

Serial Page No: 1

Date: 17/06/2020

(A Government of India Undertaking) 206/D-1, Bhagirathi (Behind NCC Campus) Rameswaram Colony, Bariatu Road Ranchi- 834 009

INDEX SHEET

Ref: BEML/MKR/WP/Qtr-1/2020/0553

Sub: Tender For "Providing APP membrane water proofing at terrace of Qtr no.- E1, BEML Colony, Sarovar enclave, Kanke Road, Ranchi".

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Note:

- a. The tenderer shall duly sign with company seal on all the pages of the tender document before submission.
- b. You are requested to seal the Technical bid and Commercial bid in separate envelopes superscripting Technical bid and Commercial bid with the above reference work respectively on the respective envelopes. Both the sealed Technical bid & commercial bids are to be put in single sealed envelope. The commercial bid which is not submitted in a separate sealed envelope will be summarily rejected.
- c. The sealed tenders should be dropped in the tender box placed in the BEML Limited, Regional office, 206/D-1, Bhagirathi (Behind NCC Campus), Rameshwaram Colony, Bariatu Road, Ranchi- 834 009.
- d. The Commercial bids of only the technically qualified tenderers will be opened.



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TENDER CONDITIONS ACCEPTANCE LETTER

(to be given on the Firm's Company letter head and to be submitted along with Technical bid)

To, M/s. BEML Limited, 206/D-1, Bhagirathi (Behind NCC Campus) Rameswaram Colony, Bariatu Road Ranchi- 834 009	
Dear Sir, Sub: Acceptance of terms and conditions of the Tender Reference No	tender –
1. I/We have downloaded / obtained the tender doc "Tender/Work from the website(s) namely	uments for the subject mentioned
As per your advertisement given in the BEML web	site(s).
2.I/ We hereby certify that I/We have read ent documents from the page No.01 to 31. Which for abide hereby the terms /conditions/clauses contained	m the part of work order and I/we shall
3. The corrigendum issued from time to time by y been taken into consideration while submitting this	<u> </u>
4. I/We hereby unconditionally accept that the te tender documents / corrigendum in its totality/entir	
5. In case any provision of this tender are found shall be at liberty to reject this tender/bid includi Money Deposit absolutely and we shall not hav satisfaction of this condition.	ng the forfeiture of the full said Earnest
Date:	Signature of the contractor
	NameAddress
	Phone No





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COVERING LETTER OF THE TENDER

Sir,

Sub: Tender For "Providing APP membrane water proofing at terrace of Qtr no.- E1, BEML Colony, Sarovar enclave, Kanke Road, Ranchi".

- 1. BEML Limited invites tenders for the subject work in two bid system (**Technical bid & Commercial bid**).
- 2. Please note that, tenders will be published through on BEML website www.bemlindia.in. Last date and time of receipt of offer will be up to 1400 Hrs on or before 26.06.2020. offer to be submitted manually / by post in the tender box placed in the BEML Limited, Regional office, 206/D-1, Bhagirathi (Behind NCC Campus), Rameshwaram Colony, Bariatu Road, Ranchi- 834 009and technical bid will be opened on 26.06.2020 at 1500 Hrs.
- 3. The relevant details are furnished below:

Sl.	Description	Remarks				
No	_					
A	EMD	Rs 2,500/-(Two Thousand Five Hundred Only)				
В	Last Date & time for	26.06.2020 upto 14:00 Hrs				
	receiving the tenders					
C	Nature of Tender documents	Two Bid system (Technical bid & Commercial Bid)				
D	FAX/E-mail quotations will b	be summarily rejected				
Е	Opening of Technical Bids	26.06.2020 at 15:00 Hrs at Regional office, 206/D-1,				
		Bhagirathi (Behind NCC Campus), Rameshwaram				
		Colony, Bariatu Road, Ranchi- 834 009				
F	Opening of Commercial	Will be intimated later				
	Bids those who qualify					
	technically					

- 4. The period allowed for execution of the work is **20** days from the date to be mentioned in the work order to be placed on the successful bidder.
- 5. This being an item rate contract, the rates quoted shall remain firm and errors if any in the extension / total shall be subjected to correction. The quantities shown against each item are only approximate and hence any reduction / increase thereof during the execution of work shall not vitiate the contract/ work order. The company does not bind itself to accept the lowest or any other tender.
- 6. The tender shall remain open for acceptance for a period of **90 days** from the date of opening of tenders.
- 7. The tenderers shall visit the site and acquaint themselves with the conditions of the site prior to submission of tenders and no claims will be entertained later on the grounds of ignorance.



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8. EMD amount of Rs.2500/- to be remitted online or on Bank Counter in favor of BEML Limited in it's STATE BANK OF INDIA Account [A/c No. 11048999662 /IFSC 'SBIN0012623' / MICR '834002032']. Or thru' Demand Draft / Banker's Cheque in favour of BEML LIMITED, payable at Ranchi, issued from Commercial Bank. The original Demand Draft /Banker's Cheque towards Earnest Money Deposit (EMD), to be submitted in a sealed envelope in the Tender drop Box provided at Regional Office, Ranchi before closing date and before the time of the bid submission. In case of online remittance, the transaction slip printout to be attached along with the technical bid.

Offers without EMD or EMD in the form other than the one specified or EMD with lesser amount shall not be considered and tenders will be rejected. No Interest would be paid on the Earnest Money Deposit.

- 9. The tenderers are requested to write the ITEM RATE IN FIGURES as well as IN WORDS against each item. In case of any discrepancy between the two, those written in the words shall take precedence. The item rate quoted should correspond to the "Units" given under unit column.
- 10. In the event of an error occurring in the amount column of Bill of Quantities as a result of wrong extension of unit rate and quantity, the unit rate quoted by tenderer / agencies shall be treated as firm and the extension shall be amended on the basis of the rate.
- 11. Late tender and conditional tenders are liable to be rejected. Hence, tenderers shall ensure that their tender is dispatched well in advance so that it reaches this office before the time and date mentioned in the tender documents.
- 12. The tenders should conform to tender specifications and conditions in every detail. Any tenders not conforming to our specifications and conditions are liable to be summarily rejected. Quotations other than those called for in the enclosed tender form are liable for rejection.
- 13. Conditional tenders are liable to be rejected.
- 14. Successful tenderer is required to employ their representative to supervise the work and they should be present when the work is under progress.
- 15. The successful tenderer is required to sign the work order prepared based on the quoted rates placed on him by the officer in charge of BEML Limited
- 16. BEML Limited reserves the right to place order as a whole or part of any item only as deemed fit.
- 17. In case, the contractor / firm after quoting withdraw from the tender or refuse / delay in commencing the work or stop the work abruptly, their EMD will be forfeited.
- 18. Any queries / clarification / information / details regarding tender enquiry to be communicated only through email id :- amr@rm.beml.co.in / ranchi@rm.beml.co.in. Ph- 0651-2540710

Thanking you

Yours faithfully For BEML Limited

Regional Manager Ranchi





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DETAILS OF TECHNICAL & COMMERCIAL BID

- 1. Technical bid should consist of:
 - a) Experience/Completion certificates, financial turnover, registration Nos. of GST and PAN etc.
 - b) EMD amount of Rs.2500/- to be remitted online or on Bank Counter in favor of BEML Limited in it's STATE BANK OF INDIA Account [A/c No. 11048999662 /IFSC 'SBIN0012623' / MICR '834002032']. Or thru' Demand Draft / Banker's Cheque in favour of BEML LIMITED, payable at Ranchi, issued from any Commercial Bank in India.
 - c) Signed relevant documents with company seal to be submitted along with the technical bid in a sealed envelope.
 - d) NIT Document duly signed with Sealed to be attached along with technical bid.
- Commercial bid should consist of:
 Bill of quantity duly filled with item rate in figures and as well as in words against each item with contractors signature and company seal on all pages.

