 microns) shall be laid, where rising moisture may cause a de-lamination of the UCRETE flooring from concrete. No extra cost shall be claimed by the contractor on this account.

The substrate concrete shall have minimum adhesive tensile (pull-off) strength of 1.5 N/mm<sup>2</sup> to ensure that failure of the substrate does not occur before acceptable bond stress has been reached. Also, Minimum compressive strength of the concrete substrate shall be 25 N/mm<sup>2</sup> of the concrete substrate.

**c) Preparation of the substrate**

In order to produce the good bond between the substrate and the floor topping the substrate shall be prepared by mechanical means using a scarifier. Scarification shall be done in both horizontal and vertical directions. Vacuum attached surface preparatory equipment (scarifier) shall be used to control generation of dust, which shall be collected in the dust holding vessel & emptied regularly. After substrate preparation by mechanical means is over, the surface should be inspected to measure surface soundness. Any weak or suspect patches must be removed. Surface defects exposed during surface preparation such as shrinkage cracks, blow holes, minor honey combing, minor damage to joint etc. shall be opened & filled with heavy duty floor topping of approved make and manufacturer. Concrete bases should allow for the provision of movement joints. All expansion joints that are formed in the floor base must be carried through the floor topping. All control & construction joints must be cut open & filled with heavy duty floor topping of approved make and manufacturer prior to the application of Top coat.

**d) Anchor Grooves**

Over the prepared substrate grooves shall be cut at a distance of every 2m X 2m of 8mm X 8mm size. This will create an extra anchoring of the UCRETE on to the substrate.

Further, Grooves must be present in the surface of the concrete within 75 mm of all 'free edges', these may be cast into the surface or cut subsequently. 'Free Edges' includes all joints.

To control dust generations during the groove cutting vacuum attached floor chase equipment shall be used. Concrete and other cementitious substrate must be visibly dry before application of the floor topping.

**e) Mixing of UCRETE**

A forced action mixer is to be used, e.g. Collomatic mixer or slow speed drill machine with helical paddle. Only whole units are to be mixed. Nothing is to be added or left out. The mix time may be varied depending on temperature. Mixing of the chemicals shall be as per the manufacture's specification.

**f) Installation of UCRETE Flooring**

The Ideal application temperatures are 16 degree C to 30 degree C. At the ideal temperatures Priming / scratch coat of 1mm thickness shall be applied. Priming or scratch coat prevents air rising from the substrate (which could result in surface defects) and stops resin being sucked into the substrate concrete so facilitating application and producing a more even surface finish. Typical overlay time over scratch coat shall be 16hrs at 20degree C - 25 degree C (it is required that the scratch coat be cured and not be soft before topping installation). However, the over coating

time shall not exceed 48 hrs, in which case, the surface would have to be lightly grinded and reapplied a scratch coat.

The heavy duty floor is then laid at 3 mm with a wet front maintained throughout. The mixed SIKA UCRETE MF is spread to the required thickness with steel trowel. A spiked roller should be passed through the material to assist flow and release any air inclusions. The roller should be pushed not more than 10 cm into the previous mix.

**g) Post Installation**

No Building Trades or traffic to be allowed on to the freshly laid UCRETE for at least 24 hours at 15 °C to 20 °C, longer at lower temperatures.

After application of the floor topping, UCRETE should be allowed to cure 24 hours prior to expose to light traffic, 48 hours prior to expose to full traffic & 7 days for full chemical resistance.

### **7.5.8 REPAIRS TO DAMAGED R.C.C MEMBERS AT ALL LEVELS AND HEIGHTS:**

#### **a) Scope of work under this item.**

The scope of work of work under this item is for providing and repairing the damaged R.C.C members like columns, roof slabs, beams, sill slabs of windows, lintels etc, comprising the following:

i. Carefully dismantling and removing the loose / spalled plaster & concrete to expose the intact surfaces of the R.C.C members / corroded reinforcement bars, using hammer and chisel or any other approved methods in geometric shapes and atleast to a depth of 10mm all round so as to avoid featheredging, thoroughly cleaning the exposed surfaces of R.C.C members using clean water, wire brush etc, as directed by the Bank's Engineer.

ii. Thoroughly cleaning the corroded reinforcements including removing the rust scales using chisel, hammer and approved quality and make rust removing solutions / chemicals, used as per manufacturers' specifications, providing and applying a coat of approved make, two components, solvent borne zinc rich epoxy primer / corrosion passivator (Master Emaco P 130 of Master Builders Solutions Limited / Nitozinc Primer Fosroc Chemicals (India) Limited / Dr. Fixit Epoxy Rich Zinc Primer of Pidilite Industries Limited or approved equivalent) for the exposed surfaces of the steel reinforcements as per manufacturer's specifications and as directed by the Bank's Engineer.

iii. Providing and rendering shrinkage compensated / controlled, polymer modified, fibre reinforced, cementitious, ready to use, trowelable structural repair mortar of approved make and brand (Master Emaco S 348 of Master Builders Solutions Limited / Rendroc SP40 of Fosroc Chemicals (India) Limited / Dr. Fixit Polymer Mortar HB of Pidilite Industries Limited or approved equivalent), used as per manufacturers' specifications, for an average thickness of up to 20 mm, to repair / re-habilitate the damaged R.C.C members true to plumb, line and level to make them up to the original shape & size of the members, after preparing the surface of the members to be repaired as per manufacturer's specification and as directed by Banks Engineer. If the average thickness of mortar exceeds 20 mm, it shall be done in layers and each subsequent layers of mortar as per the specifications above, shall be rendered (which shall be measured separately under item No. 7.5.8 below), after proper curing of the previous layer(s), all as directed by the Bank's Engineer.

iv. Necessary scaffolding, curing, cleaning, disposing the dust / debris generated from the work and carting away the same from the Banks premises, cleaning of the surfaces stained / affected during execution of the item etc are also included in the scope of the work.

#### **b) Mode of measurement.**

Actual surface area of the finished layer, for thickness up to 20 mm shall be worked out by measuring the average length and width, correct to the nearest centimetre and considered for payment. The quantities shall be rounded-off to two decimal points.

#### **7.5.9 ADDITIONAL LAYERS OF POLYMER MODIFIED MORTAR FOR R.C.C MEMBERS:**

**a) Scope of work under this item.**

The scope of work of work under this item is for Providing and rendering additional layer(s), of polymer modified cement mortar, over and above the layer applied as per item No. 7.5.7 above and applied, for an average consolidated / finished thickness of 15 mm each. These additional layers of polymer modified cement mortar shall be applied over the base layer, after proper curing of the previous layer and application of SBR based cementitious bonding coat, using approved materials, over the previous layer, as directed by the Bank's Engineer. Washed broken stone chips of 12 mm and downsize shall be added to the mortar used for base layers to make 1: 1: 2 mix.

**b) Mode of measurement.**

Actual surface area of the finished layer, for each additional layer of 15 mm thickness shall be worked out by measuring the average length and width, correct to the nearest centimetre and considered for payment. The quantities shall be rounded-off to two decimal points.

#### **7.5.10 PROVIDING AND CONSTRUCTING SINGLE BRICK 115MM THICK WALLS.**

**a) Scope of work under this item.**

The scope of work under this item shall be for providing and constructing single-brick masonry work, true to plumb and line for internal partitions, in C.M 1:4 using approved quality locally available bricks including providing proper key to the adjoining wall(s) / structure(s), raking the joints, curing, cleaning, disposing and carting away the debris from the colony premises etc, complete as directed by the Bank's Engineer. The scope of work shall include placing 10 mm diameter TOR steel bars (2 Nos.) in every 6th course of brick masonry and embedding them in 50 mm thick 1:2:4 cement concrete, including necessary shuttering, curing etc as directed by Bank's Engineer. Reinforcement shall be measured and paid for separately under item No. 7.5.10 below.

**b) Mode of measurement.**

The exposed area in elevation on one side of the newly constructed walls, including the R.C.C bands, would be arrived at by measuring the clear length / width and height, correct to the nearest centimetre and would be considered for payment. The quantities shall be rounded-off to two decimal points.



#### **7.5.11 PROVIDING, CUTTING, STRAIGHTENING, BENDING TYING AND PLACING IN POSITION TOR STEEL REINFORCEMENTS.**

##### **a) Scope of work under the item.**

The scope of work under this item shall be for providing, cutting, straightening, bending tying using 18 SWG G.I. binding wires and placing in position 02 numbers of 10 mm diameter TOR steel reinforcement bars over every 6<sup>th</sup> course of brick masonry to be constructed as per item No. 7.5.9 above, as directed by the Bank's Engineer. The rate shall include cost of binding wire and wastages. Authorized laps shall be measured and considered while arriving at the quantities.

##### **b) Mode of measurement.**

The weight of the steel reinforcements, cut straightened, bent, tied, and placed in position shall be arrived at in kilograms, by measuring the length of each bar, correct to the nearest centimetre and the actual / theoretical section weight, whichever is less and considered for payment. Authorized laps shall be measured and considered but no wastages shall be added while arriving at the weight. The weight shall be rounded-off to two decimal points.

#### **7.5.12 PROVIDING AND CASTING, R.C.C LINTELS.**

##### **a) Scope of work under the item.**

The scope of work under this item shall be for providing and casting R.C.C lintels over the openings for doors in single-brick walls, comprising the following:

i. Lintels having cross-sectional dimensions of 115 mm x 200 mm, shall be casted at site with C.C 1:1.5:3, made of approved quality 20 mm and downsize graded granite metals, river sand and approved make portland cement, including necessary shuttering, curing scaffolding, disposing off and carting away the debris etc.

ii. The scope of work shall include providing, cutting to required lengths, straightening, bending, tying with 18 SWG G.I wires and placing in position 2 numbers of 10 mm diameter TOR steel reinforcement bars as main reinforcement at bottom, 2 numbers of 10 mm diameter TOR steel reinforcement bars as top reinforcement and 10 mm diameter TOR steel bars as stirrups (all steel bars of approved make) @ 150 mm c/c, as per standard practices and relevant IS code provisions. Top and bottom reinforcement bars of lintels, for the openings adjacent to the R.C.C columns shall be inserted into the column, after making machine drilled holes of suitable diameters, for an inserted length not less than 100 mm. These bars shall be properly anchored to the column by grouting using approved make and quality cementitious grouts, before pouring concrete. Clear measurements of the R.C.C lintel only shall be measured and considered for payment.

##### **b) Mode of measurement.**

The quantity shall be arrived at by measuring the length of each lintel, correct to the nearest centimetre and considered for payment. Reinforcement shall not be measured separately and considered for payment.

### **7.5.13 PROVIDING AND RENDERING BACK PLASTER FOR WALL IN C.M 1:4 (SMOOTH FINISH):**

#### **a) Scope of work under this item.**

The scope of work of work under this item is for preparing the surface of the masonry wall / R.C.C walls / columns, exposed areas by raking the loose mortar joints, watering and thorough cleaning using wire brush / broom, providing and rendering cement plaster, in CM 1:4 in smooth finish, prepared by providing and manual batching and mixing approved make portland cement and approved quality river sand and rendered for an average thickness of 12 mm, true to plumb, level and line. The scope of work shall include all materials including wastages, labour, all leads and lifts, transport, tools & plants etc required for the finished work, all as directed by the Bank's Engineer. Spill outs, dust etc generated during execution of the work shall be cleaned, collected disposed and carted away from the premises.

#### **b) Mode of measurement.**

Actual surface area of the finished plaster shall be worked out by measuring the average length and height / width, correct to the nearest centimetre and considered for payment. The quantities shall be rounded-off to two decimal points.

### **7.5.14 DISMANTLING AND REMOVING THE EXISTING BRICK WALLS WITH FINISHES.**

#### **a) Scope of work under the item.**

The scope of work under this item shall be for carefully dismantling and removing the existing single / double-brick thick, walls along with the existing finishes like paint / plaster / natural / artificial stone slabs / tile dado / skirting, embedded R.C.C bands / lintels, embedded reinforcements etc using approved methods, disposing and carting away the debris from the colony premises etc, as directed by the Bank's Engineer. The rate shall include suitably propping / supporting / protecting (as directed by the Bank's Engineer) the adjacent / residual structure(s) to prevent any damage to them. The rate shall also include shifting and stacking the salvageable items at location(s) shown by the Bank's Engineer within the colony premises. The finishes such as wall dado, plaster etc over the surfaces of the brickwork shall not be measured under other items.

#### **b) Mode of Measurement.**

The actual volume of the existing walls to be removed along with the finishes shall be worked out by measuring the length / width, height and thickness correct to the nearest centimetre before commencement of the work and considered for payment. Deductions shall be made for openings, bearing of R.C.C members like columns, beams etc while working out the quantity. The quantities shall be rounded-off to two decimal points. Providing, erecting, removing, and taking away necessary scaffolding and staging if required for the successful execution of the work is also included in the scope of the work.

