

**BILL OF QUANTITY CUM PRICE SCHEDULE**

Name of Project

: 765kV/400kV AGRA UPPTCL (NEW) SUBSTATION

Name of Work

: CIVIL WORKS FOR 400KV SWITCHYARD AND BUILDINGS

| S.No. | Description of Item                                                                                                                                                                                                                                                                                                                                                                                                                 | Unit  | Quantity | Unit Rate(Rs) | Amount(Rs) |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|----------|---------------|------------|
| 1     | Earthwork in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30cm in depth 1.5m in width as well as 10sqm on plan) including dewatering as necessary of rain water/subsoil seepage water and disposal of excavated earth upto 100m and lift upto 3.5m, disposed earth to be levelled and neatly dressed.                                                                                    |       |          |               |            |
| (a)   | All kinds of soil.                                                                                                                                                                                                                                                                                                                                                                                                                  | cum   | 23200    | 129.35        | 3000920.00 |
| 2     | Earthwork in excavation by mechanical means (Hydraulic excavator)/manual means in foundation trenches or drains (not exceeding 1.5m in width as well as 10sqm on plan) including dewatering as necessary of rain water/subsoil seepage water and dressing of sides and ramming of bottoms, lift upto 3.5m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 100m.      |       |          |               |            |
| (a)   | All kinds of soil.                                                                                                                                                                                                                                                                                                                                                                                                                  | cum   | 5480     | 130.80        | 716784.00  |
| 3     | Filling available excavated earth (including rock) in trenches, plinth, sides of foundations, etc., in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead upto 100m and lift upto 3.5m.                                                                                                                                                                                           |       |          |               |            |
|       |                                                                                                                                                                                                                                                                                                                                                                                                                                     | cum   | 20800    | 83.80         | 1743040.00 |
| 4     | Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 3.0 m including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20cm in depth including consolidating each deposited layer by ramming,watering etc.and disposing of surplus excavated soil as directed within a lead of 100m. |       |          |               |            |
| (a)   | All kinds of soil                                                                                                                                                                                                                                                                                                                                                                                                                   |       |          |               |            |
| 4.1   | Pipes, cables etc, not exceeding 80mm dia.                                                                                                                                                                                                                                                                                                                                                                                          | meter | 40       | 101.40        | 4056.00    |
| 4.2   | Pipes, cables etc. exceeding 80mm dia. but not exceeding 300 mm dia.                                                                                                                                                                                                                                                                                                                                                                | meter | 40       | 165.60        | 6624.00    |
| 4.3   | Pipes, cables etc. exceeding 300mm dia but not exceeding 600mm                                                                                                                                                                                                                                                                                                                                                                      | meter | 80       | 258.55        | 20684.00   |
| 5     | Carriage & disposal of surplus excavated earth/rock beyond initial lead by mechanical means not necessarily all the times on pucca roads, including loading, unloading, dressing of excavated material, etc., complete as per specifications -.                                                                                                                                                                                     |       |          |               |            |
| (a)   | Lead upto 1 km.                                                                                                                                                                                                                                                                                                                                                                                                                     | cum   | 4800     | 82.78         | 397344.00  |
| (b)   | Lead upto 2 km.                                                                                                                                                                                                                                                                                                                                                                                                                     | cum   | 2000     | 93.94         | 187880.00  |