Note: The rebate/discount if any, given should be written on the Schedule -A BOQ (Commercial bid) only.

ELIGIBILITY CRETERIA OF TECHNICAL BID

In the Technical Bid, the firm has to furnish the following details / documents with regard to their experience etc:

CREDENTIALS i.e., EXPERIENCE / FINANCIAL STATUS ETC.

- 1. Intending Tenderer who meets the following eligibility criteria may quote for the tender.
- 2. **Financial Position:** Average Annual financial turnover during the last Three (3) years, ending 31st March of the financial year i.e. FY 2016-17, 2017-18, 2018-19, should be at least **Rs. 33,000/-.**
- 3. **Experience:** Experience of having successfully completed similar works (Waterproofing works) during last Seven (07) years ending last day of month previous to the one in which applications are invited should be either of the following:
 - (i) Three similar completed works costing not less than the amount equal **Rs.44,000/- Or**
 - (ii) Two similar completed works costing not less than the amount equal Rs.55,000/-
 - (iii) One similar completed work costing not less than the amount equal **Rs.88,000/**-

<u>NOTE</u>: Copies of the work order and completion certificate issued by respective clients shall be submitted along with the technical bid.

4. **Description of Work:** Providing APP membrane water proofing at terrace of Qtr no. - E1, BEML Colony, Sarovar enclave, Kanke Road, Ranchi.





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REQUIREMENTS OF TECHNICAL BID

5. <u>Details of Annual financial turnover during the last three (03) years, ending 31st March of the previous financial year.</u>

Financial Year	2016-17	2017-18	2018-19
Annual turnover			
(Rs in Lakhs)			
Profit / Loss			
(Rs in Lakhs)			

NOTE: Copies of the Audited Balance sheet and profit & loss statement for the last Three (3) years duly certified by auditor shall be submitted along with the technical bid.

6. Details of having successfully completed similar works (Waterproofing works) during last Seven (07) years ending last day of month previous to the one in which applications are invited from any Government/Public Sector Undertakings/Large Private Organizations with Certificates.

Sl. No.	Name & Address of Client	Value of work & W.O. No.	Stipulated date of start	Stipulated date of completion	Actual date of completion	Completed value of work

NOTE: Copies of the work order and completion certificate issued by respective clients to be submitted along with the technical bid.

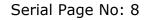


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7.	The bi	dders are required to mention and submit copies of	t the following:
(i)	(Regist PAN is	quote your PAN No. tration Certificate of ssued by the IT Authorities ubmitted along with the technical bid)	
(ii)	(Register the GS	quote your GST No. tration Certificate issued by T Authorities to be submitted along with hnical bid)	
(iii)	for Bil for EC	quote your Bank Account No. l Payment including Bank Code S (Copy of cheque leaf shall be ted alongwith the technical bid)	
	a)	Name of the Bank	
	b)	Type of Account	
	c)	Branch, Place	
	d)	Bank Code No.	
	e)	MICR No.	
Online		ils: Amount, DD No & date and in case of tion no. to be mentioned and attached along Bid	

8. The commercial bids who have submitted the satisfactory documentary evidence for the above requirements will be opened. The commercial bids of the contractors i.e., who does not qualify in the Technical requirements will not be opened and EMD will be refunded.





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GENERAL CONDITIONS

To:

BEML LIMITED,

206/D-1, Bhagirathi (Behind NCC Campus) Rameswaran Colony, Bariatu Road Ranchi- 834 009

Sir.

I/We, the undersigned, do hereby tender to execute and fully complete the whole of the work set forth and described in the General Conditions, Specifications, Schedule of Prices and Bill of Quantities attached hereto in accordance with the terms, conditions and obligations therein contained.

I/We, further agree to add to or deducting from contract/ work order sum, as the case may require, The net value of all deviations (additions and deductions) including non tendered items, of the value of work completed, shall not exceed 20% of the approved contract/ work order value and 40 % in respect of any individual item, indicated in schedule A-BOQ. The value of such additions and deductions being calculated upon the prices for similar work set forth in the accompanying Bill of Quantities, or if similar work in the opinion of the Officer in charge be not included in the Bill of Quantities then upon the price set forth in the Schedule of Prices attached hereto.

I/We, also here	ewith send Rs			.by Dema	ınd Draft/ tra	nsaction s	lip fo	or onli	ine
payment as Earnest Money as required and to enter further into a contract with the Company									
for the execution	on of the said wor	ks in cor	ıforr	nity with	the aforesaid	General	Con	ditio	ns,
Specifications,	both preliminary	as well	as	Standard	Schedule of	Prices,	and	Bill	of
Quantities	accompanying	to	all	of	which	I/We		here	by
give				asser	nt and concurr	ence.			

Yours faithfully,

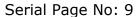
(SIGNATURE)

WITNESS:

1.

2.

Home address of the Contractor/Business Address:





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GENERAL CONDITIONS OF CONTRACT

(UNDER WHICH THE WORKS HEREINAFTER DESCRIBED ARE TO BE PERFORMED)

1. <u>INTERPRETATION CLAUSE</u>:

IN these General Conditions and the Specifications attached, the word 'COMPANY' shall be held to mean 'BEML LIMITED', the work 'CONTRACTOR' shall be held to mean one or more contractor or contractors jointly or generally engaged in the works to which these General Conditions and the specifications relate, and shall include his/their heirs, executors and administrators. The word 'OFFICER-IN-CHARGE, shall be held to mean a Member of the staff of the BEML to supervise the work. The expression 'SITE OF WORKS, shall be held to mean the extent of land which the Company places at the disposal of the Contractor from time to time for the purpose of executing the contract works. The word SPECIFICATIONS shall be held to include the tender General Conditions, Specifications, Schedule of Prices and Bill of Quantities.

2. SUFFICIENCY OF PRICED BILL OF QUANTITIES AND TENDER:

On the acceptance of this tender, the contractor shall forthwith satisfy himself as to the correctness and sufficiency of his tender for the works as well as all prices stated in the Bill of Quantities and the schedule of Prices and within SEVEN DAYS of the acceptance of his tender. The amount of the tender shall be the sum at which the contractor engages to execute whole of the works set-forth in the Bill of Quantities, the contractor shall submit to the company, with his tender both Schedule of Prices and Bill of Quantities upon which the tender has been based fully and completely priced. Items left unpriced in the bill of Quantities shall be held to be included in the prices for other items of the work.

3. CONTRACTOR TO EXECUTE CONTRACT WITH THE COMPANY:

The contractor shall within SEVEN DAYS of the acceptance of his tender enter into and execute a formal indenture of work order to be prepared by the Company's. The contractor shall not be entitled to make any charges for perusal of the work order.