### **7.5.15 PROVIDING OF NEW UPVC WINDOWS**

#### **a) Scope of work under the item.**

The scope of the work shall include carefully dismantling the existing aluminium sliding / fixed window of any size, including stacking the dismantled the window at locations directed by the Engineer-in-Charge and supplying, installing uPVC sliding / fixed system, i.e. with two track sliding window approximately upto 1.8m height and fixed window approximately upto 0.6m height (to withstand 3.5 KPA of windload) with Wooden Colour or any other approved colour having L value of 96.5 higher and Titanium Dioxide content of at least 8 PHR (parts per hundred).

The outer frame should have a minimum depth of 70mm x 45mm for 2 track. The sash (shutter) depth should be minimum 50mm (50mm X70mm). The face width of the sash should be minimum 70mm. uPVC profiles should have a minimum wall thickness of 2.3mm in the visible area, weld strength tested 35 N mm, and EN 12608, EN 514, BS 8213, IS 875 standards. The profiles should be seamlessly Zip-welded without needing corner cleaning which eliminates weld-sprue cleaning marks on the edges for improved aesthetics and higher strength.

The shutter profiles shall have co-extruded TPE gaskets in the glazing area which are welded together preventing gaps being formed. The bead profiles should also have co-extruded TPE gasket. Shutters shall have 2 layers of Siliconised Brush Seal with a central plastic fin, for casement windows Gasket between shutter and frame should be 5mm thickness after compression and made of EPDM rubber. Fully toughened 11.52 mm laminated performance glass (5mm ST167 performance glass + 1.52 PVB + 5mm clear toughened)

If directed by the Engineer-in-Charge, structural calculations shall be submitted for both glass and frames. The vertical member should not deflect more than L/175 or 19mm for SGU and L/175 or 15mm for DGU, whichever is the least for a wind load of 3kPa. Deflection calculation should be based upon moment distribution.

Steel reinforcement should be minimum of 1.5 mm thickness for shutters and 1.5 mm for outer frames and having AZ70 AluminoZinc coating for higher corrosion resistance and approved as per structural calculations.

Interlocks between the shutters should only be of anodised aluminium and hooking type. Interlocks should have woolpiles between shutters for better air/water/sound sealing. Woolpile should be siliconised with a central plastic fin. The rollers shall have a durability test for minimum of 10,000 cycles. The track must be removable and made of silver anodised aluminium. Handles to be flush/recessed with automatic reset. All hardware should be designed to withstand coastal conditions. Anchor fasteners should be of minimum M8x100 size with a pull-out strength of at least 0.35 kN. All shims to be capable of transferring the load evenly and made of a suitable material (Teflon, Nylon etc) capable of lasting the life span of the system. External peripheral sealant should be Silicone based and internal peripheral sealant should be Acrylic based to allow painting - make should be McCoy Soudal or Dow. All miscellaneous

items such as peripheral sealants, backer rods, fasteners etc to be included in the rate.

**b) Mode of measurement.**

Actual surface area of the installed UPVC window as described above shall be worked out by measuring the length and height / width, correct to the nearest centimetre and considered for payment. The quantities shall be rounded-off to two decimal points.

**c) Rate**

The rate quoted shall be inclusive of the cost of labour and materials, tools, tackles etc., involved in all the operations as described above.

**7.5.16 PROVIDING OF SIDE PROTECTION TO THE WALLS WITH 3MM THICK CHECKERED ALUMINIUM PLATE WITH 12MM THICK BISON BOARD**

**a) Scope of work under the item.**

The scope of the work shall involve providing side protection to the walls cladded with 3mm chequered aluminium plate of approved size and design on the side walls upto 1.2 m from the finished floor level.

The 3mm chequered aluminium plate shall have a backing of 12mm thick Bison Board. The chequered aluminium plate shall be nailed through the Bison Board to the brick / masonry wall with screws of appropriate size.

The chequered aluminium plate along with Bison Board backing at the top level i.e., 1.2m level shall be provided with a L guard of appropriate size screwed to the wall by mechanical means and the system of chequered aluminium plate and plywood backing at regular intervals so as to firmly hold the entire system in place.

**b) Mode of Measurement.**

Actual surface elevational area of the finished chequered wall cladding system shall be worked out by measuring the average length and height / width, correct to the nearest centimetre and considered for payment. The quantities shall be rounded-off to two decimal points.

Providing, erecting, removing, and taking away necessary scaffolding and staging if required for the successful execution of the work is also included in the scope of the work.

**c) Rate**

The rate quoted shall be inclusive of the cost of labour and materials, tools, tackles etc., involved in all the operations as described above.

**7.5.17 REPAINTING OF THE ENTIRE AREA OF SBS ROOM AND THE BRIQUETTING ROOM AT FIRST FLOOR AND THE GROUND FLOOR:**

**a) Scope of work under the item.**

The scope of work under this item shall be for Repainting the room of proposed SBS machine room at the First floor level and Briquetting room at the Ground Floor level by preparing the surface of the walls, ceiling and soffits or vertical sides of the beams, wood and metal surfaces, etc.by thorough scrapping, sand papering & dusting to remove the existing painting, providing and applying:

i. Applying white cement-based putty to fill up, level and smoothen the surface wherever required in patches, one coat of interior primer and thereafter two or more coats of interior acrylic emulsion to ceiling of approved make and manufacturer etc. (Approximate Area at both floors:500.00 Sqm)

ii. Applying white cement-based putty to fill up, level and smoothen the surface wherever required in patches, one coat of cement primer and thereafter providing and applying two coats of acrylic emulsion paint of approved make and shade to the walls, beams, etc. (Approximate Area at both floors: 600.00 Sqm)

iii. Two or more coats of 1st quality Synthetic enamel paint (satin finish) of approved make and shade to wood surfaces, meter panels etc. (Approximate Area at both floors: 10.00 Sqm)

iv. Two or more coats of 1st quality synthetic enamel paint (satin finish) of approved make and shade over a coat of zinc chromate primer to steel work, viz. Window MS woven mesh area etc including surface preparation, complete as directed. (Approximate Area at both floors: 30.00 Sqm)

vi. Thorough cleaning of the entire floor, walls, skirting, switch board etc.

**b) Mode of measurement.**

The repainting of first floor and ground floor shall be counted as one single job (1 Job / 1 Nos.) and considered for payment.

**SECTION – VII b****LIST OF APPROVED MAKES / MANUFACTURERS OF MATERIALS**

Sl.No.	Description	Approved Make / Manufacturer
1.	Cement	A.C.C, Ultratech, Coramandal, Ramco, Birla, Ambuja or approved equivalent.
2.	White Cement	Birla White, J.K. White or approved equivalent
3.	Polymers & other chemicals required for structural repairs & waterproofing	M/s Sika (Sikadur 32 IN), M/s Fosroc (Nitobond EP), M/s. Pidilite Industries Ltd. (211-Dr. Fixit Epoxy Bonding Agent) or approved equivalent
4.	Grout for Anchors (Pourable Grade)	Sika Anchorfix 3030 of M/s Sika, HIT-RE 500 V4 Epoxy anchor of M/s HILTI, Lokfix 'S' of M/s Fosroc
5.	Micro Concrete	M/s Sika (SikaRep Microcrete-4), M/s Fosroc (Rendroc RG), M/s. CERA (Cera Microconcrete) or approved equivalent
6.	Heavy Duty Floor Finish	Sika Ucrete MF of M/s Sika, Nitofloor SL3000 UT of M/s Fosroc, or approved equivalent
7.	Paints, primers, thinners, paint-removers, French spirit etc.	Asian Paints Ltd., ICI Ltd, Jenson & Nicolson Ltd, Kansai Nerolac Ltd, Berger Ltd, M/s Nippon Paint India or approved equivalent
8.	Aluminum chequered Plate	Jindal, Balco, Hindalco or approved equivalent.
9.	UPVC window sections	Saint Gobain, Fenesta or approved equivalent.
10.	Plain / semi-perforated gypsum boards.	Saint Gobain or approved equivalent.
11.	TOR steel bars	JSW Neo, Tata, SAIL, Vizag steel or approved equivalent.
12.	Glass	Saint Gobain, Modiguard, Asahi or approved equivalent.
13.	Frosted vinyl stickers / films	Birla 3M, Garware or approved equivalent.
14.	Ready Mix Concrete / RMC Plants (located in Chennai)	a) VRMX Concrete India Private Limited b) Concrete OEM Pvt Ltd c) Ultratech Cement Limited d) ACC Limited or approved equivalent

**Note:**

- 1) Equivalent means equivalent in Cost and Quality.
- 2) The tenderer shall quote his rates on the basis of the price of quality and grade of the product of the brand /make stipulated in the schedule of quantities and as described in the list of approved makes.
- 3) Bank reserves the right to select any of the brands indicated in the list of approved makes or alternate equivalent brand of the material other than the

one specified in the list of approved makes. The decision of Engineer-in-Charge shall be final in this regard. The Contractor shall obtain prior approval from the Engineer-in-charge before placing order for any specific material.

- 4) In case of non-availability of the brand specified in the contract the Contractor shall approach Engineer-in-charge to acquiring alternate equivalent brand of the material subject to submission of documentary evidence of non-availability of the specified brand. Any additional expenditure and time because of this shall be solely on contractor's account and no claims whatsoever shall be entertained by the Employer in this regard.
- 5) List of RMC plants (located in Chennai) mentioned are based on Banks previous experience and are only indicative and not exhaustive. Any other RMC plant may be selected by the bidder /contractor with the approval of Engineer-in-Charge and shall be having Quality Council of India Certification.

**Place:**

**Signature / Digital Signature of tenderer**

**Date:**

**SCHEDULE – A**

<b>Notes for Schedule of Quantities (SOQ) / Bill of Quantities (BOQ)</b>		
1	The Schedule of Quantities shall be read in conjunction with the specifications, Tender drawings and bid documents. BIDDER shall not rely merely on the description given in the Schedule of Quantities.	
2	Quantities of work indicated in the Schedule of Quantities are only approximate and are given to provide a common basis for bidding. The actual quantities of work shall be ordered by Employer as shown on the final drawings released for Renovation. No claim shall be entertained from BIDDER if the actual quantities or items of work differ from those indicated herein, except where stated otherwise. The Engineer-in-charge reserves the right to modify any aspect of the scope of Tender at any time during the course of work.	
3	The contractor shall fill his rates and amounts for all the items for the specified quantities indicated in Schedule of Quantity issued by the Employer.	
4	Quoted Prices shall be in Indian Rupees only.	
5	Rates and amounts shall be entered in both figures and words. Non-compliance of these conditions may render the Bid invalid at the discretion of the Employer.	
6	Unit Rates shall be submitted for all Items, and they shall be firm for the entire duration of the contract and any approved extended period.	
7	The quantities of work actually carried out against each item shall be measured and paid at the rates quoted in the Schedule of Quantities where applicable or otherwise at such rates and prices as may be fixed within the terms of the Contract.	
8	BIDDER shall be deemed to have allowed in his rates the provision, maintenance and final removal of all temporary works of whatsoever nature required for the proper execution of the works, except for those temporary works for which specific items have been provided in Schedule of Quantities.	
9	Abbreviations used are as under :	
	i)	No. Number
	ii)	Cum. Cubic metre
	iii)	Sqm. Square metre
	iv)	m / Rm. / Rmt. Metre
	v)	LS Lump sum
	vi)	MT Metric Tonne
	vii)	Kg Kilogram



## **PREAMBLE TO THE SCHEDULE OF QUANTITIES**

The rates quoted shall be deemed to include the following:

1. Removal and carting away all the debris from Bank's premises after cleaning the floors etc., with water and removing all paint spots and stains by using any approved paint remover to the satisfaction of the employer.
2. All articles of furniture, equipment shall be protected by covering with cloth of tarpaulin and the furniture rearranged, and floors cleaned and mopped after the day's work.
3. Painting of hardware fittings wherever directed in case of painting of external doors and windows.
4. Curing the items of work involving the use of cement and waterproof paints.
5. Unless and until all the paint stains on floor, walls, ceiling, glasses, etc., are removed satisfactorily by the contractors, the work will not be certified as complete.
6. All paints shall be of 1st/ premium quality of approved brand and shade and applied as detailed under specifications.
7. It shall be the sole responsibility of the tenderer to inspect the existing surfaces to be painted.
8. The rates quoted below also include preparation of the existing surfaces and making them even and smooth with all the required materials and labour to the satisfaction of the Bank's Engineer.
9. The rates shall include the required number of coats of the paints in case of all the following items, to make the final finish acceptable to the Bank's Engineer.
10. The rates shall include, scaffolding (wherever applicable) to access the ceiling in the first and ground floor level. The scaffolding so erected shall also be used for structural repairs, plastering, painting etc. Safety net or mesh if directed by the Engineer-in-Charge shall be installed at every landing. IS code 2750:1964 for steel Scaffolding & Retrofitting/Repairs need to be strictly adhered.
11. Bank shall reserve the right for using the scaffolding so erected for the use of other contractors towards any other work. No claim shall be made by the contractor in this regard.
12. The rate quoted shall necessarily include supporting the structural elements like Beam members/ Beam Slab junction regions / Beam Column junctions/ sunshades with required props till the entire structural repair is carried out including necessary curing, i.e centering and propping with steel / timber members is deemed to be included in the rates quoted. No extra claim shall be entertained
13. Only electric mixer of required rpm shall be used for mixing the components of the repair chemicals and rate quoted shall include the same. Hand mixing shall not be allowed without the approval of the Engineer-in-Charge.
14. Measurements shall not be taken for individual items of PAINTING WORK. The quantities shown for various items OF REPAINTING WORK (after applying respective co-efficient) in the format of schedule of quantities are the Indicative Quantities from Bank's Standard Measurement Book and are mentioned in the tender for ready reference. Payment shall be made on the basis of painting of entire block/s as one unit as more specifically indicated in the schedule of quantities.

