

D.TECHNICAL SPECIFICATIONS

1.Scope of Work :

The scopes of work and Items Rates are as per mutually agreed SOR, Drawings, and Specifications. The contractor shall plan, carryout, monitor and complete the work in every respect in accordance with the drawing, contract and in accordance with the directions and to the satisfaction of the Bank and its authorized representative and/ or Assistant Manager – Civil and/or Engineering In-charge, in a proper workmanlike and most cost efficient manner, maintaining quality and safety performance. The contract shall carryout his obligations under the contract with due care and diligence. The Company may from time to time issue further drawings and/or written instructions, details, directions and explanations in regard to:

Construction of all relevant Civil – RCC Structural works (foundation and superstructure) including supply of all materials, tools & tackles, labour, etc. and Erection & other activities for Structural Steel Work , related to following buildings/Structure/Unit complied to the Specification as laid down.

Major Item Details:

Major Civil, Structural & Architectural scope of works involved is:

- Earthwork in excavation in all types of soil including soft rock and hard rock.
- RCC work in foundation as well as superstructure for various types of Buildings and structures, Equipments, Retaining walls, Trenches, Drains, non-suspended slabs etc.
- RCC work of grade **M-20** in foundation and superstructure in 1st Floor construction
- Erection of Structural steel works in single and built up sections in super structure in portals, crane girders, roof trusses, beams, purlins, plate girders, side runners, pipe rack, trestles, stair cases, ladders, hand railing, platforms/walkways with grating/chequered plates etc.
- Fixing of Aluminium Sheets.
- The variation or modification of the work or the addition or omission or substitution of any part of the works.
- The discrepancy in the drawings or between the Schedule of Quantities and/or Drawings and/or Specifications,
- The removal from the site of any materials brought thereon by the Contractor and the substitution of any other materials.
- The removal and/or re-execution of any works executed by the Contractor.
- The Contractor shall, in performance of the Works, comply in all respects with the quality, health, environment and safety requirements applicable to the Company's Works at aforsiad site, Mayabundure, A & N Island.
- The Contractor shall notify the Bank forthwith of any defects or deficiencies in the performance of the works of which it becomes aware during performance of the Contract and or prior to the commencement of the Defects Liability Period. The Contractor shall take all necessary steps to rectify the same as soon as possible.
- The Contractor shall forthwith comply with and fully execute any of the Works comprised in such instructions provided always that verbal instructions, directions and

explanations given to the Contractor or his representative at the Site 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 period of seven days by the Engineer such instructions shall be deemed to be instructions within the scope of the Contract.

- The Bank shall have the power to make any additions, alterations and/or deletions in the original Design, Drawings, Schedule of Quantities, Specifications or Instruction to any extent that may be necessary or desirable during the progress of the work and the
- Contractor shall be bound to carry out the work as per the altered instructions and on the same conditions at rate as mentioned in clause "Security Deposit".
- Such variations, additions, omission or substitutions in the Contract shall not be construed in any way as invalidating the Contract.
- The Schedule of Quantities issued by the Bank with the tender documents shall be deemed to be approximate and no liability shall attach to them for inaccuracies or errors therein.
- If compliance with the Bank's instructions as aforesaid involves additional work beyond that contemplated by the Contract then unless the same were issued owing to some breach of the Contract by the Contractor or an error, omission, or neglect of the contractor, the Bank shall pay to the Contractor the price of the said work as an additional work to be valued as hereinafter provided.

3. Quantities & SoR:

- All rates quoted in the schedule of quantities and rates and as accepted shall remain firm during the contractual period including extension if any and shall not be subjected to any escalation for a **variation limit of $\pm 20\%$ of the Total Value of the Work as per Work Order**. They shall include for any overtime required to complete the Work according to programme and on schedule and completely to the Company's satisfaction.
- The Contract price includes rates for all items enumerated as per SoR, all wastage, all transportation costs, all costs relating to duties, royalties, Cess, taxes and other charges, all costs relating to operation and maintenance of construction equipment and also all services as applicable for execution of the work at your place except Service Tax, Education Cess and Worker's Welfare Cess.

