

## Bill of Quantities & Schedule of Rates

**Tender ref.: PMOCHS /STRUCTURAL REPAIR**

| S. No. | Description of item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Unit          | QTY  | Rate | Amount |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|------|------|--------|
| A      | <b>SAFETY &amp; PRECAUTIONS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |               |      |      |        |
| A1     | <p>P/f in position suitable supports in form of Steel props &amp; runners or Wooden props &amp; runners so as to carry the load of super structure during repairs including necessary battens, planks, bracings, jacking etc. and maintaining them in position, dismantling &amp; removing the same from site after work completion.</p> <p>The compete supports and arrangement shall be strong enough to carry the load of structure and shall be sole responsibility of the contractor .</p> <p>Proper jacking will be done for the complete system so as to avoid any structural damage to the building using telescopic props. NOTE: only props shall be measured for payment.</p> | per prop /day | 4690 |      |        |
|        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |               |      |      |        |
| A2     | P/f and removing after work protective screens made out of specified fabric with necessary fixing arrangement to ensure that it remains in position for the entire duration of work using Woven PVC cloth.                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | sqm           | 1000 |      |        |
|        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |               |      |      |        |
| B      | <b>Excavation &amp; Back Filling</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |      |      |        |
| B1     | Excavation upto 1.0 meter or as shown in drawing including Breaking of floor around the pillars of reqd size, back filling with compaction in foundation, PB, Trenches, Levelling and removal of the waste material within premises                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Cum           | 80   |      |        |
|        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |               |      |      |        |

| S. No. | Description of item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Unit | QTY | Rate | Amount |
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| C      | <b>Concrete Work</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |      |     |      |        |
|        | P/laying in position cement concrete of specified grade including the cost of centring and shuttering. All work From plinth level to terrace level                                                                                                                                                                                                                                                                                                                                                                                                   |      |     |      |        |
| C1     | 1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Cum  | 42  |      |        |
|        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |     |      |        |
| C2     | 1:3:6 (1Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Cum  | 25  |      |        |
|        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |     |      |        |
| C3     | P/a <b>Polymer Modified Concrete (PMC)</b> , Cleaning the surfaces, moistening and applying polymer base bonding coat slurry of Monobond of M/s Krishna Conchem Products Pvt. Ltd. & Dr. Fixit or equivalent and cement in the ratio 1:1 by weight. Hand pack Polymer Modified concrete in the ratio of 1:1:2( 1 part cement : 1 one part coarse sand : 2 part aggregate (0 to 6mm down) & admix with Latex in the ratio of 2% weight of cement. including the cost of centring and shuttering. Average thickness 40 to 50 mm                        | Sqm  | 340 |      |        |
|        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |     |      |        |
| C4     | P/l ready to use non shrink, cementitious free flow <b>micro concrete</b> of “Roffcrete/eqvt ” including chipping off loose and disintegrated concrete, preparing exposed concrete as specified, cleaning the reinforcement with wire brush, chipping hammer and applying KP 100 on concrete near the exposed steel , anticorrosive coating of IPNET RB on old as well as new steel, providing, bond coat of cement slurry, compacting, slurry tight shuttering system incl. placement, fixation, de-installation etc. and curing etc. all complete. | Cum  | 12  |      |        |

| S. No. | Description of item                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Unit | QTY   | Rate | Amount |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|------|--------|
| D      | <b>Reinforcement</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                             |      |       |      |        |
| D1     | P/f Reinforcement cold twisted bars Fe 415 for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete. Job includes, wherever required, drilling and fixing reinforcement at suitable interval to makeup lost steel due to corrosion with additional steel reinforcement.                                                                                                                                                           | Kg   | 11850 |      |        |
| D2     | Reinforcement for Strengthening work with welded wire mash 50 x 50 x 4mm including straightening, cutting, binding and placing in position                                                                                                                                                                                                                                                                                                                                       | Sqm  | 390   |      |        |
| E      | <b>Chemical Treatment</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                        |      |       |      |        |
| E1     | Cleaning Reinforcement bars loosely with hand wire brush and apply alkaline chemical rust remover (M/s Krishna Conchem/ M/s Dr. Fixit /Sika Rustoff 100 / equivalent) with brush and removing loose particles after 6 hrs of applications and washing thoroughly with water all complete upto 25mm dia bars.                                                                                                                                                                     | Sqm  | 225   |      |        |
| F      | <b>Grouting</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |      |       |      |        |
| F1     | Providing and Injecting super low viscous <b>epoxy grout</b> (M/s Krishna Conchem Pvt. Ltd. & equivalent) with pressure of 2-4 Kg / Sq cm. Grouting to be done in cracks till the nozzle refuses to accept the grout. Item is inclusive of drilling holes, providing and fixing grout nipples, providing labour and equipment for grouting, Cutting the nozzles by cut of wheel after completion of grouting without damaging structural elements etc., all as specified by EIC. | Kg   | 168   |      |        |