4. <u>CONTRACT NOT TO BE ASSIGNED OR UNDERLET AND CONSEQUENCE OF GRATUITIES BEING GIVEN:</u>

THE contractor shall not assign or make over the work order to any other person, or underlet it, or make a sub-contract with any workmen or workman for the execution of any part of work(s), but shall employ his own workmen for the labour thereof, who shall be paid by him in wages by the day. And in case the Contractor assigns or makes over the work order, or underlet or make sub-contract, contrary to this clause or either himself or his agents give any gratuity to any employee of the Company, the company shall be at liberty to terminate the work order.



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5. TENDER OR AGREED RATE:

THE contractor shall agree not to petition for revision of rates tendered for by him under any circumstances at any stage of the work, either during execution or when the final claims are settled.

6. THE contractor shall satisfy himself or shall be deemed to have satisfied himself as to the nature of the sub-soil, the three dimensions. levels, and character nature of all roads, existing drains, sewers, water, gas or other mains, electric cables and other things as regards any connection they may have with the works the subject of the contract, and he shall also inspect the site of the works and surroundings, the means of access there to and egress therefrom and shall generally obtain his own information on all matters and things which can in any manner influence his tender, No claims for extra works otherwise will be allowed in consequence of any misunderstandings, error or incorrect information on these points, or of any other inaccuracies in reference thereto, which may appear in the specification, nor shall the work order be nullified in consequence of any such misunderstanding, error incorrect information or in-accuracies.

7. OFFICER IN CHARGE'S ORDERS TO COMMENCE WORKS AND AS TO NON-DELIVERY OF SITE:

THE Contractor having signed the work order, BEML Limited will forthwith give him notice to commence the works and the contractor shall upon receipt of such notice, commence the works and carry them on at such point and points and in such portions as the Officer in charge may direct.

THE Company shall, with the Officer in charge written order to commence the works, give to the contractor, the use of so much of the site of works, as may in the opinion of BEML Limited be required in order to enable the contractor to commence and continue the construction of the works, and shall from time to time as works proceed give the contractor the use of such further portions of such site as the Officer in charge may from time to time consider proper in that behalf, but the non delivery in manner aforesaid of the use of such site or any portion thereof shall not vitiate or affect the work order, nor any provision contained in the specification nor entitle the contractor to any increased allowance in respect of money.

8. SETTING OUT WORKS AND NOTICES:

THE Contractor shall set out the whole of the works and be responsible for the correctness of the position, levels and dimensions of the several works, according to the specification and written instructions of the Officer in charge. If at any time during the progress of the works any error shall appear or arise in the position, levels or dimensions of the several works, the contractors on being required to do so by the Officer in charge, shall at his own expense remove and amend the works to the satisfaction of the Officer in charge, not-withstanding that he may have been assisted by Officer-In-Charge in setting out the same. The contractor shall observe, perform and comply with the requirements of all statutes and byelaws and shall also serve notice on the authorities having control of the road surfaces before the same are



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broken up and he shall likewise serve notices on the owners of the sewers, drains, water, gas or other mains, electric cables and other things which may be in any way affected by the execution of the work.

9. NIGHT WORKS:

THE works shall be carried on day only. If bad or treacherous ground be met with or if there be any other causes whatsoever, which in the judgment of the Officer-In-Charge requires, it, but no work shall be carried on in the night without the knowledge and sanction of the Officer-in-charge.

10. WATCHMEN, LIGHTS, ETC., TO BE PROVIDED BY THE CONTRACTOR:

THE Contractor, shall at his own cost provide night watchmen to all parts of the work where necessary required by the Officer-in-charge. He shall also keep all open trenches, excavation or other dangerous places properly and sufficiently lighted between sunset and sunrise, and shall provide and fix proper fencings and boarding and temporary bridges to protect and assist the public traffic. The contractor shall also at his own cost erect temporary fences on the site of works where required by the Officer-in-charge.

11. SUSPENSION OF WORK:

THE Contractor(s) shall suspend the execution of work or any part or parts thereof whenever called upon in writing by the BEML Limited to do so and shall not resume work thereon until so directed in writing by the BEML Limited. The Contractor will be allowed by the BEML Limited an Extension of time (not less than the period of suspension) for completion of the item or group of items of work for which a separate period of completion is given in the work order and of which the suspended work forms part but not other claims in this respect for completion or otherwise, however, shall be admitted. The contractors shall have no claim to any payment of compensation or otherwise, whatsoever on account of suspension of work.

12. WORK TO BE CARRIED ON WITH EXPEDITION FAILING WHICH THE COMPANY MAY EMPLOY OTHER CONTRACTOR WITHOUT VITIATING THE WORK ORDER:

THE Contractor shall commence to carry on the works with due diligence, and as such expedition as the Officer in charge may reasonably expect, having regard to the specified time of completion of the whole of the works. In case the contractor fails to do so, or neglect to provide proper and sufficient materials, or to employ a sufficient number of workmen to execute the work, then the company shall have full power, without vitiating the work order, to take the works wholly or in part out the hands of the contractor to engage or employ any other person or workmen to procure all requisite materials and implements for the due execution and completion of the said works, and the cost and charges incurred by the company in so doing shall be ascertained by the BEML Limited and be paid for or allowed to the company by the contractor and it shall be competent for the Company to deduct the



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amount of such costs and charges along with overheads out of any sum or sums due or to become due from the company to the contractor under this or any other contract/ work order.

13. INFERIOR MATERIALS OR WORKMANSHIP TO BE AMENDED:

THE materials as well as the workmanship and finish of the whole of the work order works shall be best of their kind and should any materials be brought upon the site of works or on any land or property of the company or on the places where the operations are being carried out in connection with the works, which in the judgment of the Officer in charge is of an inferior description and improper to be used in works, the said materials shall be removed. All inferior workmanship or finish shall be amended by and at the cost of the contractor forthwith, or within such period or periods as the Officer in charge may direct, and the contractor shall pull down, amend and reconstruct any work he may have erected upon an insecure or insufficient foundation or that he may have insufficiently secured and protected against immediate and future injuries, whether arising or likely to arise in future from weight, pressure action of water or otherwise, on being required to do so by the Officer in charge. Incase the contractor neglects or refuses to remove such materials or comply with such directions it shall be lawful for the BEML Limited, on behalf of the company and by its agents, servants and workmen to remove the materials and amend the workmanship and finish, so objected, to, or any part thereof, and to replace the same with such other materials, workmanship and finish as shall be satisfactory to the company and on the certificate of the Officer-in-Charge to deduct the expense thereby incurred, or to which the company may be put or be liable or which may be incidental thereto, from the amount of any sum or sums due to or become due to contractor, or to recover the same by action at law or otherwise from the contractor as the company may determine.

WHEN it is apparent to the Officer-in-Charge that defects exists in the work, or that damage or accident has occurred to the works, or that the works are not upheld or maintained in good sound and water right conditions, or repair or in working order, but the cause thereof is not apparent, a general requisition in writing by the Officer-in-Charge to the contractor to amend, make good or maintain the works in sound, perfect and water tight conditions shall be under no obligation to specify the work or repair, but such requisition shall be conclusive evidence against the contractor that he is not performing his obligations under the work order.

14. <u>EMERGENCY POWERS</u>:

IN the event of any accident or failure occurring in or on the works, which, in the opinion of the Officer-in-Charge requires immediate attention either during construction or during the period of maintenance the company may by their own or other workmen make necessary repairs at the expenses of the contractor.