The rates shall be deemed to include all direct costs, Land for Contractor's Workshop / Labour Camp and indirect cost such as those relating to access roads, establishment expenses etc

Cost of Non Tendered Item

- In case any additional, altered, substituted or any new item of work includes subsequently as per site condition and requirement for which no rate is specified in the Contract, rate for such item will be determined by the Company from the rate for similar or near similar item of work in the Contract and shall be mutually discussed and agreed. In case any similar or near similar work does not exist in the Contract, the rate shall be decided by the Company based on the principle of **actual cost of materials, wastage, taxes, transportation, equipment, running cost, labour, supervision, overheads etc towards actual direct cost plus 15.00% (Twelve and half percent) markup thereon**.
- The intent of the Specifications and Schedule of Quantities is to have items finished and complete in all respects, unless specially stated otherwise in the Schedule. This shall be understood whether or not it is specifically mentioned in the description of the item.

- The schedule of quantities as given in the SoR is indicative only and may vary up or down as per actual requirement of site conditions for which item rate shall remain unchanged.
- The Schedule of Quantities issued by the Company with the tender documents shall be deemed to be approximate and no liability shall attach to them for inaccuracies or errors therein.
- **Schedule of Completion :**

Time is the essence of this Contract. The Contractor will have to commence the work at site within Two (two) weeks from the date of LOI and complete the entire work satisfactorily within **35 DYAS** time as per mutually agreed schedule. In case the contractor fails to mobilise the resources to site for commencing the work and complete the works as per mutually agreed time line for each phase; it is assumed that the contractor is not interested in executing the work and hence the said contract stands cancelled automatically. In such case, the Company is at the liberty to off load the work to other suitable agencies at your cost and risk.

4. Liquidated Damage For Delay:

In case of any delay in completion of work beyond the above schedule, LD @ ½ % (half percent) of the total contract value of the work for every week or part thereof for the first 4 weeks of delay and thereafter 1% (one percent) total contract value for every week, subject to a maximum of 5% (five percent) of the total Contract value on uninterrupted working condition.

5.Obligations of the Bank

5.1 Electricity & Water

Branch will provide electricity/water at the Site to Contractor for construction work at a single point (within 500 metres from place of work) free of cost. Necessary distribution shall be done by Contractor at their own cost. The location to be mutually agreed.

3.Statutory and other Obligations:

The Contractor shall and ensure that he and his sub-Contractor and nominated Contractor do strictly comply with all applicable statutory laws and orders of competent authorities and court and will specifically comply with the followings :

Labour Rules etc.

In respect of all labourers directly or indirectly employed in the works, the Contractor shall comply with all legislation and rules of State and/or Central Government or other local authority governing the protection of health, sanitary arrangements, wages, welfare and safety applicable for labour employed. The Minimum Wages Act, 1948, Workmen's Compensation Act, 1923, Contract Labour (Regulation and Abolition) Act 1970 and other obligations of applicable statutes with regard to fair wages, welfare amenities and safety measures. The Contractor shall furnish to the Company necessary license under the Contract Labour (Regulation and Abolition) Act, 1970. The Contractor shall be solely liable for any default or non-compliance of the same.

Reporting of Accidents to the Authorities

The Contractor shall be responsible for the safety of all employees and/or workmen employed or engaged by him including those of the Company and the sub-Contractor/nominated Contractor on and in connection with the Works and shall report to the Company and other local authorities concerned all cases of serious accident howsoever caused and wherever occurring and render immediately all possible help to the victims of the accidents.

Accident or Injury to Workmen

The Contractor shall be solely liable for any accident or injury that may happen to any of his personnel engaged in connection with the construction, erection & commissioning work according to his Contract. HIL shall not be liable for, or in respect of, any damage or compensation payable at all in respect of, or in consequence of, any accident or injury to any personnel in the employment of the Contractor and the Contractor shall indemnify and keep indemnified HIL against all such claims, damages, compensations and proceedings

Unsatisfactory Work

No work will be paid for unless found satisfactory and carried out strictly in accordance with the Specifications by the Company and certified by the Engineer to such effect. Should, through inadvertence, bad work be certified, the Engineer shall be competent to strike the same out of the account and recover the value at any time prior to or at the time of granting the final certificate by deduction from the final payment or otherwise.