**ABSTRACT OF SCHEDULE OF QUANTITIES**

Item No.	Description.	Qty.	Unit.
1	<p>Supplying, Fabricating, Erecting, Dismantling of temporary platforms, staircases, ladders laid in Steel / Aluminium sections, outside the Main Office Bulding premises from Ground Floor upto First Floor level for the entire duration of the work for the movement of labour / staff of the contractor.</p> <p>(Approximate dimensions of the ladders includes - Double width stairway scaffold ladder, length 2-meter, width 1.35 meter, platform height 3 meter + 1 meter safety cabin. Total height - 4 meter, with a maximum working height 5 meter with / without bottom rotating nylon with side support.)</p> <p>The temporary staircase system shall be stiffened with suitable bracings, runners, connection wherever required with essential safety features for the accessibility of the workmen etc. complete as per directions and approval of Engineer-in-charge. Safety net or mesh if directed by the Engineer-in-Charge shall be installed at every landing. IS code 2750:1964 for steel Scaffolding &amp; Retrofitting/Repairs need to be strictly adhered.</p> <p>Approximate duration of the work is 3 months.</p>	1.00	L.S
<b>INSIDE THE SBS MACHINE AREA AND MANAGERS CABIN / AHU AREA</b>			
2	<p><b>Dismantling and removing the existing flooring, screed concrete, plaster around the select columns upto an approximate height of 750mm from the exposed RCC Slab and filling in the sunken / raised portions in the bathroom and toilet:</b></p> <p>Carefully dismantling and removing the existing marble mosaic/ ceramic tile / vitrified tile / Kota / granite or any other natural stone slab flooring / skirting including bed / back mortar by approved methods, so as to expose the existing R.C.C floor slab / wall / column without damaging them, thoroughly cleaning the exposed surfaces using water, wire brush or any other approved methods, disposing and carting away the debris out of the Bank's premises to approved dump yards as per prevailing municipal rules etc., complete all as directed by Bank's Engineer.</p> <p>Approximate average quantity of the portions to be dismantled:</p> <p>i) SBS machine area - 65 Cum.</p> <p>ii) Select columns - 0.10 Cum.</p> <p>iii) Sunken / raised portion removal for the area of the Bathroom - 1.90 Cum.</p>	1.00	LS
3	<p><b>Dismantling and removing the aluminium partitions / sliding windows / fixed windows including shutters along with any window glass panes / wooden / metal frames / fittings including gypsum board false ceilings and associated sections:</b></p> <p>Carefully dismantling and removing the existing aluminium partitions / sliding doors including shutters along with any window</p>	38.00	Sqm.

Item No.	Description.	Qty.	Unit.
	<p>glass panes / wooden / metal frames / fittings etc., including gypsum board false ceiling and associated sections shifting the removed items and stacking the same at location(s) shown by the Bank's Engineers within the Bank's Premises. The rate shall include disposing and carting away debris / non-salvageable items generated from the work to outside of the Bank's premises.</p> <p><b>Note:</b> Providing, erecting, removing and taking away the non-salvageable material with necessary scaffolding and staging if required for the successful execution of the work is also included in the scope of the work.</p>		
4	<p><b>Dismantling and removing the existing wooden door shutters / Aluminium door shutters including door frames:</b></p> <p>Carefully dismantling and removing the existing wooden door shutters / Aluminium door shutters or any other door shutter along with hardware / fittings / fixtures, shifting and stacking the same at location(s) shown by the Bank's Engineer within the Bank's premises, disposing and carting away the non-salvageable materials out of the Bank's premises etc., complete all as directed by the Bank's Engineer.</p> <p>i) Approximate dimensions of Double leaf wooden door shutter - 2.1m x 1.5m.  ii) Approximate dimensions of Aluminium door shutter of SBS Engineer room - 1m x 2.1m.</p> <p><b>Note:</b> Providing, erecting, removing and taking away the non-salvageable material with necessary scaffolding and staging if required for the successful execution of the work is also included in the scope of the work.</p>	5.00	Sqm.

Item No.	Description.	Qty.	Unit.
5	<p><b>Repairs to damaged R.C.C members:</b> Repairing the damaged R.C.C members like columns, roof slabs, beams, sill slabs of windows, coping of parapet walls, sunshades, lintels etc., comprising the following:</p> <p>i. Carefully dismantling and removing the loose / spalled plaster &amp; concrete to expose the intact surfaces of the R.C.C members / corroded reinforcement bars using mechanical means and thoroughly cleaning the exposed surfaces of R.C.C members using clean water, wire brush etc. The areas where the repair is to be done shall be cut in a square / rectangular shape with cutting machine upto atleast 10mm on all sides so as to avoid feather edging.</p> <p>ii. Thoroughly cleaning the corroded reinforcements including removing the rust scales using chisel, hammer and approved quality and make rust removing solutions / chemicals used as per manufacturers' specifications, providing and applying a coat of approved make, two components, solvent borne zinc rich epoxy primer / corrosion passivator of approved make and brand over the exposed surfaces of the reinforcements as per manufacturer's specifications and as directed by the Engineer-in-charge.</p> <p>iii. Providing and rendering shrinkage compensated / controlled, polymer modified, fibre reinforced, cementitious, ready to use, trowelable structural repair mortar of approved make and brand used as per manufacturers' specifications for an average thickness of up to 20 mm to repair / re-habilitate the damaged R.C.C members true to plumb line and level to make them up to the original shape &amp; size of the members after preparing the surface of the members to be repaired as per manufacturer's specification and as directed by Bank's Engineer.</p> <p>iv. If the average thickness of mortar exceeds 20 mm, it shall be done in layers and each subsequent layers of mortar as per the specifications above, shall be rendered (which shall be measured separately under item No. 6 below) after proper curing of the previous layer(s), all as directed by the Engineer-in-charge.</p> <p>v. Necessary scaffolding, curing, cleaning, disposing the dust / debris generated from the work and carting away the same from the Bank's premises, cleaning of the surfaces stained / affected during execution of the item etc., are also included in the scope of the work.</p>	5.00	Sqm.
6	<p><b>Providing and rendering additional layers of polymer modified cement plaster:</b> Providing and rendering shrinkage compensated / controlled, polymer modified, fibre reinforced, cementitious, ready to use, trowelable structural repair mortar, all as per the specifications under item No. 5 above, but for additional layers of average thickness of 15 mm, as additional layers over the base layer(s)</p>	5.00	Sqm.

Item No.	Description.	Qty.	Unit.
	rendered as per item No. 5 above or subsequent additional layer(s) under this item. These subsequent layers shall be applied after proper curing of the previous layer(s), all as per the manufacturers specifications and as directed by the Engineer-in-charge. The scope of work also includes necessary scaffolding, curing, disposing the debris generated from the work, cleaning of the surfaces stained / tarnished by splashing of the chemicals / mortar etc.		
<b>STRUCTURAL STRENGTHING MEASURES</b>			
7	<p>Providing and laying reinforced cement concrete of design mix of M-30 grade concrete (Ready Mixed Concrete of approved manufacturer) for portions of the newly laid RCC Slab / Column portions, using 20 mm and down size coarse aggregate, fine aggregate in appropriate proportions as per approved design criteria, spreading and compacting mechanically by using needle and surface vibrators, power trowelling, levelling to required slope/ camber, vacuum dewatering by approved method, texture finishing, maintaining required gradient/camber as per the drawing or as directed, including wooden/steel form works with sturdy M.S. channel sections, side shuttering, curing for at least 14 days (by ponding of water / covering with wet gunny bags, hessian cloth or any other approved method), excluding steel reinforcement (steel reinforcement shall be measured and separately under item No. 10 below) etc. complete as per drawing and as directed by Engineer-in-Charge.</p> <p><b>Note:</b></p> <p>i) The cement concrete shall be manufactured in approved make automatic batch plant (RMC plant) and must be transported to site in transit mixer. Rate quoted shall include pumping cost upto first floor level including transport of the pump to and fro from the site.</p> <p>ii) Design mix of M-30 grade of concrete shall be conforming to IS Code and shall be approved by the Engineer-in-Charge. Cement content considered in M-30 is @ 340 kg/cum. Excess/ Less cement used as per design mix is payable/ recoverable separately. The rate for extra / less cement shall be paid / recovered at the basis of ₹ 8 / kg / cum excluding GST.</p> <p>iii) The Rate quoted shall include removing any excess concrete left over at site.</p>	42.00	Cum.
8	<p><b>Micro Concrete:</b></p> <p>Supplying, providing and casting ready mix 'Micro Concrete' of approved make and manufacturer and as per the manufacturers specification and of atleast M30 grade (i.e, strength of concrete at 28 days to be atleast 30 MPa) mixed with aggregates of 10mm and downsize aggregates, as per the directions of the Engineer-in-Charge for strengthening the Column areas at the SBS area for column jacketed thickness of 150mm complete and as per the directions of the Engineer-in-Charge.</p>	2000.00	Kg

Item No.	Description.	Qty.	Unit.
	<p><b>Note:</b></p> <p>1) Cost of Shuttering is deemed to be included in the rate quote. No separate payment shall be made.</p> <p>2) The micro concrete along with the aggregate shall be mixed in a mechanical mixer / mechanical mixing machine only.</p>		
9	<p>Supplying and applying Epoxy Resin based concrete bonding agent (a solvent free epoxy resin, to the existing RCC Column and Slab exposed as per item no. 2 above, which is supplied as a two-pack component in pre-weighed quantities for ready mix and use condition) for bonding between old &amp; new concrete including cost of all labour, bonding agent, tools, equipment's etc. complete as per detailed specifications and directions of the Engineer-in-charge.</p>	300.00	Sq.m
10	<p>Providing, cutting, straightening, bending and placing in position the TMT / HYSD steel reinforcement / rebars with yield stress of 500 MPa and conforming to IS-1786 of approved make and manufacturer of various diameters,</p> <p>i) including providing shear connectors rebars by way of drilling suitable holes in reinforced or plain cement concrete with power driven drill machine to a minimum depth of 100mm in RC slab, Columns to introduce steel rebar as shear key connector, cleaning the drilled holes of loose dust by air blowing, and insertion of anchoring chemical from cartridges(the anchoring chemical shall be mixed as per manufacturer' s specification, placing the shear key bar at every 600mm c/c on the surfaces of the column / slab in position and allowing it to stay undisturbed for 24 hours all complete as per direction of Engineer-in-Charge;</p> <p>ii) including placing and tying the reinforcement mat / reinforcement bars of various diameters and spacing as mentioned in the drawing at and with 18 SWG G.I binding wires, with cover blocks of M30 grade concrete &amp; 25mm thickness, etc.,. The work shall proceed as per the directions of the Engineer-in-Charge.</p> <p>Approximate quantity of epoxy bonding agent is 8 ml per drilled hole.</p> <p><b>Note:</b></p> <p>a) The rate quoted shall include cost of labour, machine etc., for cutting, straightening the bars, drilling holes of appropriate diameter and upto the required depth as mentioned in the drawings by mechanical drill bit.</p> <p>b) The rate quoted shall include cost of binding wires and wastages, thorough cleaning the surface of the exposed column / slab surfaces over which the reinforcement mats / rebars have to be placed / anchored, using wire brush / brooms, clean jet of water etc., complete as directed.</p> <p>c) Authorized laps and Chairs provided shall be paid extra.</p> <p>d) The rate for chemical grout of approved make shall be paid separately under the respective item.</p>		