| S.No. | Description of Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Unit             | Quantity | Unit Rate(Rs) | Amount(Rs) |
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| (c)   | Lead upto 3 km.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | cum              | 600      | 104.98        | 62988.00   |
| (d)   | Lead upto 5 km.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | cum              | 480      | 125.92        | 60441.60   |
|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |          |               |            |
| 6     | Supplying and filling in plinth with Jamuna/local sand under floors including watering, ramming, consolidating and dressing complete.                                                                                                                                                                                                                                                                                                                                                                                                                            | cum              | 135      | 749.30        | 101155.50  |
|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |          |               |            |
| 7     | Supplying chemical emulsion in sealed containers including delivery as specified.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                  |          |               |            |
|       | Chloropyriphos emulsifiable concentrate of 20%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | litre            | 85       | 185.95        | 15805.75   |
|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |          |               |            |
| 8     | Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work upto plinth level.                                                                                                                                                                                                                                                                                                                                                                                                                 |                  |          |               |            |
| (a)   | 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | cum              | 550      | 4514.05       | 2482727.50 |
| (b)   | 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | cum              | 20       | 3888.20       | 77764.00   |
| (c)   | 1:4:8 (1 cement : 4 fine sand : 8 graded stone aggregate 40mm nominal size)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | cum              | 1915     | 3331.25       | 6379343.75 |
|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |          |               |            |
| 9     | Extra for providing and mixing water proofing material 'Impermo' or equivalent in cement concrete work in the proportion recommended by the manufacturer.                                                                                                                                                                                                                                                                                                                                                                                                        | per 50 kg cement | 200      | 35.35         | 7070.00    |
|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |          |               |            |
| 10    | Diluting & injecting chemical emulsion for PRE-CONSTRUCTIONAL ANTI-TERMITE treatment and creating a continuous chemical barrier under and all around the column pits, wall trenches, basement excavation, top surface of plinth filling, junction of wall & floor, along the external perimeter of building, expansion joints, over the top surface of consolidated earth on which apron is to be laid, surroundings of pipes and conduits, etc complete as per specifications (Plinth area of the building at ground floor only shall be measured for payment). | sqm              | 875      | 71.50         | 62562.50   |
|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |          |               |            |
| 11    | Providing and laying damp proof course 50mm thick cement concrete 1:1.5:3 (1 Cement:1.5 coarse sand : 3 graded stone aggregate 12.5 mm nominal size) .                                                                                                                                                                                                                                                                                                                                                                                                           | sqm              | 85       | 254.70        | 21649.50   |
|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |          |               |            |
| 12    | Applying a coat of residual petroleum bitumen of penetration 80/100 of approved quality using 1.7 kg per sqm on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.                                                                                                                                                                                                                                                                                                                      | sqm              | 85       | 96.65         | 8215.25    |
|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |          |               |            |
| 13    | Making plinth protection of 50mm thick cement concrete 1:2:4 (1 cement : 2coarse sand : 4 graded stone aggregate 20mm nominal size) laid over 75mm thick bed of dry brick balast 40mm nominal size well rammed and consolidated and grouted with fine sand including finishing the top smooth.                                                                                                                                                                                                                                                                   | sqm              | 225      | 363.25        | 81731.25   |
|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |          |               |            |

| S.No.      | Description of Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Unit    | Quantity | Unit Rate(Rs) | Amount(Rs)  |
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| <b>14</b>  | Providing and laying in position machine batched and machine mixed design <b>mix M25</b> grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS:9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge.<br>(Note Cement content considered in this item is 330kg/cum. Excess/less cement used as per design mix is payable/recoverable separately) |         |          |               |             |
| <b>(a)</b> | All works upto plinth level                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | cum     | 3080     | 5242.15       | 16145822.00 |
| <b>(b)</b> | All works upto above plinth level upto floor V level                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | cum     | 1040     | 5781.5        | 6012760.00  |
| <b>15</b>  | Providing and laying <b>reinforced CC pavement</b> of design <b>mix M25</b> grade with ready mixed concrete from batching plant. The ready mixed concrete shall be laid and finished with screed board vibrator, vacuum dewatering process and finally finished by floating, brooming with wire brush etc. all complete as per specifications and direction of Engineer-in-charge. (The panel shuttering work and reinforcement shall be paid for separately).<br>(Note Cement content considered in this item is 330kg/cum. Excess/less cement used as per design mix is payable/recoverable separately)                                                                                     | cum     | 685      | 5761.6        | 3946696.00  |
| <b>16</b>  | Add for using extra cement in the items of design mix over and above the specified cement content therein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | quintal | 3960     | 589.80        | 2335608.00  |
| <b>17</b>  | Centering and shuttering including strutting, propping, etc., and removal of form for:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |          |               |             |
| <b>(a)</b> | Foundations, footings, bases of columns, etc., for mass concrete.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | sqm     | 3160     | 166.90        | 527404.00   |
| <b>(b)</b> | RCC walls at all levels (any thickness).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | sqm     | 6960     | 285.15        | 1984644.00  |
| <b>(c)</b> | Suspended floors, roofs, landings, balconies, chajjas and access platforms at all levels.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | sqm     | 1150     | 311.20        | 357880.00   |
| <b>(d)</b> | Lintels, beams, plinth beams and cantilevers.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | sqm     | 1100     | 262.25        | 288475.00   |
| <b>(e)</b> | Columns, Pillars, Piers, Posts and Struts .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | sqm     | 2720     | 365.60        | 994432.00   |
| <b>(f)</b> | Stairs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | sqm     | 60       | 326.30        | 19578.00    |
| <b>18</b>  | Extra for additional height in centring ,shuttering wherever required with adequate bracing ,propping etc. including cost of deshuttering and decentring at all levels over a height of 3.5 meter for every additional height of 1 meter or part thereof (Plan area to be measured).                                                                                                                                                                                                                                                                                                                                                                                                          |         |          |               |             |
|            | Suspended floors, roofs, landing, beams and balconies .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | sqm     | 300      | 121.65        | 36495.00    |