Any work, executed not according to Specifications or with imperfect or unskilled workmanship shall be removed or reconstructed by the Contractor at his cost on receipt of instructions in writing from the Company's Engineer. Should the Contractor fail to take action within 7 days of receipt of such notice, the Engineer shall be entitled to remove or reconstruct such work at the risk and cost of the Contractor, and the Company shall recover the amount from any amount of money due to the Contractor/security deposit on account of such work.

Should the Engineer consider that the work although not executed in strict accordance with the Specifications may be allowed to stand, he may at his discretion certify payment against such work at such reduced rates as he may consider reasonable.

Examination of any covered work may on occasion be required by the Engineer and such work shall be uncovered by the Contractor. The Company shall not pay for covering such work again unless it is found that the work uncovered has been executed fully to the Company's satisfaction

26. Defective Liability / Warranty:

The Contractor warrants the quality of civil construction work under the scope of work for a period of **12 months from the date of ~~certifications of final bill~~ virtual completion**, against defective material, poor workmanship and design. In case the civil construction work shows any defect arising out of defective material, and/or poor workmanship and/or design (if design is within the scope of the Contractor) during the warranty period, the Contractor shall take immediate step for rectification within 7 days of observance of such defect, free of all cost against written communication from the Company/Engineer failing which the Company reserves the right to carry out rectification at the risks and cost of the Contractor and recover the expenses from the Contractor's running bills and/or from retention money and/or other means, as deemed fit. However, the above warranty will not be applicable for any normal wear and tear in roadwork if constructed by the Contractor under the Scope of Works.

Should any defective work have been done by any Sub-contractor or Nominated Sub-contractor, the Contractor shall be liable to make good the same in the same manner as if the work and materials has been done and supplied by the Contractor itself. The Contractor shall remain liable under the provisions of this clause notwithstanding the payment of any intermediate bills or settlement of the final bill.

1. PAVING TILE FLOORING / SKIRTING:

1.1 MATERIALS :

- a) **PAVING Tiles:** The tiles shall be of approved make and shall generally conform to the approved standards. They shall be flat and true to shape, free from cracks, crazing spots, chipped edges and corners. Unless otherwise specified, the nominal sizes of tiles shall be as under:
- b) The tiles shall be square or rectangular of nominal sizes such as: 600 x 600 mm; 900 x 900 mm or as per tender schedule / drawings or as directed by the Engineer-in-Charge. Thickness shall be as per recommendations of the approved manufacturers. The tiles shall conform to the relevant standards in all respects. Samples of tiles shall be got approved from the Engineer-in-charge before bulk procurement for incorporation in the work
- c) Sub grade concrete or RCC slab or side brick wall / or plastered surfaces on which tiles are to be laid shall be cleaned, wetted and mopped as specified for terrazzo tile flooring.
- d) **Mortar and bedding:** Cement mortar for bedding shall be prepared of mix 1:4 or as specified in the schedule of items, to a consistent paste and shall conform to the specification for materials; preparations etc. as specified under cement mortar. The amount of water added while preparing mortar shall be the minimum necessary to give sufficient plasticity for laying. Care shall be taken in preparation of the mortar to ensure that there are no hard lumps that would interfere with even bedding of the tiles. Before spreading the mortar bed the base shall be cleaned off all dirt, scum or laitance and loose materials and well wetted without forming any pools of water on the surface. The mortar of specified proportion and thickness shall then be evenly and smoothly spread over the base by use of screed battens to proper level or slope.
- e) Once the mix is prepared, no further water be added and the same shall be used within one hour of adding water. Apply on an average 20 mm thick bedding of mortar over an area of 1 sqm. at a time over surface of the area for laying tiles, in proper level and allowed to harden sufficiently to offer a fairly good cushion for the tiles to set.