15. OPENING TO BE MADE FOR EXAMINATION OF WORKS:

SHOULD Officer-in-charge require it for their more perfect satisfaction, the contractor shall at any period during the continuance of the work order, pull down



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any part of the work and make such openings, as to such extent through any part of the said work as the Officer-in-charge may direct and the contractor shall make such works good again to his or their satisfaction. Should the work be found faulty in any respect, the whole of the expenses thereby incurred shall be defrayed by the contractor but if otherwise by the Company.

16. PRECAUTIONS AGAINST INJURY TO PROPERTY ADJACENT TO THE WORK IN PROGRESS:

THE contractor shall take special care, by the erection of temporary fences and by every other means which circumstances may render necessary, to prevent all injury and damage to or trespass upon the lands, roads, fences or property adjacent to the site of works and shall confine the passage of his workmen to existing public roads, foot paths. He shall likewise pay and satisfy all claims whatsoever and from whomsoever, for temporary occupation, way-leaves, damages, the trespass or otherwise, in reference to the said lands, roads, fences and property adjacent and bear the company harmless from any and all such claims. If any greater extent of land than the site of work be required by the contractor for his operations, he shall obtain and occupy the same at his own cost and charge.

17. PRECAUTIONS AGAINST ACCIDENTS OR INJURY:

THE Contractor shall, at his own expense, shore, sling, protect, support, alter, restore make good and maintain as may be necessary, all buildings, water and gas pipes, sewers, drains, electric cables and other things which may be disturbed, exposed or injured during the execution of works or in consequence of the execution of the works and shall also provide any extra timbering which may be temporarily required and all labour in fixing and removing the same and shall, at his own expenses provide for the continuous use of all buildings, pipes, sewers, drains electric cable, water sources and other things, the use of which may be liable to interruption during the progress of the work. The Contractor shall at his own expense restore all such buildings, water and gas pipes, sewers, drains, electric cables and other things to the satisfaction of the owners thereof and he shall like wise, at his own expense, construct and maintain such works as may be necessary for the due permanent support of all such buildings, pipe, sewers, drains, electric cables and other things met with in the construction of works, and shall indemnify, save, harmless and keep indemnified, the Company and its officers from and against all action, suits, claims, penalties, liabilities, cost, expenses and demands whatsoever, by reasons or on account of damage to such buildings, pipes, sewers, drains, electric cables and other things whether caused by the execution of the work order works or in the insufficiency of the aforesaid permanent support. Company may deduct the expenses thereby incurred or to which the Company or its Officers may thereby be put or be liable or which may be incidental thereto from, the amount of any sum or sums due or to become due to the contractor or may recover the same by action at law or otherwise from the contractor and the Company may compromise any such action suits or other proceedings, or such terms as it shall see fit and contractor shall thereupon forthwith pay the Company the sum or sums paid by the Company upon the occasion thereof, and shall in every case pay such



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sum or sums as shall fully indemnify the Company according to the present stipulation.

18. REJECTED MATERIALS:

ALL rejected materials will at once be removed from site by the contractor to such distance as may be desired, failing which the company after giving three days notice in writing may do so and recover the cost of removal from the contractor.

19. <u>COMPANY'S PLANT:</u>

NO Company's premises, materials or Labour will ordinarily be lent or hired to the contractor. Exceptional cases must have the approval of the company in writing.

20. SCOPE OF COMPLETION:

COMPLETION includes completion of all work in accordance with the plans and specifications, removal of all yard mess accumulated during construction, levelling and cleaning up the site and generally cleaning the whole building or works.

21. FINAL MEASUREMENTS TIME:

THE final measurement must invariably be preceded by a thorough remeasurement of the whole of the work, performed which will be made by the company's Officer in charge and at which the contractor or his accredited agent must be present. For this purpose, a written notice will be sent to him at least THREE DAYS before the date fixed for the measurements, appointing the day, hour and place of meeting. Should he not attend to this the measurements will proceed without him, and he will be precluded from making any protest.

22. ATTENTION:

- i) TIME will be the essence of the work order and the contractor is to complete the whole of the work in the time stated in the tender, subject to the schedule of conditions.
- ii) THE contractor is to provide at all times during the progress of work and the maintenance period proper means of access, with ladders, gangways, etc., and the necessary attendance to move and adopt as directed for the inspection of their representative (no separate rate will be allowed).
- iii) THE Contractor is to keep all persons under his control and within the boundaries of the site and he will be held responsible for the care of the works generally until their completion including all works executed and materials deposited in the sites by himself or suppliers, together with all risks arising from weather, carelessness of operatives, damages or loss by thefts or by any other cause, and is to allow for all necessary watching and protective lighting.



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23. LABOUR ACTS:

a. IN the event of any accident/injury/disablement, the contractor shall arrange to pay the requisite compensation legally payable to the concerned employee/dependents and also indemnify to BEML in case of any claim arising therefore later.

24. <u>DISPUTE RESOLUTION AND JURISDICTION:</u>

All disputes or differences whatsoever arising between the parties out of or relating to the construction, meaning and operation or effect of the work order or the breach thereof arising during the progress of work or after completion or abandonment thereof shall be mutually discussed and settled amicably by conciliation Committees/ Councils comprising of independent subject experts constituted by BEML, failing which, the dispute shall be settled by arbitration consisting of sole arbitrator appointed by the Company in accordance with the provisions of Arbitration and Conciliation Act 1996 and the arbitration proceedings shall be conducted at the place of awarding of original work order.

The court at the place of awarding of work order only shall have jurisdiction to entertain any dispute/matter relating to the contract



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SPECIAL CONDITIONS

- 1. THE tender shall remain open for acceptance for a period of 90 days from the date on which the tenders are due to be submitted.
- 2. THE contractor shall visit the site to acquaint himself with site conditions and study the specifications in detail prior to tendering, and no claims will be entertained later on the ground of ignorance or otherwise of the conditions under which the work shall have to be executed.
- 3. THE contractor shall arrange for at least one qualified Engineer with experience in similar construction work to be at the work spot through out the period of construction to ensure correct undertaking and execution of the work as per specifications.
- 4. THE setting of the work shall be done by the contractor himself, All measurements shall comply with the dimensions noted on the specification. The contractor shall construct centre line pillars and Bench Marks wherever necessary at his own cost and the setting out shall be got checked, approved and certified by the Officer-in-charge before execution of the work.
- 5. CARE shall be taken in execution of work not to damage service lines etc., coming in the way of construction. If any damage is caused in the lines, the cost of replacing or repairs shall be borne by the contractor.
- 6. CONTRACTOR shall provide himself with requisite number of welding sets, mixers with hoppers, vibrators builders hoist, Tools, meters and testing equipments, transport vehicles, etc., required for the complete satisfactory execution of work.
- 7. **WATER:** Water required for the work shall be arranged by the contractor at his own cost. Non availability of water for the work shall not be a reason for delay in work.
- **8. ELECTRICITY:** Electricity required for the work shall be arranged by the contractor at his own cost. Non availability of electricity for the work shall not be a reason for delay in work.