| S.No. | Description of Item                                                                                                                                                                                                                                                                                                       | Unit                  | Quantity | Unit Rate(Rs) | Amount(Rs) |
|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|----------|---------------|------------|
| 19    | Providing precast <b>cement concrete Jali</b> 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6mm nominal size) reinforced with 1.6mm dia mild steel wire including centering and shuttering, roughning, cleaning, fixing and finishing in cement mortar 1:3 (1 cement : 3 fine sand) etc. complete            |                       |          |               |            |
|       | 50mm thick                                                                                                                                                                                                                                                                                                                | sqm                   | 40       | 598.15        | 23926.00   |
| 20    | Steel reinforcement -Cold twisted bars /TMT/HCR                                                                                                                                                                                                                                                                           |                       |          |               |            |
| (a)   | Including supply (To be procured from SAIL/RINL/TISCO/IISCO) and straightning, cutting, bending, binding (i/c cost of binding wire), placing in position, etc., all labour & material, complete.                                                                                                                          | kg                    | 12000    | 62.25         | 747000.00  |
| (b)   | Excluding supply but including transporting from SAIL stockyard to site, straightening, cutting, bending, binding, (i/c cost of binding wire), placing in position, etc., all complete as per specification and directions of Engineer-in-Charge. (Reinforcement shall be supplied by BHEL as per conditions of contract) | kg                    | 320000   | 10.50         | 3360000.00 |
| 21    | Providing & fixing in position 12mm thick bitumen impregnated fibre board conforming to IS:1838 including cost of primer, sealing compound in expansion joints                                                                                                                                                            | per cm depth per 100m | 20       | 430.30        | 8606.00    |
| 22    | Add or deduct plaster drip course /groove in plastered surface or moulding to RCC projections:                                                                                                                                                                                                                            | meter                 | 100      | 22.25         | 2225.00    |
| 23    | Brickwork with F.P.S.bricks of class designation 75 in foundation and plinth in:                                                                                                                                                                                                                                          |                       |          |               |            |
|       | Cement mortar 1:6 (1 cement : 6 coarse sand)                                                                                                                                                                                                                                                                              | cum                   | 1400     | 3316.55       | 4643170.00 |
| 24    | Brickwork with F.P.S.bricks of class designation 75 in superstructure above plinth level to floor V level in all shapes and sizes in:                                                                                                                                                                                     |                       |          |               |            |
|       | Cement mortar 1:6 (1 cement : 6 coarse sand)                                                                                                                                                                                                                                                                              | cum                   | 375      | 3876.15       | 1453556.25 |
| 25    | Half brick masonry with bricks of class designation 75 in foundation and plinth in:                                                                                                                                                                                                                                       |                       |          |               |            |
|       | Cement mortar 1:4 (1 cement : 4 coarse sand)                                                                                                                                                                                                                                                                              | sqm                   | 40       | 416.95        | 16678.00   |
| 26    | Half brick masonry with bricks of class designation 75 in superstructure above plinth level to floor V level.                                                                                                                                                                                                             |                       |          |               |            |
|       | Cement mortar 1:4 (1 cement : 4 coarse sand)                                                                                                                                                                                                                                                                              | sqm                   | 305      | 476.85        | 145439.25  |
| 27    | Extra for providing and placing in position 2 Nos 8mm dia bars at every third course of half brick masonry (with FPS bricks)                                                                                                                                                                                              | sqm                   | 345      | 63.30         | 21838.50   |