1.2 LAYING OF PAVING TILES FOR FLOORING :

- f) The tiling work shall be done as per the pattern shown in the drawing or as directed by the Engineer-in-Charge. As a general practice laying of tiles shall be commenced from the centre of the area and advanced towards the walls. Cut tiles, if any, shall be laid along wall with necessary border pattern as shown / directed by the Engineer-in-Charge. Tiling work shall be completed by pressing tiles firmly into place along the wall / floor. A white cement slurry to the back of the tile to be applied to ensure proper and full bedding. The tiles shall be laid on the bedding mortar when it is still plastic but has become sufficiently stiff to offer a fairly firm cushion for the tiles. Tiles, which are fixed on the flooring adjoining the wall, shall be so arranged that the surface on the round edge tiles shall correspond to the skirting or dado. Press gently

the tile with wooden mallet for even adherence at the back of the tile. Do not use an iron hammer or some heavy material to press the tile.

- g) The edges of the tiles shall be smeared with neat white cement slurry and fixed in this grout one after the other, each tile being well pressed and gently tapped with a wooden mallet till it is properly bedded and in level with the adjoining tiles. There shall be no hollows in bed or joints. The joints shall be kept as close as possible and in straight line. Unless otherwise specified, joint-less tiling shall be done butting the tiles with each other. If joint is specified, the same shall not exceed 1.00 mm. in width. The joint shall be grouted with white / matching colour cement slurry. After fixing the tiles, finally in an even plane or slope, the flooring shall be covered with wet sand and allowed undisturbed for 14 days.

1.3 GROUTING OF JOINTS IN FLOOR / SKIRTING / DADO:

- h) The joints, if specified, shall be cleaned off and all dust and loose particles removed. Joints shall then be filled with approved adhesive grouts. After finishing the grouting process, after 15 minute, wipe off excess grout with a damp sponge and polish the tiles with a soft & dry cloth for a clean surface. The Finished work shall not sound hollow when tapped with a wooden mallet.

1.4 MODE OF MEASUREMENT AND RATE:

- i) Dado / flooring / skirting shall be measured in sqm correct to two places of decimal. Length and breadth shall be measured correct to 1 cm. between the exposed surfaces of skirting or dado. No deductions shall be made nor extra paid for any opening of area upto 0.1 sqm. The rate shall include all the cost of labour and materials involved.

2.0 BRICK WORKS:

2.1 BRICKS

- a. The bricks shall be locally available kiln burnt bricks of generally regular and uniform size, shape & colour, uniformly well burn but not over burnt. The bricks shall be free from cracks, chips, flaws, stones or lumps of any kind and the rating of efflorescence shall not be more than "moderate", when tested as per I.S. 3495 of latest edition. They shall not have any part sunburn. They shall not break even after being dropped on the ground on their flat face in a standard condition from a height of 60 cms.
- b. The size of brick shall normally 250 mm x 125 mm x 75 mm or 230 mm x 115 mm x 65 mm. Bricks of one standard size shall be used on one work unless specially permitted by the Bank/Consultant.
- c. After immersion in water, absorption by weight shall not be exceeding 20% of dry weight of the brick when tested according to IS 1077 of latest edition. Unless otherwise specified the load to crush the brick when tested according to IS 1077 of latest edition shall not be less than 75 Kg/Sq.cm.
- d. Prior approval of Bank/Consultant shall be obtained for the brands of bricks to be used in the work after compliance with the above specifications/tests.

2.2 MORTAR

Unless otherwise specified, mortar for brick work shall be composed of 1 part of cement to 6 parts of approved sand for walls of one brick thick (25 cm) and over

and one part of cement to 4 parts of approved sand for half brick thick and brick on edge walls.