9. TAXES:

WHATEVER Taxes and duties, as applicable, chargeable in respect of this contract whether by the Central or State Government shall be borne by the contractor and the price quoted shall be inclusive of such taxes, cess or any other statutory duties or taxes payable by them and price quoted shall be firm and shall be inclusive of such duties and taxes. WHEREVER Taxes are deductible at source, the company will recover the amount as per the statutory requirement.

10. THE Contractor shall agree to execute the work progressively in co-ordination with the concerned officers and as directed by Officer-in-charge.



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11. THE specifications contained in the MES Schedule (referred to in the tender) in appropriate sections shall apply to this work order to the extent applicable, Cement co-efficient shall also form part of MES Schedule.

12. VALUATION OF DEVIATIONS :

Every deviation shall be subject to the limits specified as under:

- a. The net value of all deviations (additions and deductions) including non tendered items, of the value of work completed, shall not exceed 20% of the approved work order value and 40 % in respect of any individual item, indicated in schedule A-BOQ
- b. In case of non tendered items, the total value of such non tendered items shall not exceed 5% of the approved contract value.

The basis for ascertaining the non tendered items shall be as follows:

- (i) The value of all deviations shall be ascertained by measurements, on the basis of the rates or prices for similar work in the bill of quantities of the same contract/ work order in so far as such rates or prices apply.
- (ii) Where the rates or prices in Bill of Quantities do not apply, the value shall be based upon rates or prices deduced there from to the extent practicable to do so.
- (iii)The rates for Non Tender (NT) items shall be based on the SSR rates after proportionate adjustment in comparison with the tendered rates of like items in the work order. The basis to be adopted for working out the NT rate is the comparison of the NT item with similar trade item in the bill of Quantity for which the contractor has quoted.

13. PROVISION OF FITTING/FIXTURES OF DIFFERENT MAKE:

The contractor shall provide the same make of fittings/fixtures specified in the tender documents unless he has quoted for other equivalent for genuine reasons. In case due to exigency of the work and difficult market conditions, the contractor is not able to provide the same make, he shall be allowed to provide equivalent approved make subject to his obtaining the concurrence of the Officer-in-Charge for the price adjustment as between the quotation and the purchase price for the item involved. The base for reckoning shall be the date of purchase. The contractor shall produce purchase invoice as a proof of expenditure for the items other than those specified in the tender documents allowed for incorporation in the work. Construction Department of BEML Limited shall ensure the reasonableness of the rate in the purchase bill produced by the contractor. The price adjustment shall be the difference between the two makes on the date of purchase.

14. The Company reserves the right to accept the tender in parts i.e. on the basis of lowest quotation in each part or as a whole, at its own discretion and hence it is



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important that the tenders take sufficient care and quote reasonable rates in each part, so that if one part only is separated and entrusted to one Contractor he should be able to do it without difficulty. The rates quoted for similar items should be consistent. THE company also reserves the right to accept the lowest or any other tender at its discretion without assigning any reasons whatsoever.

15. EXTENSION OF TIME:

For all work order awarded, time is the essence of the work order. The contractor is bound to complete the work within the stipulated time. The Officer-in-Charge as to assess the delay arising out of default of the contractor. Where the delay is due to default of the contractor, and if there is no financial loss due to such delay, the Officer-in-Charge can recommend for grant of extension of time by the same authority who accepted the tender/awarded the work order, subject to recording the reasons for granting such extension of time.

Where the delay is due to default of the contractor, and if there is a financial loss due to such delay, the extension of time requires the approval of CMD. In the absence of CMD's approval, Liquidated Damages for delay in completion of the work shall become enforceable.

Where the delay is not due to default of the contractor, for example: - a) not providing clear work front to the contractor by the Company, b) Company's delay in decision making for changes relating to original work., etc necessary extension of time shall be granted with the approval of Competent Authority, as per DoP without sanctioning escalation claimed by the contractor except statutory levies.

Extension of time when granted with the approval of the Competent Authority as per Company's Delegation of Powers shall have the effect of rendering the clause Liquidated Damages for delay in completion work' inoperative upto the period of extension of time so granted unless otherwise specifically stated.

IF THE WORKS BE DELAYED:

- a) by force majeure, or
- b) by reasons of abnormally bad weather, or
- c) by reasons of civil commotion, local combinations of workmen strike or lockout, affecting any of the tradesmen employed on the work, or
- by reasons of delay on the part of nominated suppliers which the Contractor has in the opinion of Engineer-in-Charge taken all practical steps to avoid or reduce, or
- e) by reasons of delay on the part of the Contractors or tradesmen engaged by BEML in executing works not forming the part of work order, or
- f) by reason of any other cause, which in the absolute discretion of Officer-incharge is beyond the control.

Then in such case the BEML Limited may grant fair and reasonable extension in the completion dates of individual items or work for which the separate period of completion is mentioned in the work order as applicable. Upon the happening of any such event causing delay, the Contractor shall immediately give notice thereof in



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writing to Engineer-in-Charge but shall nevertheless use constantly his best endeavor to prevent or make good the delay and shall do all that may reasonably be required to the satisfaction of the Engineer-in-Charge to proceed with the works. extension of time as granted above shall be communicated to the Contractor by the Engineer-in-Charge in writing and shall be final and binding.

No claims in respect of compensation or otherwise, however, arising as a result of extension granted shall be admitted.

16. FORCE MAJEURE:

If, at any time during the currency of the work order, the performance of any obligation (in whole or in part) by the Employer or the Contractor shall be prevented or delayed by reason of any war, hostilities, invasion, acts of public or foreign enemies, rebellion, revolution, insurrection, civil commotion, sabotage, large scale arson, floods, earth quake or any other act of God, large scale epidemics, nuclear accidents, any other catastrophic unforeseeable circumstances, quarantine restrictions, any statutory, rules, regulations, order or requisitions issued by a Government department or competent authority (hereinafter referred to as "event") then, provided notice of the happening of such an event is given by either party to the other within 21 days of the occurrence thereof.

- a. Neither party by reason of such event be entitled to terminate the contract or have claim for damages against the other in respect of such non-performance or delay in performance, if not covered under insurance.
- b. The obligations under the contract shall be resumed as soon as practicable after the event has come to an end or ceased to exit.
- c. In case of doubt or dispute, whether a particular occurrence should be considered an "event" as defined under this, clause the decision of BEML Limited shall be final and binding.
- d. If the contractor is fore-closed under this clause, the Contractor shall be paid fully for the work done under the work order, but not for any defective work or work done which has been destroyed or damaged before its measurement. The BEML Limited shall have the option to take over any machines and material lying at site, at rates provided for in the work order, failing that, as per rates which are determined to be fair and reasonable by BEML Limited.

 If no notice is issued by either party regarding the event within 21 days of
 - occurrence, the said event shall be deemed not to have occurred and the work order will continue to have effect as such.

17. LIQUIDATED DAMAGES FOR DELAY IN COMPLETION OF WORKS

In case the Contractor fails to complete the works and clear the site on or before the stipulated time mentioned in the Work order he shall without prejudice to any other right or remedy of the Company in this behalf pay, as agreed Liquidated Damages and not as penalty, pay sum equal to 0.5% of the Contract/ work order sum (excluding non tendered/extra items, if any) for every week's delay subject to maximum of 10% of the total final bill value of the contract/work order.



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Liquidated Damages shall be applicable in the following cases:

- a) where the contractor fails to complete the work within the stipulated time;
- b) where the extension of time is granted with levy of LD;
- c) Where extension of time is granted without levy of LD but the contractor has failed to complete the work within the extended period.