| S. No. | Description of item                                                                                                                                                                                                                                             | Unit | QTY | Rate | Amount |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----|------|--------|
| F2     | <b>Bonding Coat</b> :Providing, mixing and applying bonding coat of SBR Latex adhesive (M/s Krishna Conchem Products Pvt. Ltd. & Dr. Fixit or equivalent) on chipped portion of RCC as per manufactures specification or as per direction of E-I-C.             | Sqm  | 340 |      |        |
|        |                                                                                                                                                                                                                                                                 |      |     |      |        |
| G      | <b>Plaster</b>                                                                                                                                                                                                                                                  |      |     |      |        |
| G1     | P/a <b>polymer modified mortar</b> in one coat to vertical or horizontal faces in proportion 1 : 3 ( 1 Cement : 3 Coarse Sand ) admix with SBR M/s BASF & Dr. Fixit make Rheomix 141 or equivalent @2% weight of cement.                                        | Sqm  | 340 |      |        |
| G2     | P/a 12 to 15mm thick <b>internal plaster</b> in cement mortar 1:5 (1 cement : 5 fine and coarse sand in equal proportion) finished smooth including hacking the surfaces, curing, making grooves at desired location etc. complete as per drawing.              | Sqm  | 173 |      |        |
|        |                                                                                                                                                                                                                                                                 |      |     |      |        |
| G3     | P/a 20 to 25mm thick <b>External plaster</b> in cement mortar 1:5 (1 cement : 5 fine and coarse sand in equal proportion) finished smooth including hacking the surfaces, curing, making grooves at desired location etc. complete as per Engineer- in- charge. | Sqm  | 173 |      |        |
|        |                                                                                                                                                                                                                                                                 |      |     |      |        |
| H      | <b>Rebarring</b>                                                                                                                                                                                                                                                |      |     |      |        |
|        | Rebarring : Providing & Fixing rebar with Fischer/ Hilti chemical.                                                                                                                                                                                              |      |     |      |        |
| H1     | 8mm                                                                                                                                                                                                                                                             | Nos  | 105 |      |        |
| H2     | 10 mm                                                                                                                                                                                                                                                           | Nos  | 105 |      |        |
| H3     | 12 mm                                                                                                                                                                                                                                                           | Nos  | 105 |      |        |
| H4     | 16 mm                                                                                                                                                                                                                                                           | Nos  | 42  |      |        |
|        |                                                                                                                                                                                                                                                                 |      |     |      |        |

| S. No.   | Description of item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Unit | QTY  | Rate | Amount |
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| <b>I</b> | <b>Dismantling</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      |      |      |        |
| I1       | <p>Dimantling /Chipping off of damaged /loose concrete of any thickness in damaged area or honeycombed area by chiseling or electric hammering machine for columns , beams and slabs.</p> <p>Job includes removing the external finishes complete from the member and chipping off the loose concrete from the surface so that the member is cleaned / free from all loose materials and till reinforcement is exposed completely.</p>                                                                                                                                                                                                                                                                                                                                                                                                      | Sqm  | 173  |      |        |
|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |      |      |      |        |
| <b>J</b> | <b>Scaffolding</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      |      |      |        |
|          | <p>Erecting, dismatling (including shifting from one place to other within society) of double scaffolding system (cup lock type ) on the exterior side, up to eight story height made with 40 mm dia, M.S. tube 1.5 m centre to centre horizontal &amp; vertical tubes joining with cup &amp; lock system with M.S. tubes, M.S. tube challies, M.S. clamps and M.S. staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for the required duration as approved and removing it there after. The scaffolding system shall be stiffened with bracings, runners, connection with the building etc wherever required for inspection of work at required locations with essential safety features for the workmen etc. complete as per directions and approval of Engineer-in-charge.</p> | Sqm  |      |      |        |
| J1       | <p><b>Scaffolding Material supplied by Client</b></p> <p>The payment will be made once irrespective of number of erection and dismantling of scaffolding carried out the complete scope of work.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Sqm  | 1190 |      |        |
|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |      |      |      |        |

| S. No.   | Description of item                                                                                                                                                                                                            | Unit | QTY   | Rate | Amount |
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|          | <b>alternatively</b>                                                                                                                                                                                                           |      |       |      |        |
|          |                                                                                                                                                                                                                                |      |       |      |        |
| J2       | <b>Scaffolding Material supplied by Contractor</b><br>The payment will be made once irrespective of no of erection and dismantling of scaffolding carried out the complete scope of work.                                      | Sqm  | 1190  |      |        |
|          |                                                                                                                                                                                                                                |      |       |      |        |
| <b>K</b> | <b>Structural Steel Work</b>                                                                                                                                                                                                   |      |       |      |        |
| K1       | P/F structural Steel work (at all heights) welded in Rolled/ built up sections/framed work/ Plate including cutting hoisting, fixing in position and applying a priming coat of approved steel primer as per direction of EIC. | KG   | 12975 |      |        |
|          | <b>TOTAL</b>                                                                                                                                                                                                                   |      |       |      |        |
| NOTE     |                                                                                                                                                                                                                                |      |       |      |        |
| 1        | RATE TO INCLUDE COST OF ALL MATERIAL, LABOUR, T&P & ALL TAXES AS APPLICABLE                                                                                                                                                    |      |       |      |        |
| 2        | RATE SHOULD BE QUOTED FOR WORK AT ALL HEIGHTS - SUB PLINTH LEVEL TO TERRACE LEVEL                                                                                                                                              |      |       |      |        |
| 3        | RATE SHOULD INCLUDE STAKING OF SERVICEABLE MATERIALS AT DESIGNATED PLACE AT GF                                                                                                                                                 |      |       |      |        |
| 4        | RATE SHOULD INCLUDE DISMANTLING OF ALL FORMWORKS, SCAFFOLDING ETC AFTER WORK COMPLETION                                                                                                                                        |      |       |      |        |
| 5        | RATE SHOULD INCLUDE REMOVAL OF ALL UNSERVICEABLE MATERIAL/MALBA FROM SOCIETY PREMISES                                                                                                                                          |      |       |      |        |
| 6        | QUANTITIES ARE APPROXIMATE & PAYMENT SHALL BE MADE BASED ON ACTUAL MEASUREMENT OF WORK DONE                                                                                                                                    |      |       |      |        |