2.3 CONSTRUCTION DETAILS

- a) **Soaking:** All brick shall be immersed in water for 24 hours before being put into work so that they will be saturated and will not absorb water from the mortar.
- b) **Bats:** No bats or cut bricks shall be used in the work unless absolutely necessary around irregular openings or for adjusting the dimensions of different course and for closers, in which case, full bricks shall be laid at corners, the bats being placed on the middle of the courses.
- c) **Laying:** The bricks shall be laid in mortar to line, level and shapes shown on the plan, slightly pressed and thoroughly bedded in mortar and all joints shall be properly flushed and packed with mortar so that they will be completely filled with mortar and no hollows left anywhere. Bricks shall be handled carefully so as not to damage their edges. They should not also be thrown from any height to the ground T.S. Civil-26 but should be put down gently. All course shall be laid truly horizontal and all vertical joints made truly vertical. Vertical joints on one course and the next below should not come over one another and shall not normally be nearer than quarter of a brick length. For battered faces beading shall be at right angles to the face. Fixtures, plugs, frames etc. if any, shall be built in at place shown in the plans while laying the courses only and not later by removal of bricks already laid. The top layer of bricks of one or more thick wall coming in contact with R.C.C beam, slab and at window sill level etc shall be laid on edge as per direction.
- d) Care shall be taken during construction to see that edges of bricks at quoins, sills, heads etc. are not damaged
- e) The verticality of the walls and horizontality of the courses shall be checked very often with plumb bob and spirit level respectively. All external wall should have fair face on exterior surface.
- f) **Bond: Unless** otherwise specified, brick work shall be done in English Bond. All walls, coming in contact with reinforced concrete columns, beams etc. should be properly bonded by inserting reinforcements. Extra labour shall be included in the rates (reinforcements will be measured and paid separately against reinforcement item provided in the Schedule of Quantities.
- g) **Joints** shall not exceed 10 mm (about 3/8") in thickness and this thickness shall be uniform through out. The joints shall be raked out not less than 10mm (about 3/8") deep when the mortar is green where pointing is to be done. When the brick surface are to be plastered, the joints shall be raked to a depth of 5 mm when the mortar is green, so as to provide good key to plaster

2.4 SCAFFOLDING/SHUTTERING

The scaffolding must be of approved type strong and rigid stiffened with necessary cross bearers and safe to prevent injury to persons or materials. The contractor shall have to allow other trades to make reasonable use of his scaffolding as directed by the Owner/ Architects. If for the interest of work the contractor have to erect scaffolding in the other properties including local bodies or Corporation, the arrangement for the same including the cost of licensing fees etc. shall have to be borne by the contractor and the Owner should be kept free from any liability on this account. Put log holes shall be

made good by bricks to match the face work when put logs are removed after ensuring that the holes behind are solidly filled in with 1:4:8 cement

2.5 CURING

All brick works shall be kept well watered for 14 days after laying. While pozzalana cement is used for mortar the curing shall be extended by one week at contractors expense.

2.6 HALF BRICK/BRICK ON EDGE WORK

j) Half brick thick and brick on edge walls, shall be provided H.B. wire netting of approved quality as reinforcements. For half brick thick wall and brick on edge wall H.B. wire netting reinforcements of approved quality shall be provided at every third course and in alternate course respectively according to standard practice.

2.7 RATES TO INCLUDE:

Apart from other factors mentioned elsewhere in this contract, the rates for items of brick work shall include for the following:

- a) All labour, materials, use of tools, equipment and other items incidental to the satisfactory completion of brick masonry at all heights and levels.
- b) Erecting and removing of all scaffolding, ladders and plant required for the execution of the work to the height and depths and shapes as shown on the plan or as ordered by the Bank/Consultant including extra labour and materials for using cut bricks in the construction of wall of varying thickness other than one brick, one and half brick, half brick and brick on edge walls as per drawings.
- c) Constructing brick work to lines, levels, batters, pillars, curve, projection, cutting, tooting etc. in strict conformity with the drawings and to any position or shape, to any heights or levels including raking out joints and housing frames, fixtures etc.
- d) Necessary charges of outside scaffolding work for construction of external brickwork from outside to have fair face on exterior surface.
- e) Curing brick work.
- f) Extra labour for bonding brick work to R.C. works as specified.
- g) Removing of all stains and adhering mortar lumps on the brick work surface.
- h) Cost of reinforcement in half brick walls and brick on edge walls.
- i) Raking out joints for receiving plaster as specified.

2.8 MEASUREMENTS:

- a) Half brick thick and brick on edge walls shall be measured nett in sq.m unless otherwise mentioned.
- b) One brick wall and thicker walls shall be measured in cum. Brick walls up to and including 3 brick in thickness should be measured in multiples of half bricks which

shall be deemed to be inclusive of mortar joints. Widths of more than three bricks in walls will be measured actually and limited to the width specified.