The amount of Liquidated Damages shall be adjusted or set off against any sum payable to the contractor under this or any other contract / work order awarded by the Company.

In case where the work order is subjected to levy of LD, the BEML limited will issue 'Work Completion Certificate', which shall be final and binding the Company as well as the Contractor concerned.

18. FORE-CLOSURE OF CONTRACT:

The tender documents shall provide a clause to the effect that at any time after acceptance of the tender, the Company can decide to abandon or reduce the scope of work for any reason whatsoever, the BEML Limited shall give notice in writing to that effect to the contractor. The compensation, if any, payable for such foreclosure of work shall be discussed mutually between the Company and the contractor and settled after taking into consideration the loss suffered by the contractor on account of foreclosure of the work order. The contractor shall have no claim for any compensation whatsoever on account of any profit or advantage which he might have derived consequent to foreclosure of the whole or part of the works. The Company shall have the option to take over the contractor's materials or any part thereof, either brought to the site. The amount of compensation payable to the contractor due to foreclosure shall be decided by the authority one level above the level of the authority competent to award the work order, or by the CMD.

- 19. BEML General Conditions together with BEML specifications will form part of the contract/ work order. Should there be any discrepancy between the provision in the Bill of quantities, the former shall be deemed to take precedence there over.
- 20. No modification or change of specifications in the bill of quantities shall normally be accepted and such changes are to be rejected. Acceptance of such deviations shall be at the discretion of the Officer-in-charge.

21. EARNEST MONEY DEPOSIT:

CONTRACTORS should submit their tender accompanied by EMD of value indicated in the tender. It should be paid by bank draft or Bankers Cheque drawn in favour of the BEML Limited payable at Ranchi or the transaction slip printout (In case of online remittance) along with technical bid. Bid without Earnest money



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deposit will be rejected. On finalization of the tender, Earnest money deposit will be refunded to unsuccessful tenderers under proper acknowledgement.

In case, the contractor/firm after quoting, withdraws from the tender or refuse/delay in commencing the work or stop the work abruptly, their EMD/SD, as the case may be, will be forfeited. No interest amount is payable on EMD.

22. SECURITY DEPOSIT:

The successful tenderer shall be required to furnish security deposit for the fulfillment of work order and amount shall be 10% of the value of the work order (including GST), to be paid by the contractor. No waiver can be allowed in this regard. Such security deposit shall not entail any interest payment on refund.

The contractor shall choose any one of the following options for payment of security deposit in writing as under:

- (i)The contractor shall within 7 days of acceptance of the work order deposit the difference between Earnest Money and full Security Deposit by Demand Draft/Banker's cheque drawn on any of the commercial bank made in favour of BEML Limited.
- (ii)Security Deposit amount shall be deducted from the bills of the contractor at the rate of 10% of the total work order value (including GST).

The above security deposit shall be held by the Company up to one year from the date of successful completion of the work duly signed by officer in charge, as security of satisfactory performance of the work.

Security deposit amount will be refunded after one year from the date of successful completion of the work (completion certificate) duly signed by authorized person of BEML Limited

23. COMPLETION CERTIFICATE:

As soon as the Contractor completes the work assigned to him the same shall be inspected and if found satisfactory shall be taken over by the officer in charge. A "Completion Certificate" shall be issued to the contractor within 15 days from the date the contractor has given request for the same. If there are minor defects which can be rectified even after the building has been taken over, the defects shall be listed out and the contractor shall be asked to rectify the same before the final bill is submitted. The final bill along with the completion certificate duly certified by the Officer in charge shall be submitted to Finance Department for payment. The completion certificate shall have the following details:

- a) Particulars of the work and work order number,
- b) The date of work order to commence the work,
- c) Date of completion as per work order,
- d) Actual work done value.
- e) Extension of time if any, granted,
- f) Date on which contractor was required to complete the work,



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g) Actual date of completion and taking over by BEML.

24. FINAL BILL:

On completion of the work and the recording of measurements in the Measurement Book (MB), bill / Invoice shall be submitted by the contractor. On receipt of the bill duly signed by the contractor, the same shall be scrutinized by the Officer-in-charge to see that the claim is in order.

The bill prepared by the Department and accepted by the contractor, shall be accompanied with the following documents:

- Original Completion certificate
- ➤ No claim certificate duly signed by the contractor
- Original Contractor's All Risk Insurance Policy covering up to the actual date of completion of work.
- ➤ Measurement books duly technically checked by Officer in charge.
- Any other documents which are specified by the Management from time to time.

The Officer-in-charge has to certify in the work Completion certificate as well as in the Measurement Book, that the work is executed in conformity with the work order specification / conditions. The bill duly checked and co-ordinated by the Officer-in-charge shall be sent to the Finance Department along with the documents stated above.

25. CONTRACTORS LIABILITY AND INSURANCE:

From commencement to completion of the works, the contractor shall take full responsibility taking precautions to prevent loss or damage. He shall be liable for any damage or loss that shall happen to the works or any part thereof.

In addition, the contractor shall indemnify and keep the Company indemnified against all losses and claims for injuries or damages to any person or any property whatsoever which shall arise out of or in consequence of the construction works. For this purpose, the contractor shall take an insurance policy-"contractors all risks insurance"- to cover the risks, as per the Conditions of the Contract. The insurance policy has to be kept valid till the work is completed and the possession handed over to the Company. The policy shall be taken at his cost showing the Company as the 'principal' to simplify the work in the matter of raising claims and settlement thereof.





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CEMENT CO-EFFICIENT SHEDULE:

Sl. No.	Description	Unit	Cement in Kgs
01.	CC 1:1.5:3 Types A1 & A2	CM	403.50
02.	CC 1:2:4 Types B1 & B2	CM	320.80
03.	CC 1:3:6 Types C1 & C2	CM	216.20
04.	CC 1:4:8 Types A1 & A2	CM	170.00
05.	CC 1:5:10 Types DE2	CM	129.20
06.	Brick work in (one brick) CM 1:6	CM	49.34
07.	Brick work in (½ brick) CM 1: 4	CM	63.51
08.	Damp proof course in CM (1:2) 10mm thick	SM	7.19
09.	Damp proof course in CM (1:2) 15mm thick	SM	10.81
10.	Walling of random or polygonal rubble in gauged mortar 1:1:6	CM	89.69
11.	Size stone in gauged mortar 1:1:6	CM	62.79
12.	Walling of random or polygonal rubble in CM 1:4	CM	143.50
13.	Size stone masonry in CM 1:4 in foundation	CM	89.69
14	Size stone in CM 1:4 in basement and superstructure with joints neatly dressed.	СМ	80.72
15.	Size stone masonry in CM 1:6 in foundation	CM	62.79
16.	Size stone masonry in CM 1:6 in superstructure.	CM	56.66
17	Size stone masonry in CM 1:8 in foundation	CM	51.13
18	Rendering or screeding 10mm thick in brick/concrete in CM 1:2	SM	7.80
19.	Rendering or screeding 10mm thick in brick/concrete in CM 1:3	SM	6.24
20.	Rendering or screeding 10mm thick in brick/concrete in CM 1:4	SM	5.04
21.	Rendering or screeding 10mm thick in brick/concrete in CM 1:6	SM	2.58