Item No.	Description.	Qty.	Unit.
a	8mm dia bars as shear connector rebars with holes drilled upto 100mm in existing RC Slab and providing epoxy bonding agent of approved make and manufacturer upon inserting the rebar	240.00	Kg.
b	8mm dia bars as rings / stirrups etc.,	40.00	Kg.
c	12mm dia bars	4550.00	Kg.
d	16mm dia bars	400.00	Kg.
e	20mm dia bars	85.00	Kg.
<b>HEAVY DUTY POLYURETHANE FLOOR FINISH</b>			
11	<p>Supplying and applying of 4mm thick (comprising of 1mm thick scratch coat and 3mm thick topcoat) self-smoothing breathable polyurethane / UCRETE floor finish system with fully trained and licensed applicator of approved make and manufacturer over item no 7. above as per the following described herein. Warranty against delamination with minimum 05 years.</p> <p>(i) Preparing the substrate surface laid as per item no. 7 above by wire brush and mechanical means attached with industrial vacuum cleaner for maintaining dust free environment at work place or other suitable means with scarifier, removing the loosely adhered mortar/ slurry, making the surface free from dust, oil or any other deleterious materials, etc., as per the specification of the manufacturer including making provision for Anchor grooves at 2m x 2m grid spacing and with 8 mm wide x 8 mm deep square grooves by groove cutting machine. The surface of the substrate over which the heavy-duty floor finish is to be applied, shall be made absolutely dry &amp; free from laitance to achieve the maximum bond strength between substrate &amp; flooring system.</p> <p>Substrates must be clean, dry and free of contaminants such as dirt, oil, grease, coatings, laitance, surface treatments and loose friable material.</p> <p><u>Scratch Coat (1mm thickness):</u> Providing and application of breathable self-smoothing 1mm thick UCRETE scratch flooring must be applied to the substrate @ 2.00 kg [depending upon the floor condition] per Sqm as a scratch coat to fill up the pores of RCC/ damaged existing flooring surface, after surface preparation and allowed to dry until it is tack free, prior to the application of the topping, as per the specification of the manufacturer. All the damaged part of existing flooring system must be filled with above material.</p> <p><u>Top Coat (3mm thickness):</u> Providing and application of breathable self-smoothing 3mm thick UCRETE Topcoat, having the following technical parameters</p> <ul style="list-style-type: none"> <li>• Mix density of 1900Kg/m<sup>3</sup> and having Class Bfl-s1 reaction to fire,</li> <li>• Tensile strength Cured for 28 days at +20 °C 9 MPa as per ISO/BS Specification,</li> <li>• Compressive strength from 48 - 53 Mpa,</li> </ul>	280.00	Sq.m

Item No.	Description.	Qty.	Unit.
	<ul style="list-style-type: none"> <li>Modulus of elasticity in flexure 3250 - 4000 MPa</li> <li>Flexural strength of minimum 21 Mpa,</li> <li>Abrasion resistance of AR 0.5 as per BS 8204,</li> <li>Heavy duty Impact resistance,</li> <li>Coefficient of thermal expansion <math>3.6 \times 10^{-5}</math> degree centigrade</li> <li>VOC <math>\leq 50</math> gm / litre and conforms to all the emission requirements for indoor flooring systems in Europe including AgBB in Germany, Afsset in France.</li> <li>Water absorption chemical &amp; slip resistance should be at desired level as per the specification of the manufacturer.</li> <li>The mixing proportions and coverage of products shall be as per the specification of the manufacturer.</li> <li>The product shall be non solvented and non-tainting from the end of mixing as tested by Campden Technology Limited.</li> </ul>		
	<b>MISCELLANEOUS CIVIL WORKS</b>		
12	<p><b>Providing of side protection to the walls with 3mm thick chequered aluminium plate with 12mm thick Bison Board backing:</b></p> <p>i) Providing side protection to the walls clad with 3mm chequered aluminium plate of approved size and design on the side walls upto 1.2 m from the finished floor level.</p> <p>ii) The 3mm chequered aluminium plate shall have a backing of 12mm thick Bison Board. The chequered aluminium plate shall be nailed through the Bison board to the brick / masonry wall with screws of appropriate size.</p> <p>iii) The chequered aluminium plate along with Bison Board backing at the top level i.e., 1.2m level shall be provided with a C-Channel of approximate size of 15mm x 15mm x 3mm on the top level of appropriate size screwed to the wall by mechanical means and the system of chequered aluminium plate and Bison Board backing at regular intervals so as to firmly hold the entire system in place.</p>	30.00	Sqm.
13	<p><b>Providing, fabricating / making and fixing, fixed window system using Unplasticised Vinyl Chloride (UPVC) sections (Approximate size of the window is 1.80 m x 2.10 m):</b></p> <p>Supplying, installing uPVC fixed window system, as per the drawings mentioned (to withstand 3.5 KPA of windload) with Wooden Colour or any other approved colour having L value of 96.5 higher and Titanium Dioxide content of at least 8 PHR (parts per hundred).</p> <p>The outer frame and shutters should have a depth of 70mm. The face width of the sash should be minimum 80mm. uPVC profiles</p>	25.00	Sqm.



Item No.	Description.	Qty.	Unit.
	<p>should have a minimum wall thickness of 2.3mm in the visible area. . Fully toughened 11.52 mm laminated performance glass (5mm ST167 performance glass + 1.52 PVB + 5mm clear toughened). The shutter profiles should have co-extruded TPE gaskets in the glazing area which are welded together preventing gaps being formed. The bead profiles should also have co-extruded TPE gasket. Gasket between shutter and frame should be 5mm thickness after compression and made of EPDM rubber.</p> <p>If directed by the Engineer-in-Charge, structural calculations shall be submitted for both glass and frames. The vertical member should not deflect more than L/175 or 19mm for SGU and L/175 or 15mm for DGU, whichever is the least for a wind load of 3kPa. Deflection calculation should be based upon moment distribution.</p> <p>Steel reinforcement should be minimum of 1.5 mm thickness for shutters and 1.5 mm for outer frames and having AZ70 AluminoZinc coating for higher corrosion resistance and approved as per structural calculations.</p> <p>All hardware should be designed to withstand coastal conditions. SS304 grade friction stays should be used with plates of minimum 1.5mm thickness. EasyClean friction stay should be used to allow cleaning of glass outside surface. Anchor fasteners should be of minimum M8x100 size with a pull-out strength of at least 0.35 kN. All shims to be capable of transferring the load evenly and made of a suitable material (Teflon, Nylon etc) capable of lasting the life span of the system. External peripheral sealant should be Silicone based and internal peripheral sealant should be Acrylic based to allow painting - make should be McCoy or Dow. All miscellaneous items such as peripheral sealants, backer rods, fasteners etc to be included in the rate.</p> <p>Note:</p> <p>i) The rate for dismantling / stacking the existing aluminium window system shall be quoted in the relevant item of the tender.</p> <p>ii) Providing, erecting, removing and taking away the non-salvagable material with necessary scaffolding and staging if required for the successful execution of the work is also included in the scope of the work.</p>		
14	<p><b>Providing of MS woven wire mesh grill for the windows (as per the Sample work in the adjoining AHU Window without the MS Woven wire mesh)</b></p> <p>Supplying and Providing MS woven wire mesh grill with an opening size of 30 mm x 30 mm or any other approved opening size on all the windows fixed on the support frame with MS channels, i.e with 30mm x 30mm x 3mm - C Channel at the ends for the entire perimeter &amp; 20mm wide and 3mm thick Flat sections</p>	25.00	Sqm.

Item No.	Description.	Qty.	Unit.
	<p>in middle portion. The Flat sections shall be welded to the C-sections at their ends.</p> <p>ii) The C - channel sections shall be fixed firmly to the adjoining Masonry wall with appropriate holdfast mechanism.</p> <p>iii) The woven wire mesh shall be tack welded to the MS Channel sections at the entire perimeter and at the middle.</p> <p><b>Note:</b> Providing, erecting, removing, necessary scaffolding and staging, including taking away the non-salvageable material with if required for the successful execution of the work is also included in the scope of the work.</p>		
15	<p><b>Repainting the entire interior area of SBS area at first floor and Briquetting Room at Ground Floor:</b></p> <p>Repainting the entire interior area of SBS and Briquetting Room by preparing the surface of the walls, ceiling (including False Ceiling) and soffits or vertical sides of the beams, wood and metal surfaces etc., by scrapping, sand papering &amp; dusting of loose paints / paint flakes etc., providing and applying:</p> <p>i. Applying white cement-based putty to fill up, level and smoothen the surface wherever required in patches, one coat of exterior primer and thereafter two or more coats of interior acrylic emulsion to ceiling etc. (Approximate Area at both floors:500.00 Sqm)</p> <p>ii. Applying white cement-based putty to fill up, level and smoothen the surface wherever required in patches, one coat of cement primer and thereafter providing and applying two coats of acrylic emulsion paint of approved make and shade to the walls, beams, etc. (Approximate Area at both floors: 500.00 Sqm)</p> <p>iii. Two or more coats of 1st quality Synthetic enamel paint (satin finish) of approved make and shade to wood surfaces, meter panels etc. (Approximate Area at both floors: 10.00 Sqm)</p> <p>iv. Two or more coats of 1st quality synthetic enamel paint (satin finish) of approved make and shade over a coat of zinc chromate primer to steel work, viz. Window MS woven mesh area etc including surface preparation, complete as directed. (Approximate Area at both floors: 40.00 Sqm)</p> <p>v. Thorough cleaning of the entire floor, walls, skirting, switch board etc.</p>	1.00	L.S
16	<p><b>Scrap value for taking away the salvageable items:</b> Scrap value for taking away the reusable / salvageable items removed and stacked under any of the items from 1 to 15 above, which are not required to be re-used in the work under any of the items above.</p>	1	L.S

**SCHEDULE – B1**

**SAFETY CODE**

2. There shall be maintained in a readily place First Aid appliances including adequate supply of sterilized dressings and cotton wool.
3. An injured person shall be taken to a public hospital without loss of time, in cases where the injury necessitates hospitalization.
4. Suitable and strong scaffolds should be provided for workmen for all works that cannot safely be done from ground.
5. No portable single ladder shall be over 8 meters in length. The width between the side rails shall not be less than 30 cm. (clear) and the distance between two adjacent rungs shall not be more than 30 cm. When a ladder is used an extra mazdoor shall be engaged for holding the ladder.
6. The excavated material shall not be placed within 1.5 meters of the edge of the edge of the trench or half of the depth of trench whichever is more. All trenches and excavations shall be provided with necessary fencing and lighting.
7. Every opening in the floor of a building or in a working platform is provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be one metre.
8. No floor, roof or other part of the structure shall be so overloaded with debris or materials as to render it unsafe.
9. Workers employed on mixing and handling material such as asphalt, cement mortar or concrete and lime mortar shall be provided with protective footwear and rubber hand gloves.
10. Safety belts shall be provided by the contractor and used by the workmen while working from height of more than 3 metres from ground level.
11. Those engaged in welding works shall be provided with welder's protective eye-shields and gloves.
12. (i) No paint containing lead products shall be used except in the form of paste or readymade paint.  
(ii) Suitable facemasks should be supplied for use by the workers when the paint is applied in the form of spray or surface having lead paint dry rubbed and scrapped.
13. Overalls shall be supplied by the Contractor to the painters and adequate facilities shall be provided to enable the working painters to wash during the periods of cessation of work.
14. Hoisting machines and tackles used in the works, including their attachments, anchorage and supports shall be in perfect condition.

15. The ropes used in hosting or lowering material or as means of supervision shall be of durable quality and adequate strength and free from defects.
16. Additional safety net is to be providing to cover the external work and to avoid any injury to the occupants of the building.