3.0 CEMENT PLASTER:

- a) **Preparation of Surface:** The walls to be plastered to have all joints raked out to a depth of 10 mm, if not already done. R.C.C surface shall be properly hacked to get good key to the plaster. All dust and oily matter, if any, shall be brushed and cleaned and surface to be plastered shall be kept wet for 6 hours before plastering is commenced.
- b) **Proportion of Mortar:** The plaster in walls, lintels, columns, ceiling, ceiling beams, projected slabs, rails, chajja, marquise, domes etc. shall be done with sand cement mortar in the proportion as described in the Schedule of Quantities). No more cement mortar shall be prepared than that can be used within half an hour.
- c) **Application of Plaster:** The mortar shall be applied evenly with force on the surface to be plastered. The mortar surface shall be finished at once by being rubbed over with a trowel till the cement appears on the surface. All corners, angles and junctions shall be truly vertical and horizontal as the case may be, carefully and neatly finished. Rounding of corners and junctions where required shall be done without extra charge. The mortar shall adhere to the surface intimately when set and there should be no hollow sound when struck.
- d) When neat cement finish is specified over the plaster surface, a coat of pure Portland cement slurry, 1.5 mm thick shall be applied and well rubbed to the plaster surface while the plaster surface is still fresh.
- e) When no finish is specified, the plastered surface shall be rubbed well to an even plane with a wooden float for external surface and finished smooth with a steel trowel for internal surface.
- f) **Rates to include :** Apart from other factors mentioned elsewhere in the contract rates for the item of plaster shall include for the following :-
 - a) Erecting, dismantling and removing the scaffolding.
 - b) Preparing the surface to receive the plaster.
 - c) Providing cement plaster of the specified average thickness.
 - d) All labour, materials, use of tools and equipment to complete the plastering as per specification.
 - e) Curing for 7 days.
 - f) Any molding work if shown on the drawings or as specified unless separately provided in the tender
 - g) Labour for plastering the surface in two operations when thickness of plaster is more than 12 mm thick.
 - h) Plaster work in bends, arises, rounded angles, fair edges, narrow returns, quirks 'V' joints, splays, drip mouldings, making good to metal frame junctions with skirting of dados narrow width and small quantities, making good round pipes, conduits, timbers, sills, brackets, railings, etc and making good after all the sub-contractors or nominated sub-contractors have done their work
 - i) Neat cement finish when specified in the item.

- g) Mode of Measurement** Plaster shall be measured nett in square metre. The measurement of wall plastering shall be not taken between the walls or partitions (the dimensions before plastering shall be taken) for the length and from the top of floor or skirting depending upon the situation to the ceiling for the height after making deductions for openings.

4. PAINTING:

- a) Material:** Ready mixed oil paints and primer, in general shall be of approved quality, color and shall manufactured by ICI, Berger Paints (India) Ltd, Asian Paints Ltd. These materials shall be in sealed tins and shall be opened in the presence of the Bank/Consultant at site.

b) Preparation of Surface

- i) Iron and Steel works:** Surface to be painted shall be thoroughly cleaned, sand papered and/or rubbed with emery cloth, if necessary, to remove grease, mortar or any other foreign materials. In case of rusted surface, it shall be first cleaned with wire brushes till the corroded rust is removed. the prepared surface shall be shiny and free from brush marks, patches, blisters and other irregularities. The surface thus finished shall be got approved for painting.
- ii) Wood Work:** All surfaces to be painted shall be thoroughly cleaned sand papered and removed of all foreign materials. In case of surfaces having knotted and nail holes, this shall be filled with knotting and stopping materials. The knotting materials shall consist of pure shellac dissolved in methylated spirit. Stopping materials shall consist of putty. The surface thus treated shall be allowed to dry and then sand papered smooth.