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22	Rendering or screeding 10mm thick stone masonry in CM 1:2	SM	9.08
23	Rendering or screeding 10mm thick stone masonry in CM 1:3	SM	7.28
24	Rendering or screeding 10mm thick stone masonry in CM 1:4	SM	5.90
25	Rendering or screeding 10mm thick stone masonry in CM 1:6	SM	4.42
26	Pointing to block squared rubble coursed or un coursed in CM 1:2	SM	3.88
27	Pointing to block squared rubble coursed or un coursed in CM 1:3	SM	2.95
28	Pointing to block squared rubble coursed or un coursed in CM 1:4	SM	2.46
29	Pointing to block random rubble in CM 1:2	SM	4.87
30	Pointing to block random rubble in CM 1:3	SM	3.66
31	Pointing to block random rubble in CM 1:4	SM	3.06



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PARTICULAR SPECIFICATIONS

1. **GENERAL**:

THESE particular Specifications are to be read in conjunction with the specifications contained in the MES Standard Schedule of Rates 2010, i.e. PART I - Specifications and PART II-Rates, including errata (here-in-after referred to as the MES Schedule) and specifications given hereunder mentioned in these documents, rates and specifications thereon shall be deemed to apply to the works unless mentioned otherwise in the tender documents. In case of discrepancy between the documents, viz., Bill of Quantities, Particular specifications the following order of precedence shall be followed:

- (a) Bill of Quantities
- (b) Particular specifications

2. SCOPE OF THE CONTRACT:

THE contract comprises full, final and entire completion of Subject Work all as shown in Schedule-A and as described in these Particular Specifications enclosed hereto and also subject to the General and Special Conditions. The work shall be completed in stipulated period.

THE time for completion is to be reckoned from the date of commencement mentioned in the Work Order.

3. PROPRIETORY MATERIALS:

THE contractor shall ensure that proprietary materials like paints etc., are brought to site in original sealed containers / packing and bear the manufacturer's markings.

4. CLEANING DOWN:

THE contractor shall clean all the floors, walls, glass panes, fittings and fixtures, etc., touch up all painter's works and carryout all other necessary items of work in connection therewith and leave the whole premises clean and tidy before handing over the buildings.

5. CONCRETE MATERIALS

- **5.1 CEMENT:** Cement used in the work shall be ordinary PORTLAND/PUZZOLANA cement and shall be stored by the contractor in a dry place under proper cover and stack. Stacks shall not be more than 10 bags high.
- **FINE AGGREGATE**: Fine aggregate (sand) for concrete shall be of approved quality natural sand. Fine aggregate shall be clean, free from any admixture of clay, loam, silt, organic matter and other impurities.



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- **5.3 COARSE AGGREGATE**: Coarse aggregate for concrete shall be of approved broken granite stone and shall conform to IS-383-1963.
- **5.4 WATER:** Water used in concrete shall be clean, fresh and non-saline.

Rate: Rate quoted for cement concrete works in Schedule-A shall include the cost for the use and waste of formwork as necessary.

Unless otherwise specified, the rates quoted against various items of schedule 'A' shall not include for plastering. The various concrete surfaces shall be finished as under:

- a) All concrete surfaces occurring in conjunction with wall and the like: Immediately after the formwork is removed all irregularities shall be removed and air holes shall be stopped with CM 1:3 so that the surface is ready for application of plaster which is paid for separately.
- b) Soffits & edges of roofs, soffits & edges of chajjas, facias, soffits and sides of beams and columns, exposed surfaces of shelves, not occurring with conjunction of walls: These shall be finished as described above to receive plastering which is paid for separately.
- c) Exposed surfaces of concrete members other than those specified above and tops and edges of chajjas and the like, independent columns and other concrete surfaces not specified to be plastered: These surfaces shall be finished fair and smooth. On account of any reason whatsoever, if fair and smooth surface cannot be achieved, the contractor is permitted to plaster these surfaces with CM 1:3, to obtain a fair, uniform and smooth finish. However, he shall ensure that the thickness of plaster is kept to a minimum. The contractor shall not be paid anything extra for the application of this CM 1:3 plaster.
- d) The rate quoted for pre-cast concrete shall include for cost involved in the cutting of grooves, etc., in walls, etc, and fixing as specified.

5.5 **Mixing concrete:**

All concrete shall be mixed in mechanical concrete mixers with hopper. The mixing drum shall be washed and cleaned on completion of work, every day and on every stoppage of work, if the stoppage exceeds 30 minutes. If the total quantity of concreting proposed to be carried out in any one day does not exceed 0.25 cum hand mixing may be adopted for such concrete.

6. FORM WORK

All form work shall be as mentioned in MES schedule 2009, Part I, section 7, Where concrete is to be finished smooth, the forms shall be wrought on the inside surface. Contractor may at his discretion use steel or plywood form work in lieu of timber formwork at no extra cost to the Company.



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7. COMPACTING CONCRETE

The compacting of concrete shall be done all as specified in SSR Part I – Specifications. The mechanical vibrator shall be used to compact the concrete in footing, columns and beams etc., and vibrator shall be used to compact the PCC 1:2:4 in flooring and shop irrespective of the fact whether the thickness of concrete exceeds 30 cm or not.

8. SIZE STONE MASONRY IN CEMENT MORTAR IN FOUNDATIONS

Face work shall be hammer dressed with no stone to tail into a point. No face stone to be narrower or shorter than its height. Thickness of mortar in beds and joints shall not exceed 20mm.HEIGHT OF COURSES 150mm to 230mm but no course shall be greater in height than any course below.

- 8.1 BOND OR THROUGH STONES: Bond or through stones shall be provided at 1.5m in every course and are to be staggered. No stone shall tail into a point. Bond stones shall extend from the front to the back of walls. For walls 600mm thick and under, bond stones shall be in one piece. For walls over 600mm thick they shall either be in one piece (if available locally) or be in series of headers, each header overlapping the adjoining one by not less than 150mm. No header shall preferable be less than 600mm in length.
- 8.2 Quoins and jambs to be squared back in beds and joints are faced as ordered.
- 8.3 HEARTING Stone to be not less than 150mm in any direction, carefully laid hammered down into place with wooden mallet and solidly bedded with mortar. The hearting must not be brought to same level as the facing stones with spalls or pinning, which are only to be used as wedges in the hearting.

9. SIZE STONE MASONRY IN PLINTH AND SUPER STRUCTURE

Facing stone shall have hammer dressed faces with no stone tailing into a point. No face stone shall be narrower or shorter than its height. Face beds shall be squared back at least 50mm and joints 25mm. No spalls or pinnings shall show on face. All other details shall be as detailed herein before for foundations.

10. BRICK MASONRY IN CEMENT MORTAR

Brick shall be table moulded / clamp burnt bricks locally available of approved quality having a minimum compressive strength of 50kgs/Sq.cm from the local kilns and shall be used in bonds as specified in MES schedule 2009 Part I, Section – 5.