Date:

**Digital Signature / Signature of the bidder**

Place:

**SCHEDULE – B2**

**FIRE SAFETY CODE**

- i. Cutting / drilling machine and other electrically operated equipment used at site shall be plugged into correctly rated electrical outlets.
- ii. LPG used in 'oxy-acetylene' gas cutters shall be 'industrial type'.
- iii. Only ISI marked 3 pin plug and other appliances and equipment shall be used.
- iv. Electrical power cables / wires used shall not have any joints and shall be properly rated.
- v. All electrical appliances i.e., welding, drilling, cutting machine etc. shall be safely and securely earthed to prevent leakage current while in operation.
- vi. Before commencing the welding work for the first time on any day, fire section shall be informed and only after the site inspection by the Fire officers / Personnel, work shall be started.
- vii. Two buckets of water and sand shall be kept in an easily accessible area on the site.
- viii. Fire extinguishers recommended and issued by fire officers shall be kept on the site.
- ix. Used paint drums shall be stored in specified store only after closing them properly.
- x. None of the passages near lift lobby and staircases shall be used for stacking / dumping any kind of materials/waste.
- xi. None of the fire extinguishers shall be removed / shifted from its designated location.
- xii. Power supply shall be switched off from the mains when equipment is not in use.
- xiii. Wood-shavings and saw-dust generated from the work shall be collected on daily basis, removed from site and stored at the designated place in proper manner.
- xiv. Any debris generated from the work shall be collected on daily basis, removed from site and stored at the designated place in proper manner.
- xv. Battery operated emergency light / torches shall be provided by the contractor to the workmen while working beyond office hours.
- xvi. All the electrical/mechanical/electromechanical appliance shall be connected to sufficiently rated circuit breakers before tapping to a power source.

Place:

**Signature / Digital Signature of tenderer**

Date:

**SCHEDULE C****LIST OF DOCUMENTS TO BE MAINTAINED AT SITE**

<b>Sl. No</b>	<b>Description of the Document</b>	<b>Remarks</b>
1	Work instruction / Site order Book	For issue of instructions by Engineer-in-charge or his representative at site in the course of day-to-day supervision and compliance to the same shall be recorded by Contractor after taking required action.
2	Test Reports/ certificates for Materials/ equipment	To maintain record of test reports/ certificates received from manufacturers.
3	File and Register for Extra/Variation Order	To maintain record of extra / variation items
4	Hindrance register	For recording the details of hindrances, reasons & its clearance with time period jointly signed by the Site Engineer/ Engineer-in-charge representative and the contractor's representative

Place:

**Signature / Digital Signature of tenderer**

Date:

## **SCHEDULE – D: GREEN BUILDING REQUIREMENTS**

**Reserve Bank of India (RBI)** intend to follow Indian Green Building Council (IGBC) norms for **Structural Strengthening of existing part slab area, providing heavy duty floor finish including ancillary civil works at 1st Floor of MOB, Chennai for providing new SBS (Shredding & Briquetting) machines..** IGBC norms involve complying with the green building specification like using of certain green materials, following of sustainable procedures and certain measures during the captioned work, as spelt out in this document. The contractor shall ensure to comply the material specifications/ works as per Schedule of Quantities for the respective items and all the work procedures/ processes as specified in this schedule.

To comply with Green Building requirement, wherever called for, the Contractor shall provide necessary documents / drawings issued by the manufacturers and this document shall generally cover test certificates, Letter of authorization in terms of standards, thermal values, and relevant data, MSDS, write-ups / detailed description of the particular material / equipment, as stipulated by the Engineer-in-charge prior to ordering the materials and after the supply of materials or at appropriate stages.

The contractor shall verify with the Engineer-in charge regarding the correctness of the green specification before ordering and procurement of materials and equipment supplied to the work.

If the material specifications, the drawings and the relevant documents do not meet the specified norms; it shall be the sole responsibility of the contractor to satisfy the specified Green norms by replacing the materials / equipment with the prior approval of the Engineer-in-charge.

Site measures during the construction like

- 1) Dust prevention, noise prevention as per the local municipal norms
  - 2) Using Low VOC paints and allied products.
- are the sole responsibility of the contractor.

**Place:**

**Signature / Digital Signature of bidder**

**Date:**

**SECTION – IX**

**ANNEXURE - 1**

**DRAFT ARTICLES OF AGREEMENT**

(To be submitted by successful bidder only)  
(On Non-Judicial Stamp Paper of appropriate value)

ARTICLES OF AGREEMENT made the \_\_\_\_\_ day of \_\_\_\_\_ between the Reserve Bank of India having its Central Office at Bombay 400001(hereinafter called “the Employer”) of the one part and \_\_\_\_\_ (hereinafter called “the Contractor”) of the other part.

WHEREAS the Employer is desirous of getting executed and completed the work of **“Structural Strengthening of existing part slab area, providing heavy duty floor finish including ancillary civil works at 1st Floor of MOB, Chennai for providing new SBS (Shredding & Briquetting) machines..”** and has caused drawings, Schedule of quantities and specifications describing the works to be done to be prepared by employer.

AND WHEREAS the said Drawings, Specifications and the Schedule of Quantities have been signed by or on behalf of the parties hereto.

AND WHEREAS the Contractor has agreed to execute upon and subject to the Conditions set forth herein and to the Conditions set forth in the Special Conditions and in the Schedule of Quantities and General Conditions of Contract (all of which are collectively hereinafter referred to as “the said Conditions”) the works shown upon the said Drawings and/or described in the said Specification and included in the Schedule of Quantities at the respective rates therein set forth amounting to the sum as therein arrived at or such other sum as shall become payable there under (hereinafter referred to as ‘the said Contract Amount’).

NOW IT IS HEREBY AGREED AS FOLLOWS:

- 1) In consideration of the said Contract Amount to be paid at the times and in the manner set forth in the said conditions, the Contractor shall upon and subject to the said Conditions execute and complete the work shown upon the said Drawings and described in the said Specifications and the Schedule of Quantities.
- 2) The Employer shall pay the Contractor the said Contract Amount or such other sum as shall become payable, at the times and in the manner specified in the said Conditions.
- 3) The Reserve Bank of India will administer and directly arrange for supervision of works, certification of bills, making payments and implementation of various terms, conditions and stipulations of the contract regarding executions of work, quality of work, quality of materials, progress and completion of the project shall mean the Regional Director, or any other person designated for the purpose by the Reserve Bank of India.
- 4) The said Conditions shall be read and construed as forming part of this Agreement, and the parties hereto shall respectively abide by, submit themselves to the said



Conditions and perform the agreements on their part respectively in the said Conditions contained.

- 5) The plans, agreement and documents mentioned herein shall form the basis of this Contract.
- 6) This Contract is neither a fixed Lump Sum Contract nor a Piece Work contract but is a Contract to carry out the work in respect of the entire work of **Structural Strengthening of existing part slab area, providing heavy duty floor finish including ancillary civil works at 1st Floor of MOB, Chennai for providing new SBS (Shredding & Briquetting) machines.** to be paid for, according to actual measured quantities at the rates contained in the Schedule of Rates and Probable Quantities or as provided in the said Conditions.
- 7) The Contractor shall afford every reasonable facility for movement of vehicles in the premises, any other regular functions of the Bank and also works performed by other agencies engaged by the Bank.
- 8) The Employer reserves to itself the right of altering the drawings and nature of the work by adding to or omitting any items of work or having portions of the same carried out without prejudice to this Contract.
- 9) Time shall be considered as the essence of this Contract and the Contractor hereby agrees to commence the work soon after the site is handed over to him or from 10th day after the date of issue of formal work order as provided for in the said Conditions, whichever is later and to complete the entire work within **3 months** subject nevertheless to the provisions for extension of time. If the Contractor fails to complete the work within the specified completion period, subject to the prior approval of Extension of time, he shall be liable to pay the Liquidated Damages at the rate of 0.25% of the accepted contract amount subject to a ceiling of 10% of accepted contract amount.
- 10) All payments by the Employer under this contract will be made only at Chennai.
- 11) All disputes arising out of or in any way connected with this agreement shall be deemed to have arisen at Chennai and only Courts in Chennai shall have jurisdiction to determine the same.
- 12) That the several parts of this Contract have been read by the Contractor and fully understood by the Contractor. The Contractor shall not be entitled for the payment for the quantities beyond the tendered quantities unless ordered for by specific written instructions from the Employer.
- 13) The Contractor shall indemnify and keep indemnified the RESERVE BANK OF INDIA against:
  - i) Any claim arising out of third party loss / damage to life or property caused by / during execution of the work.
  - ii) Any claim arising out of loss / damage to the workmen engaged by the contractor during execution of the work.
  - iii) Any claim due to non-compliance of applicable PF / Labour laws, ESI, regulations etc.

- 14) The Contractor shall not disclose directly or indirectly any information, materials and details of the Bank's infrastructure / systems / equipment etc., which may come to the possession or knowledge of the Contractor during the course of discharging its contractual obligations in connection with this agreement, to any third party and shall at all times hold the same in strictest confidence. The Contractor shall treat the details of the contract as private and confidential, except to the extent necessary to carry out the obligations under it or to comply with applicable laws. The Contractor shall not publish, permit to be published, or disclose any particulars of the works in any trade or technical paper or elsewhere without the previous written consent of the Employer. The Contractor shall indemnify the Employer for any loss suffered by the Employer as a result of disclosure of any confidential information. Failure to observe the above shall be treated as breach of contract on the part of the Contractor and the Employer shall be entitled to claim damages and pursue legal remedies. The Contractor shall take all appropriate actions with respect to its employees to ensure that the obligations of non-disclosure of confidential information under this agreement are fully satisfied.
- 15) Sexual Harassment of women at work place:
- a) The contractor / agency shall be solely responsible for full compliance with the provisions of "the Sexual Harassment of women at work place (Prevention, Prohibition and Redressal) Act, 2013". In case of any complaint of sexual harassment against its employee within the premises of the Bank, the complaint will be filed before the Internal Complaints Committee constituted by the Contractor / Agency and the Contractor / Agency shall ensure appropriate action under the said Act in respect of the complaint.
  - b) Any complaint of sexual harassment from any aggrieved employee of the contractor against any employee of the Bank shall be taken cognizance of by the Regional Complaint Committee constituted by the Bank.
  - c) The contractor shall be responsible for any monetary relief that may need to be paid in case the incident involves the employees of the contractor, for instance any monetary relief to the Bank's employee, if sexual violence by the employee of the contractor is proved.
  - d) The contractor shall be responsible for educating its employees about prevention of sexual harassment at work place and related issues.
  - e) The contractor shall provide a complete and updated list of its employees who are deployed within the Bank's premises.
- 16) Contractor should ensure that the instructions/ directions issued by Central as well as State Government, and also by the Bank in connection with Covid-19 Pandemic are followed scrupulously by the workmen deployed at the Bank. Workmen from containment area or under quarantine should not be deployed for work. Further, you are required to closely monitor the staff deployed to the Bank and in case of any staff/family member of staff is found 'COVID' infected, action to be taken to replace the staff at once. Staff should be sensitized to follow strict social distancing norms while they remain deployed. You shall provide them with necessary gloves, masks, sanitizer, etc., and personal protective equipment (PPE), if necessary, at no extra cost to the Bank. Further, you shall indemnify and keep indemnified the Bank from any financial/ legal liability arising out of your failure, fault or negligence in complying-

with the above instructions. Any hindrance to the work due to COVID-19 pandemic or any other reasons shall be intimated to the bank's engineer.

If the contractor is a partnership or an individual

IN WITNESS WHEREOF the employer and the Contractor have set their respective hands to these presents and two duplicates hereof on the day and year first herein above written.

If the contractor is a company

IN WITNESS WHEREOF the Employer has set its hands to these presents through its duly authorized official and the Contractor has caused its common seal to be affixed hereunto and the said two duplicates and caused these presents and the said two duplicates hereof to be executed on its behalf, the day and year first herein above written.

### **SIGNATURE CLAUSE**

SIGNED AND DELIVERED by the Reserve Bank of India by the hand of

Shri \_\_\_\_\_  
(Name and Designation)

In the presence of (Witnesses)

(1) \_\_\_\_\_  
Address \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

(2) \_\_\_\_\_  
Address \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

SIGNED AND DELIVERED by

\_\_\_\_\_

If the party is a partnership firm or an individual should be signed by all or on behalf of all the partners.

In the presence of (witnesses)

(1) \_\_\_\_\_  
Address \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

(2) \_\_\_\_\_  
Address \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

THE COMMON SEAL OF

Was hereunto affixed pursuant to the resolutions passed By its Board of Directors at the meeting held on

\_\_\_\_\_

The Contractor is signing by the hand of power of attorney whether a company or individual.