- c) Application** After preparing the surface, a primer coat shall be applied. The primer coat shall be ready mix of approved make and manufacturer. After the primer coat is applied and perfectly dried, all holes, cracks, etc. which shall remain, shall be T.S. Civil-41 filled in with putty and the surface sand papered smooth. Then a second coat of paint of approved shade and manufacturers shall be evenly applied and allowed to dry. The third coat shall be carefully applied to achieve smooth and even surface after the previous coat has dried up. Minimum 3 coats of paint shall be applied inclusive of a primer coat. If a proper and even surface is not obtained to the satisfaction of the Bank/Consultant in 3 coats, contractor shall carry out additional coats of painting to approval, at contractor's expenses. Care shall be taken that dust or other foreign materials do not settle or otherwise disfigure the various coats.

- d) Rates to include :** Apart from other factors mentioned elsewhere in this contract, the rate for the item of painting shall include for the following :-

- 1) All labour, materials equipment necessary to carry out the work.
- 2) Supplying the approved paint for priming and finishing coats.
- 3) Preparing the surface including knotting and stopping for receiving the priming and finishing coats.
- 4) Scaffolding including its erection and dismantling.
- 5) Application of atleast one primer coat and two coats of finishing for wood work and atleast two finishing coats for steel work unless otherwise specified. If a proper and even surface is not obtained to the satisfaction of the Bank/Consultant, contractor shall carryout additional coats of painting to approval at contractor's expense.
- 6) Protection to painted surface till dried and handed over.

e) Mode of Measurement

Painting to wood work and steel shall be measured net separately In SqMtr as prescribed in IS codes.

5. R.C.C Work: As per IS 456-2000 & Construction Procedure & Schedule items as per CPWD Specification. The contractor shall carry out all the RCC works, including formwork, strictly in accordance with drawings, details, relevant BIS specifications, and instructions of the Architects/Employer/Consulting Engineer. If any changes have to be made in the RCC designs, the contractors shall carry out the same without any extra charge. The Architect & Employer's decision in such cases shall be final and shall not be open to arbitration

A. List of Approved Material For Civil Work.

1	GI Pipes	TATA(Medium)
2.a	Oil & cement paints All type	Berger /Asian /Dulox /equiv
b	Wall Putty	Birla White/ J.K white
3.	Glazing	TATA, Modi Guard or Saintgobain
4	Cement	JK. Ultratecg, Acc/Lafage/equiv
5	Sand/aggregates	Locally available good quality sand & hard aggregates approved by EIC
6	Shuttering Material	Shutter Structure Approved by EIC. Good Quality Ply with MS frame.
7	PAVING tiles	Johnson/ Kajaria/ somany/Nitco/PAVIT
8.	Texture Paint	Berger /Asian /Dulox/Nerolac
9.	Vertical Blinds	Vista Levolor/ MAC/Equivalent
10	Reinforcement	SAIL/TATA/Jindal Steel
	Brick:	1 st Class Modular Brick certified by APWD.

Material testing if required of above will carry out as prescribed in IS Codes to a cost to contractor.

Caution: All materials shall be used only after quality check/inspection/approved by EIC.

The challan of the materials or the invoice or the certificate from concerned companies will be required to be submitted if demanded by bank's engineer at the time of submission of the final bill. If the approved brands mentioned as mentioned in the item are not available or requisite shade/ quality is not available, other brand as approved by the Bank's Engineer only to be used for the work. Decision of bank's engineer shall be final and binding on the contract.

DECLARATION

I/We confirm that we shall certify the material from Bank's engineer/Architect prior to use in site as per the above list. I/we hereby accord our unqualified consent & agreement to the said conditions.

Signature of the tenderer with seal

Date:

E.SPECIAL CONDITION OF CONTRACT

1. **Setting out the work:** a)The contractor shall set out the work 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 get it approved by the consultant/ Bank's Engineer before proceeding with the work. If at any time any error in this respect shall appear during the progress of the works, irrespective of the fact that the layout had been approved by the consultant/ Bank's Engineer the contractor shall be responsible for the same and shall at his own expenses rectify such error, if so, required to satisfaction of the SBI.
 - a) The dimension provided in the schedule as well as in the drawing are likely to vary slightly according to the size & space available in the Premise Area where they are to be provided or placed, Bank have the right to slightly modified the dimensions of the items to suit the site & no claim therefore shall be made by the contractor.
2. **Protection of works and property:** The contractor shall continuously maintain adequate protection, of all his work from damage and shall protect the SBI's properties from injury or loss arising in connection with contract. He shall make good any such damage, injury, loss due to his fault or negligence except which are due to causes beyond his control.
3. **Inspection of Work:** The Bank's Engineer/Consultant or their representatives shall at all reasonable time have free access to the work site and/or to the workshop, factories or other places where materials are lying or from where they are obtained and the contractor shall give every facility for inspection and examination and test of the materials and workmanship.
4. **Quality of Materials, Workmanship & Test:** All materials and workmanship shall be best of the respective kinds described in the contract and in accordance with Bank's Engineer/Consultant instructions and shall be subject from time to time to such tests as the Bank's Engineer/Consultant may direct at the place of manufacture or fabrication or on the site or an approved testing laboratory. The contractor shall provide such assistance, instruments, machinery, labour and materials as are normally required for examining measuring sampling and testing any material or part of the work before/after incorporation in the work for testing as may be selected and required by the Architect/Consultant.

5. **Obtaining Information related to execution of work:** No claim by the contractor for additional payment shall be entertained which is consequent upon failure on his part to obtain correct information as to any matter affecting the execution of the work nor any misunderstanding or the obtaining incorrect information or the failure to obtain correct information relieve him from any risks or from the entire responsibility for the fulfillment of contract.
6. **Works to be measured:** The Bank's Engineer/Consultant may from time to time intimate to the contractor that he required the work to be measured and the contractor shall forthwith attend or send a qualified representative to assist the them in taking such measurements and calculation and to furnish all particulars or to give all assistance required by any of them. The contractor or his authorized representative shall sign all the pages of the measurement book in which the measurements have been recorded in token of his acceptance All authorized extra work, omissions and all variations made shall be included in such measurements.
7. **Bill Submission Format:** The bill shall be as per tender specification as detailed below along with Detail Measurement Sheet. Bill will not be accepted if detail calculation sheet of the quantity executed at site is not being attached. If required then the contractor may be ask to submit the Manufacturing certificate in due course of bill checking period

Sl. No	Descrip-tion	Unit	Ted rate	Ten qty	Act qty (L/B/D)	Ted amount	Act amount

I/We hereby declare that I/We have read the above terms and conditions /instructions carefully and fully understood and will abide by the same.

Signature of the tenderer with seal

Date:

Place:

PREAMBLE TO BILL OF QUANTITIES & RATES

Bidders are advised to quote their rates after due consideration of the following pertinent points :

- Actual site conditions including working time that would be available to them as per standing rules
- Material access regulations of the building including permission of use of lifts and stairways etc.
- Temporary storage provision of disposable materials arising out of the work
- Security measures and permissions required to be observed and obtained in consultation with the representatives of the landlords and act strictly according to the same.
- Traffic regulations of the City Police in order to organize trouble free access of materials
- The work has to be executed in close and effective co-ordination with other executing agencies who shall be working simultaneously
- Any other governing issue or issues likely to have impact on the productions rate and cost of work
- **TAXES AND DUTIES**
The tenderer must include in their tender prices quoted for all duties, royalties, cess, excise, sales tax, work contract tax or any other taxes such as Income Tax deducted to vendor or local charges, as applicable etc. No extra claim on this account will in any case be entertained. However, Service Tax as per Service Tax act will be paid on production of Service Tax Registration Certificate and on claim.
- **GOVERNMENT AND LOCAL RULES**
The Contractor shall conform to the provisions of all local By laws and Act relating to the work and to the Regulations etc. Of the Government and Local Authorities and of any Bank with whose system the premises is proposed to be connected. The Contractor shall give all notices required by the said Act, Rules, Regulations and By laws etc. and pay all fees payable to such authority / authorities for execution of the work involved. The cost, if any shall be deemed to have been included in his quoted rates, taking into account all liabilities for licenses, fees for footpath encroachment and restorations, statutory Clearance etc. and shall defend all actions arising from such claims or liabilities.