11. WATER PROOF COURSE

Water proof course with lime concrete and machine made pressed clay tiles: The roof surface shall be wire brushed and cleaned of all dust and foreign matter before laying the coba. Lime and brick aggregate coba shall be made out of good quality fat lime and brick aggregate 20mm size mixed in preparation of 1:3 by volume and



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allowed to cure for 3 days. The cubed brick bat coba shall be spread over the roof slab to the required thickness and slopes etc. and consolidated with wooden mallets using beal fruits and gur all as specified of section 11 of SSR Part I, and finished rough. Over the coba, one course of machine made YELAHANKA tiles or other equivalent and approved make shall be laid all as specified in Bill of Quantities.

12. PLINTH PROTECTION

Plinth protection 75mm thick shall be provided. Plinth protection need not be provided where portions are covered by steps and ramps and shall be laid to slope as directed and in bays of length not exc. 3M adopting alternate bay system. The top surface shall be finished smooth using extra cement.

13. PLASTERING GENERAL

The surface to be plastered shall be prepared by raking out joints and wetting the surface thoroughly. Curing of plastering work shall be properly done by means of stirrup pumps or similar devices. The contractor shall take every precaution right from the commencement of plaster work to prevent any defect that may appear on the surface of plaster and shall be responsible to make good any portion of plaster, which in the opinion of the Officer -in-charge requires removal and re-doing.

- 13.1 Sand for plastering and pointing work shall be as specified herein before for RCC works.
- 13.2 The thickness specified in relevant Schedule 'A' item is the thickness above the proudest part of brick/concrete/stone surface and is exclusive of dubbing coat. Any dubbing coat that may be necessary to bring the surface to uniform level shall be provided by contractor and shall be of the same mix specified for the plastering. The rate quoted for Schedule 'A' items shall be deemed to be inclusive for the dubbing coat also.
- 13.3 No rounding off of external and internal angles or corners of plaster shall be done. The junction/arises shall be made true and square.
- 13.4 Plastering on walls, dados and skirting shall be returned along with the jambs of opening in walls and cills of windows.
- 13.5 Plastered surfaces shall be finished fair and even.
- 13.6 Cement Mortar Plastering: Plain cement plaster or ordinary cement plaster where shown in schedule of finishes shall be of mix/proportion and thickness as specified in Schedule 'A' finished fair and even without using extra cement.
- 13.7 Keyed pointing: Keyed pointing to size stone masonry shall be in CM 1:4 all as MES SSR, part I.



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13.8 Rough cast plastering: Provide rough cast plastering of thickness over and including cement mortar screeding as specified in Schedule A. The mixing laying of rough cast plastering shall be as specified in SSR Part I 2009.

14. EXPANSION AND CONTRACTION DUMMY JOINTS

Provide expansion and contraction (Dummy) joints to the width and lengths specified in Schedule 'A'. These shall be straight and the slab edges adjacent to the joints shall be formed truly vertical. The top edges of the slab at joints shall be bull nosed to 10mm radius. The joint shall be thoroughly cleaned, sides brushed before filling the filler. The molten bituminous charge before incorporation.

Note:

- a) All concrete work should be strictly done according to the description and specifications given in the tender. If the same is to adhered to in respect of any concrete items by the contractors the BEML Limited shall have the power to reduce the quoted rates in respect of such schedule items and the decision of the BEML Limited is final and binding on the contractors.
- b) Contractor should note that only the relevant clauses of particular specifications attached to the tender documents are applicable to Schedule A-Bill of quantities.



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Acceptable brands of materials to be used in the work:

Sl.No.	Item	Brand/Make
1	Switches	M/s Anchor Roma/Havells/Crabtree
2	PVC conduit pipe	M/s Supreme/Finolex
3	PVC Insulated Copper Wire	M/s Finolex/Havells
4	DB & MCB	M/s L & T/Havell's/Indoasia
5	L T Cable	M/s CCI/ Universal/Havells
6	Lights/Fixtures	M/s Philips/Wipro/GE/ Crompton Greaves
7	Cables	M/s Finolex/ Havells/Anchor
8	Fan	M/s Crompton greaves/Almonard/GEC
9	Ply wood/Block Board (BWP / Marine grade)	M/s Archid/Greenply/Century/Kitply.
10	Particle Board	M/s Archid/Greenply/Century/Kitply.
11	Veneer	M/s Archid/Greenply/Century/Kitply
12	Lamination	M/s Archid/Greenlam/Century/Kitply
13	Ceramic/Vitrified /glazed tiles	M/s.Naveen/Kajaria/Johnson
14	Locks, mortice locks	M/s. Godrej/Europa
15	Cement	M/s ACC/Ultratech/Birla
16	Paints	M/s Asian paints/Berger
17	Reinforcement steel	M/s Sail/Tisco/Tata
18	Toughened glass, beveled glass	M/s Saintgobain/Modiguard
19	Modular workstations	M/s. Godrej/Blowplast/ Featherlite/Durian
20	Chairs	M/s. Godrej/Designo/Durion/ Featherlite
21	Door closure	M/s Everite/Dorma
23	EWC	M/s Hindware/Parryware
24	Urinals	M/s Hindware /Parryware
25	Wash basin	M/s Hindware/Parryware
26	Shower taps / washbasin taps/pillar taps/Bib cocks	M/s Parryware/Hindware/ESS ESS
27	GI pipes	M/s Tata/Zenith
28	PVC Pipes	M/s Finolex/Supreme
29	Gully trap/Nahani trap	M/s Supreme/Finolex
30	Towel rail/Paper holder/ Liquid soap holder/Fancy soap holder trays	M/s Parryware/Hindware/ESS ESS
31	White cement	M/s Birla/JK
32	Antiskid ceramic tiles	M/s Naveen/Kajaria/Johnson
33	Waterproofing compound	M/s. Fosroc/Roff/BASF/Pedlite





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COMMERCIAL BID

Schedule - 'A' Bill of Quantities(BOQ)

Sl	Description of Work	Unit	Quantity	Rate (Rs)	Amount (Rs)
1 1	Preparing and repairing the existing loose damaged surface and removing the existing water proof chemical coating by hacking, scrapping, removing all dirt, laitance, contaminants, Repairs to high spots and loose bedding layer in cement mortar and scrubbing down with water including disposal of debris to a far place not objected by any civic authorities etc complete all as specified and directed by Officer-in-charge.	Sqm	90		
2	Providing and laying water proof treatment by using 3mm thick heavy duty Atatic Polypropylene (APP) Membrane of M/s Fosroc/Pidilite/Roff by preparing the surface by clearing of all foreign matter by wire brushing etc., all as detailed a) Applying a coat of Bituminous primer at 0.40 Liter/Sqm b) Providing 3mm thick APP membrane sheet reinforced with polyester non woven fabric (weight of the membrane should not be less than 3.50 Kg/SM) and fixed neatly on the hot applied bitumen surface for proper bonding including torching etc., wherever necessary. Extra care to be taken at lap joints for proper bonding. c) Providing and applying 2 coats of heat resistant aluminum paint at the rate of 100grm / Sq.mt for each coat on the bitumen surface. Note: i) Clear & Finished area only will be taken for the purpose of measurement & lap will be deemed to be included in the quoted rate.ii) Lap should be of 75mm width for horizontal and 100mm width for vertical surface and joints should be sealed with torching. iii) Work has to be carried out by removing vegetation (if any) thoroughly all as per the directions of Officer in charge.	Sqm	of all Taxes	and duties:	
	Total (Rs) in figure In Total (Rs) in words Inclusive of all Taxes	clusive	of all Taxes	and duties:	
	and duties				