\_\_\_\_\_  
\_\_\_\_\_

In the presence of (witnesses)

(1) \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

(2) \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Directors who have signed these Presents in  
token thereof in the presence of

If the Contractor signs under its common  
seal the signature clause should tally with  
the sealing clause in the Articles of  
association

In the presence of (witnesses)

(1) \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

(2) \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

SIGNED AND DELIVERED by

Shri \_\_\_\_\_

and duly constituted attorney

If the Contractor is signing by the hand of  
power of attorney, whether a company or  
individual

**ANNEXURE – 2**

**UNDERTAKING / DECLARATION /CERTIFICATE REGARDING SATISFYING  
THE ELIGIBILITY CRITERIA**

(To be submitted by bidders on their letters head duly sealed and signed by  
authorised signatory)

To  
The Regional Director  
Reserve Bank of India  
Fort Glacis, Rajaji Salai  
Chennai – 600001

Dear Sir/Madam,

**e-Tender No: RBI/Chennai/Estate/ / 25-26/ET/**

1. I/We certify that..... (Name of the Bidder)

- a) have not been suspended / delisted / blacklisted/ banned or any such process initiated against the company/entity or its directors, by any Statutory Authorities/organizations including Reserve Bank of India at any location in India on any grounds for last 5 years ending on \_\_\_\_\_.
- b) do not have any proceedings pending or order passed by any Authority/Court for violation/deficiency of statutory provisions such as EPF, ESI, Bonus, Minimum Wages, or other payments for last 5 years ending on \_\_\_\_\_.
- c) have not rescinded/abandoned any contract awarded by any of our clients before the expiry of prescribed period of contract for last 5 years ending \_\_\_\_\_.
- d) have been maintaining a clean track record without any involvement in unlawful/ illegal activities or financial Banking frauds. We do not have any case with the Police/ Court/ Regulatory authorities against the bidder or proprietor/partners/directors in case of Proprietorship/Partnership firm/company respectively involving the above.

2. I/ We know and understood that, if this Undertaking / Declaration /Certificate submitted by us is found to be false, the Bank shall free to reject/ terminate our tender/ Work Order and that the Bank shall also be free to initiate any legal action in accordance with law including forfeiting of Earnest Money Deposit/ Performance Bank Guarantee/ Security Deposit and / or debarring us from participating in tenders invited by the Bank in future.

Date:

**Digital Signature / Signature of the  
bidder**

Place:

**ANNEXURE - 3**

**PROFORMA FOR BANK GUARANTEE FOR PERFORMANCE / EARNEST MONEY DEPOSIT**

(On Non-Judicial Stamp Paper of appropriate value purchased in the name of the Issuing Bank)

Place.....

Date.....

To  
Regional Director  
Estate Department  
Reserve Bank of India  
Fort Glacis, Rajaji Salai  
Chennai – 600 001.

Dear Sir/Madam,

**Structural Strengthening of existing part slab area, providing heavy duty floor finish including ancillary civil works at 1st Floor of MOB, Chennai for providing new SBS (Shredding & Briquetting) machines.**

Ref.: NIT/Advt.No.

date:

WHEREAS Reserve Bank of India, having its Central Office at Shahid Bhagat Singh Road, Mumbai, through its office at Reserve Bank of India, Fort Glacis – 16, Rajaji Salai, P.B.No.40, Chennai 600 001 (hereinafter called "the RBI") has awarded the Contract for the captioned work (hereinafter called the "Contract") to M/s \_\_\_\_\_ (Name of the Contractor) (hereinafter called "the said Contractor", which expression shall include its successors and assigns).

AND

Whereas the Contractor is bound by the said Contract to submit to Reserve Bank of India, Chennai a Performance Bank Guarantee for a total amount of ₹ \_\_\_\_\_ for the due fulfilment by the said Contractor of the terms and conditions contained in the contract. We, .....(Name of the Bank), (hereinafter called "the Bank"), at the request of M/s \_\_\_\_\_, the Contractor, do hereby undertake to pay to the Reserve Bank of India, an amount not exceeding ₹ \_\_\_\_\_ as Performance Guarantee for due fulfilment of terms and conditions of the contract.

NOW THIS GUARANTEE WITNESSETH

1. We (Name of the Bank) do hereby agree with and undertake to RBI, their Successors, Assigns that in the event of the RBI coming to the conclusion that the Contractor has not performed his obligations under the said conditions of the Contract or have committed a breach thereof, which conclusion shall be binding on us as well as the said Contractor; we shall on demand by the RBI, pay without demur to the RBI, a sum of ₹ \_\_\_\_\_ or any lower amount that may be demanded by the RBI. Our guarantee shall be treated as equivalent to the Performance Guarantee Amount for the due performance of the obligations of the Contractor under the said Contract, provided, however, that our liability against such sum shall not exceed the sum of ₹ \_\_\_\_\_

2. We also agree to undertake and confirm that the sum not exceeding ₹ \_\_\_\_\_ as aforesaid shall be paid by us without any demur or protest, merely on demand from the RBI on receipt of a notice in writing stating that the amount is due to them and we shall not ask for any further proof or evidence and the notice from the RBI shall be conclusive and binding on us and shall not be questioned by us in any respect or manner whatsoever. The Bank shall pay to RBI any money so demanded notwithstanding any dispute/disputes raised by the Contractor in any suit or proceedings pending before any Court, Tribunal or Arbitrator/s relating thereto and the liability under this guarantee shall be absolute and unequivocal. We undertake to pay the amount claimed by the RBI within a period of one week from the date of receipt of the notice as aforesaid.

3. We confirm that our obligation to the RBI under this guarantee shall be independent of the agreement or agreements or other understandings between the RBI and the Contractor.

4. This guarantee shall not be revoked by us without prior consent in writing of the RBI.

We hereby further agree that:

a) Any forbearance or commission on the part of the RBI in enforcing the conditions of the said agreement or in compliance with any of the terms and conditions stipulated in the said Contract and/or hereunder or granting of any time or showing of any indulgence by the RBI to the Contractor or any other matters in connection therewith shall not discharge us in any way and our obligation under this guarantee. This guarantee shall be discharged only by the performance by the Contractor of their obligations and in the event of their failure to do so, by payment by us of the sum not exceeding ₹ \_\_\_\_\_

b) Our liability under these presents shall not exceed the sum of ₹ \_\_\_\_\_

c) Our liability under this agreement shall not be affected by any infirmity or irregularity on the part of our said constituents/clients or their obligations thereunder or by dissolution or change in the constitution of our said constituents.

d) This guarantee shall remain in force up to \_\_\_\_\_ beyond the work completion period / Issuance of Performance Guarantee i.e., \_\_\_\_\_ for this contract. provided that if so desired by the RBI, this guarantee shall be renewed for a further period as may be indicated by them on the same terms and conditions as contained herein.

e) Our liability under these presents will terminate unless these presents are renewed as provided hereinabove on the or on the day when our said constituents comply with their obligations, as to which a certificate in writing by the RBI alone is the conclusive proof whichever date is later. Unless a claim or suit or action is filed against us within or any extended period, all the rights of the RBI against us under this guarantee shall be forfeited and we shall be released and discharged from all our obligations and liabilities hereunder.

In witness whereof, I/We of the Bank have signed and sealed this guarantee on the \_\_\_\_\_ day of \_\_\_\_\_ (Month) (Year) being herewith duly authorized.

For and on behalf of (Name of the Bank)

Signature and Seal of authorized Bank official

Name:

Designation

Stamp/ Seal of the Bank

Signed, sealed and delivered for and on behalf of the Bank by the above named in the presence of:

Witness 1

Signature .....

Name .....

Address .....

(NB: This Performance Bank Guarantee will require stamp duty as applicable in the state, where it is executed and shall be signed by the official whose signature and authority shall be verified).



**ANNEXURE – 4**

**FORMAT OF MEASUREMENT BOOK**

*First Page*

Name of the Work: **Structural Strengthening of existing part slab area, providing heavy duty floor finish including ancillary civil works at 1st Floor of MOB, Chennai for providing new SBS (Shredding & Briquetting) machines.**

Measurement Book No. \_\_\_\_\_

Second Page

**Index**

Sl.No	Particulars of items	Page No.

Third Page

Sl.No	Particulars of items	Page No.	Amount	Initial of the Officer

Fourth Page

M.B.No. \_\_\_\_\_

Page No. \_\_\_\_\_

Tender Item No./ Tender Page No.	Full Description of item of work	Measurements				Quantity
		No.	L	B	D/H	

**PROFORMA OF ABSTRACT OF COST**

Sl.No	Tender Item No.	Description	Quantity	Rate	Unit	Amount

**ANNEXURE – 5**

**FORMAT FOR POWER OF ATTORNEY OR AUTHORIZED SIGNATORY**

(To be submitted by successful bidder)  
(On Non-Judicial Stamp Paper of appropriate value)

To,  
Regional Director,  
Reserve Bank of India,  
Estate Department,  
Chennai Office – 600001.

Dear Sir/Madam,

**Structural Strengthening of existing part slab area, providing heavy duty floor finish including ancillary civil works at 1st Floor of MOB, Chennai for providing new SBS (Shredding & Briquetting) machines.**

We.....(Name of the Bidder and address of their registered office) do hereby constitute, appoint and authorise Mr. / Ms. ....(Name and residential address of Power of Attorney holder) who is presently employed with us and holding the position of ..... as our attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to our bid for the captioned Project, including signing and submission of all documents and providing information / responses to the Reserve Bank of India (RBI), representing us in all matters before RBI, and generally dealing with RBI in all matters in connection with our proposal for the said Project.

We hereby agree to ratify all acts, deeds and things lawfully done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

Signature/(s) of the Bidder

Name/(s)

Stamp/Seal of the Bidder

Note:

Power of Attorney should be properly stamped and notarized

Power of Attorney furnished by Contractor shall be irrevocable.

**ANNEXURE - 6**

**PROFORMA FOR INDEMNIFYING THE EMPLOYER AGAINST CONTRACT LABOUR RULES/REGULATIONS**

(To be submitted by successful bidder on Non-Judicial Stamp Paper of appropriate value)

To  
The Regional Director  
Reserve Bank of India  
Fort Glacis, Rajaji Salai  
Chennai – 600001

**e-Tender No: RBI/Chennai/Estate/     / 25-26/ET/**

Dear Sir/Madam,

**Structural Strengthening of existing part slab area, providing heavy duty floor finish including ancillary civil works at 1st Floor of MOB, Chennai for providing new SBS (Shredding & Briquetting) machines.**

We, M/s ..... (Name of contractor), hereby undertake that we shall comply with all the statutory rules/ regulations with regard to the employment of contract labour and their payment. We also hereby fully indemnify and keep indemnified the Employer, i.e. Reserve Bank of India, against payments to be made to the contract labour and for the observance of the laws in this regard without prejudice to our right to claim indemnity from our sub-contractors.

Yours faithfully,

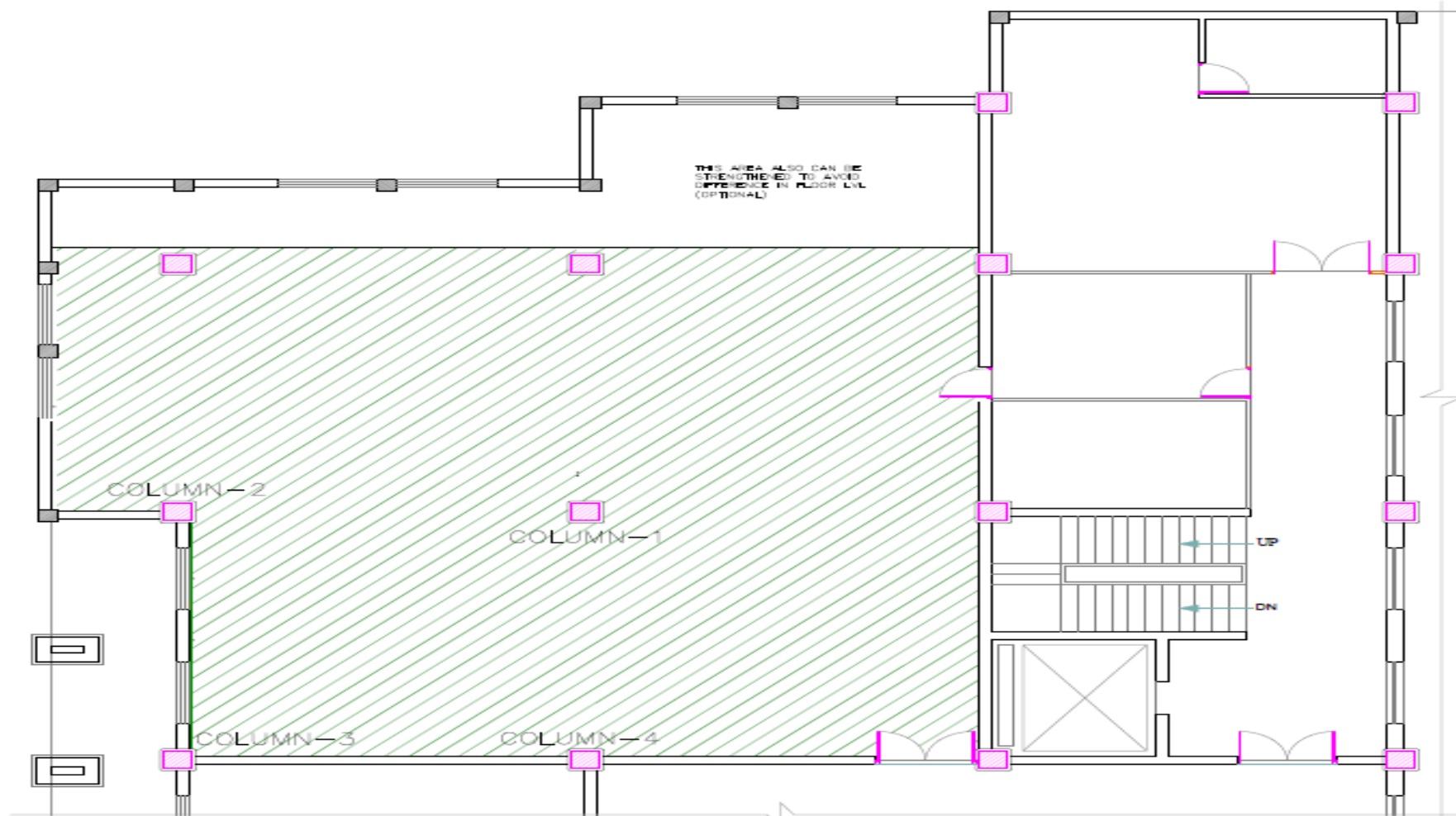
Date:

**Digital Signature / Signature of the bidder**

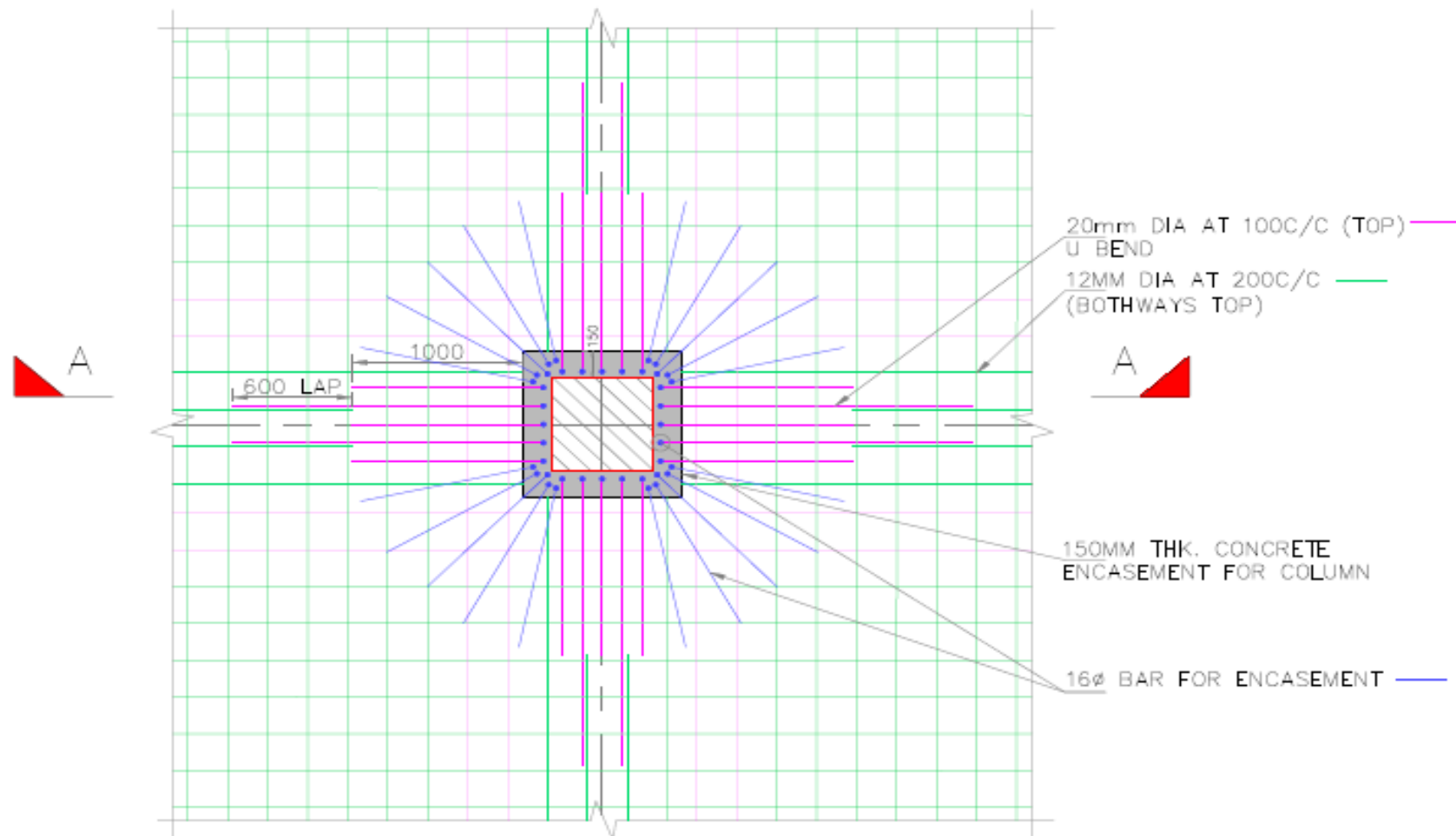
Place:

**SECTION – X**

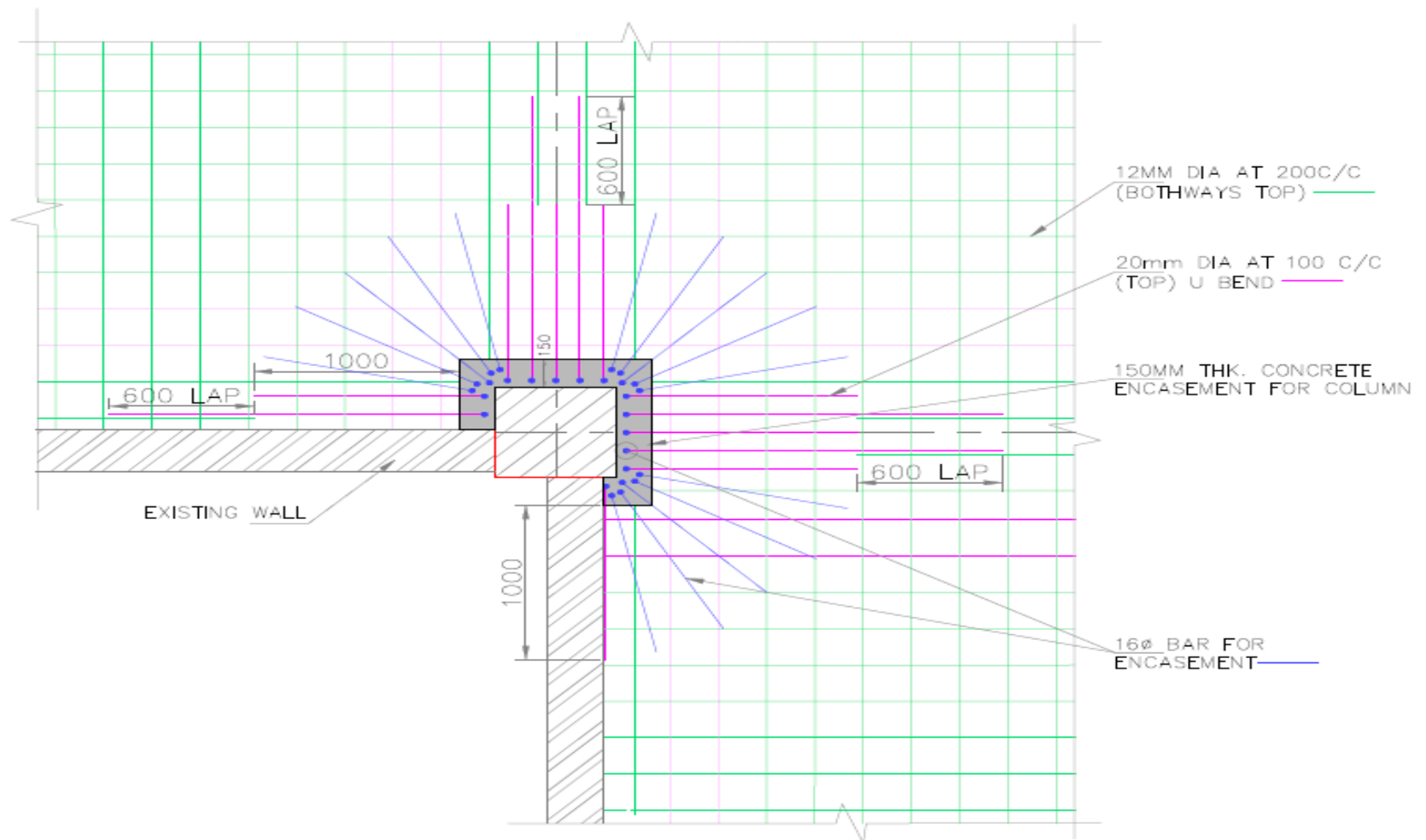
**Drawings / Sketches / Typical Photographs**



**Plan of the proposed SBS area**

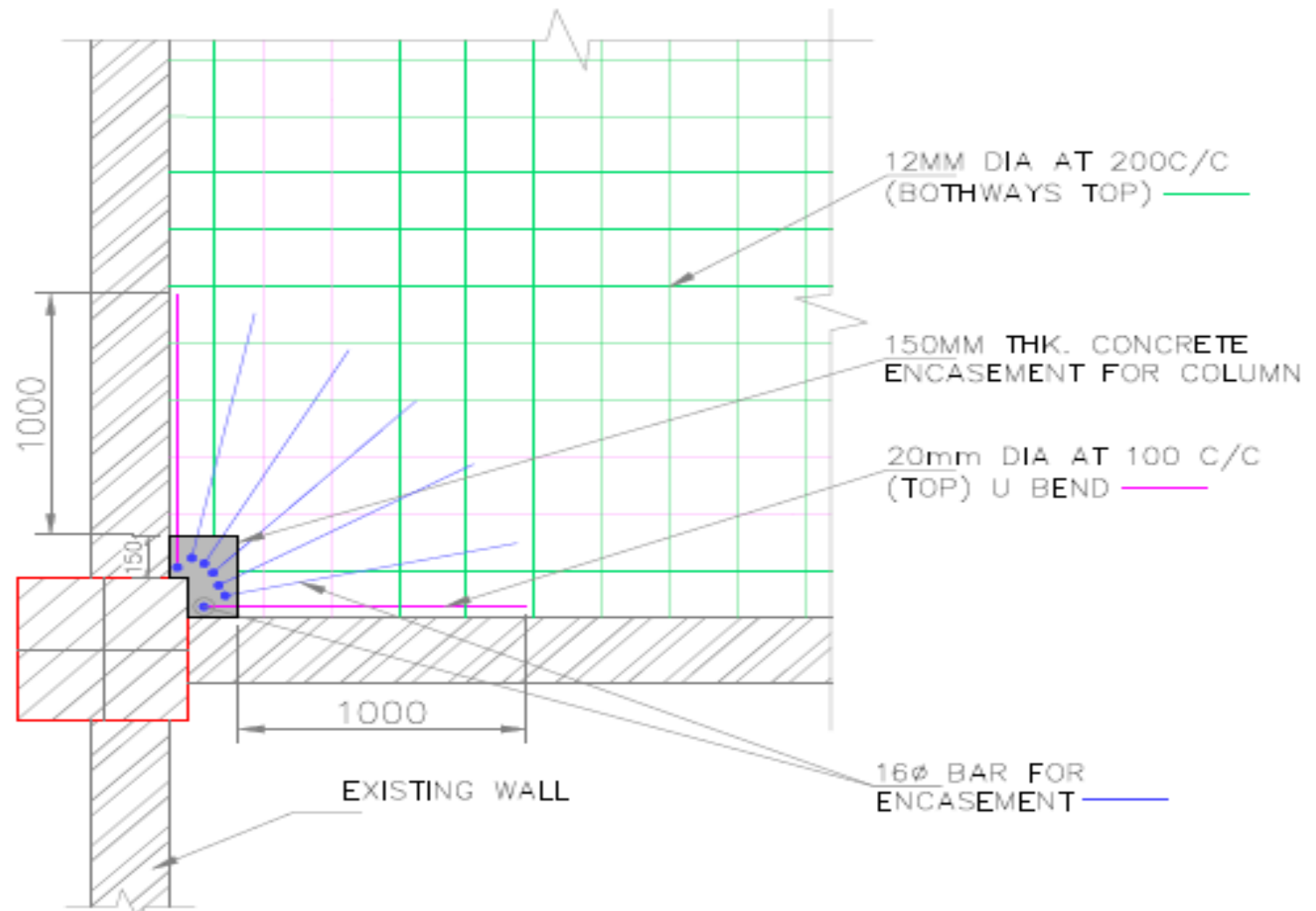


**TYPICAL REINFORCEMENT AT COLUMN JUNCTION - 1**

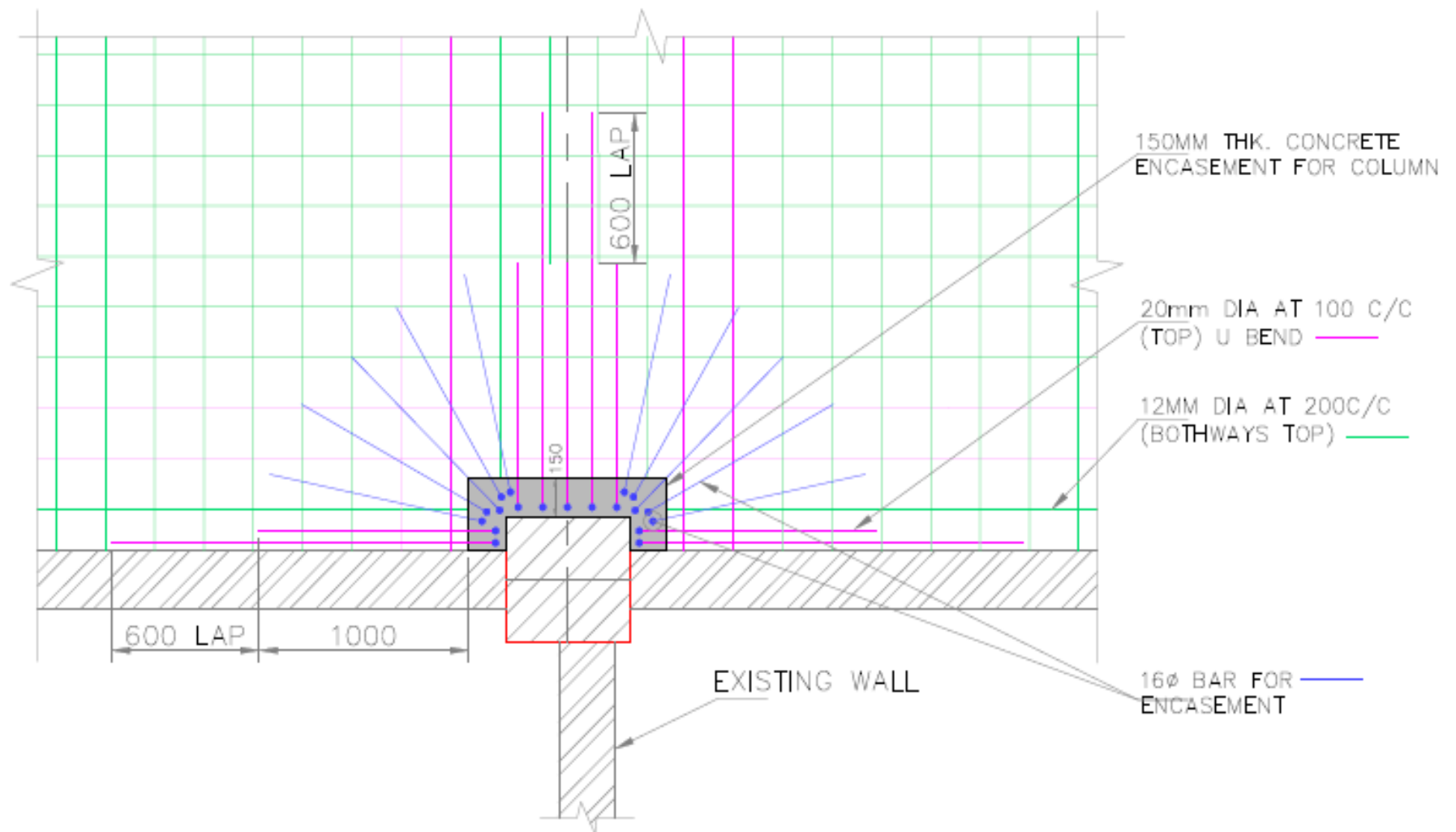


**TYPICAL REINFORCEMENT AT COLUMN JUNCTION - 2**

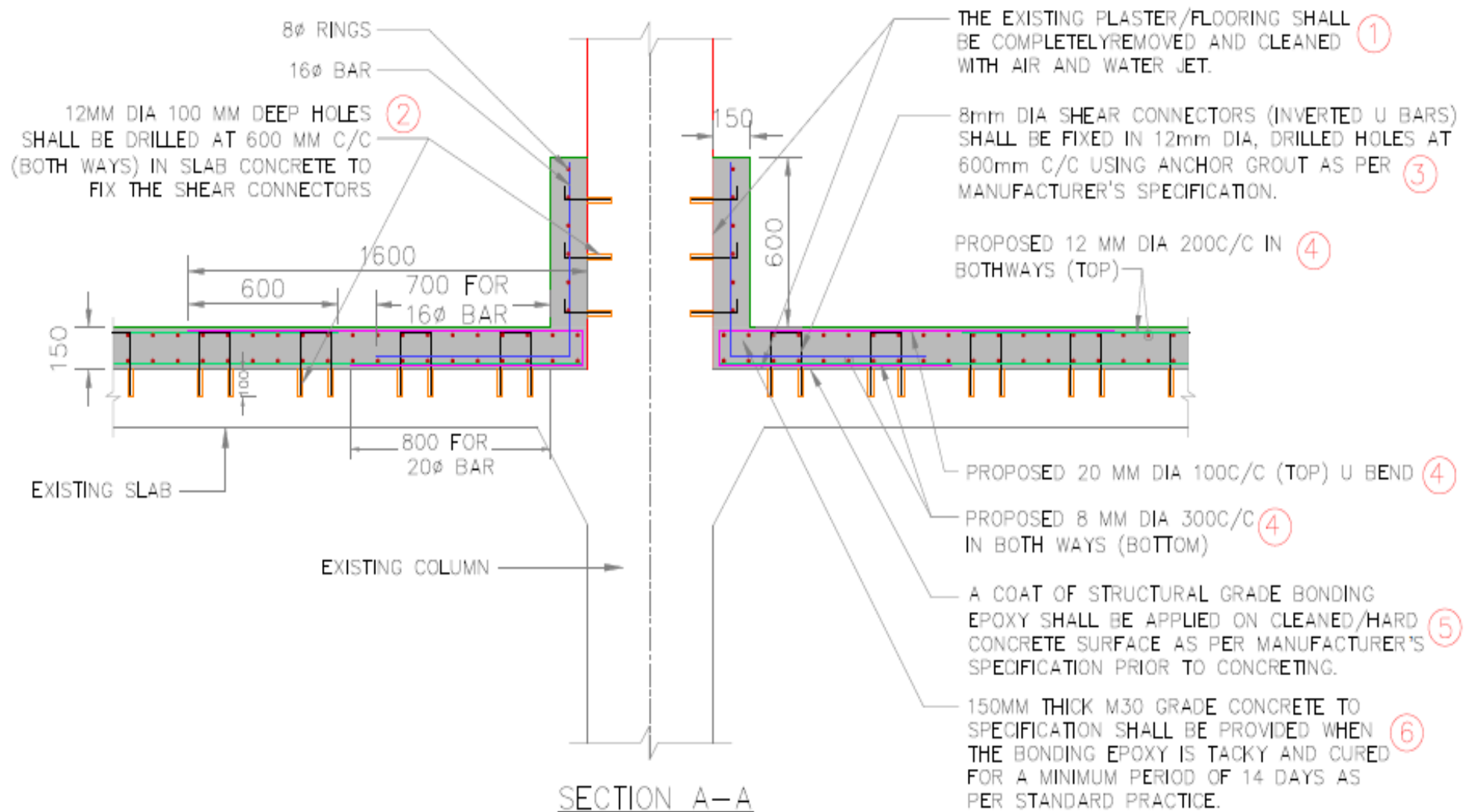




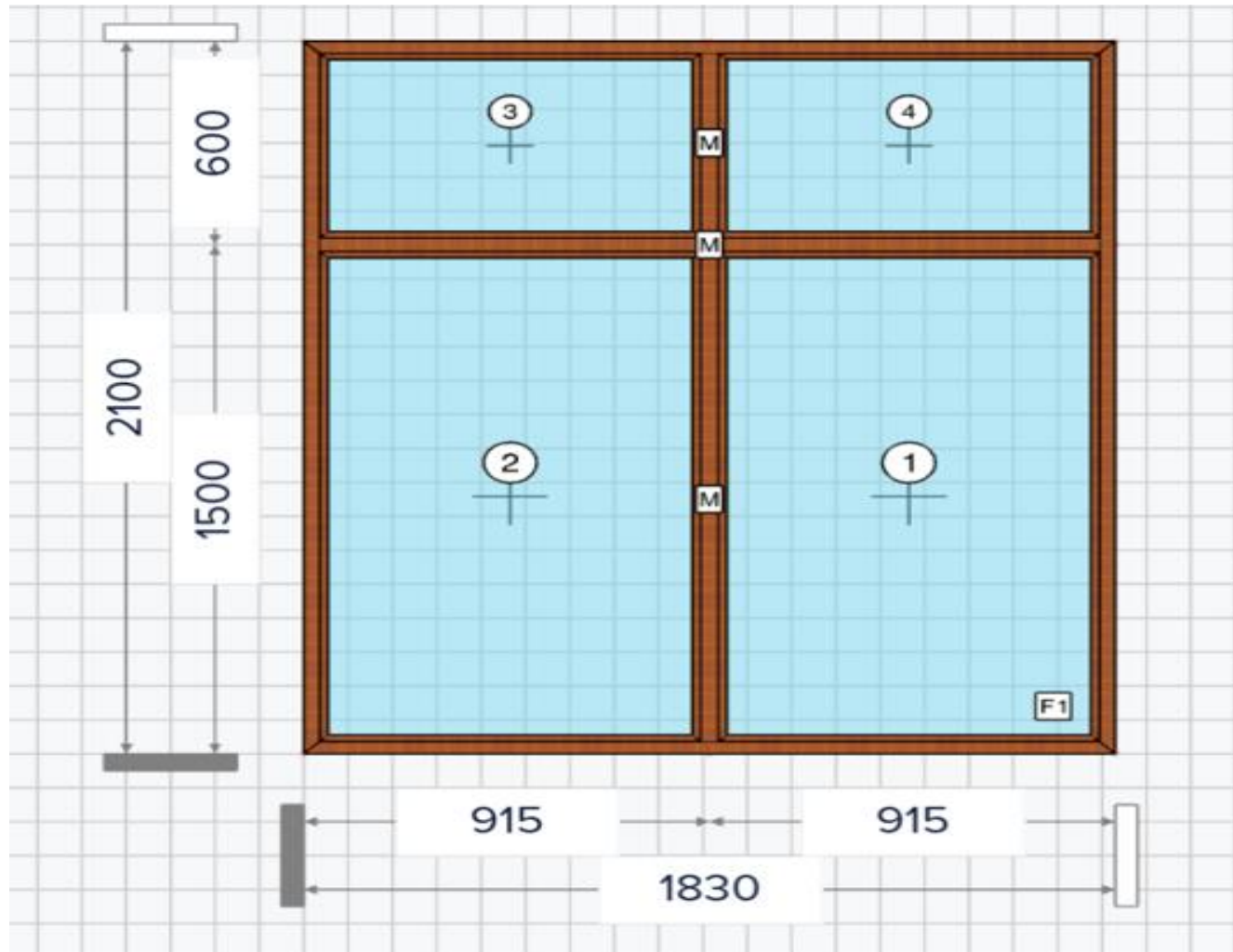
**TYPICAL REINFORCEMENT AT COLUMN JUNCTION – 3**



**TYPICAL REINFORCEMENT AT COLUMN JUNCTION – 4**



**SECTION A-A (TYPICAL FOR COLUMN JUNCTION - 1)**



**PROPOSED UPVC WINDOW SYSTEM (sizes are approximate only)**  
**(Panels 1,2,3&4 are fixed)**



**PROPOSED GRILL SYSTEM FOR THE UPVC WINDOW SYSTEM (for indicative purpose only)**





**TEMPORARY MS STEEL SCAFFOLDING SYSTEM TO BE ERECTED (FOR INFORMATION PURPOSE ONLY)**