| S.No. | Description of Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Unit | Quantity | Unit Rate(Rs) | Amount(Rs) |
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| 28    | Marbel work gang saw cut (polished and machine cut) of thickness 18mm for staire case in cement mortar 1:3 (1 cement : 3 coarse sand) including pointing with white cement mortar 1:2 (1 white cement : 2 marble dust ) with an admixture of pigment to match the marble shade.                                                                                                                                                                                                                                                                      |      |          |               |            |
|       | Raj Nagar Plain white marble/Udaipur green marble/ Zebra black marble.                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |          |               |            |
|       | Area of slab over 0.5sqm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | sqm  | 10       | 2314.10       | 23141.00   |
| 29    | Providing and fixing 18mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for column facia, kitchen platforms, vanity counters, flooring/skirting, stair case and similar locations of required size of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement: 4 coarse sand) with joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloos finish etc. complete at all levels. |      |          |               |            |
|       | Granite of required colour & shape                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |      |          |               |            |
|       | Area of slab upto 0.50sqm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | sqm  | 25       | 3041.15       | 76028.75   |
|       | Area of slab over 0.50sqm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | sqm  | 200      | 3083.40       | 616680.00  |
| 30    | Providing and fixing best quality marble slab polished on both sides & machine cut, exposed corners rounded etc. of size 610 x 1150mm, 20mm thick in urinal partition by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2coarse sand : 4 graded stone aggregate 6mm nominal size) as per direction of Engineer-in-charge and finished smooth                                                                                                 | sqm  | 1        | 2670.25       | 2670.25    |
| 31    | Providing and fixing chromium plated brass 100mm mortice latch and lock with 6 levers and a pair of lever handles with necessary screws etc. complete (best make of approved quality).                                                                                                                                                                                                                                                                                                                                                               | each | 27       | 646.50        | 17455.50   |
| 32    | Providing and fixing aluminium sliding door bolts anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with nuts and screws etc., complete.                                                                                                                                                                                                                                                                                                                                           |      |          |               |            |
|       | 300 X 16mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | each | 6        | 203.80        | 1222.80    |
| 33    | Providing and fixing aluminium tower bolts anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc., complete.                                                                                                                                                                                                                                                                                                                                                 |      |          |               |            |
|       | 300 X 10mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | each | 54       | 100.40        | 5421.60    |
|       | 150 X 10mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | each | 46       | 59.00         | 2714.00    |

| S.No. | Description of Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Unit | Quantity | Unit Rate(Rs) | Amount(Rs) |
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| 34    | Providing and fixing aluminium handles anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc., complete.                                                                                                                                                                                                                                                                                                                                                                 |      |          |               |            |
|       | 125mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | each | 54       | 62.50         | 3375.00    |
| 35    | Structural steelwork welded in built up sections like edge protection angles, insert plates with lugs & framed work including providing, cutting, hoisting, fixing in position/ embedding in concrete and applying a priming coat of approved steel primer all complete.                                                                                                                                                                                                                                                                                         | kg   | 64000    | 66.50         | 4256000.00 |
| 36    | Providing and fixing 1mm thick M.S. sheet door with frame of 40x40x6mm angle iron and 3mm MS gusset plates at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer.                                                                                                                                                                                                                                                                                                                            |      |          |               |            |
|       | Using M.S. angle 40x40x6mm for diagonal braces                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | sqm  | 8        | 2551.45       | 20411.60   |
| 37    | Supplying and fixing rolling shutters of approved make, made of required size MS laths interlocked together through their entire length and jointed together at the end by end locks mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with mechanical arrangement for operation complete including the cost of providing and fixing necessary 27.5cm long wire springs grade no. 2 and MS top cover of required thickness for rolling shutters.                                               |      |          |               |            |
|       | 80 X 1.25mm MS laths with 1.25mm thick top cover.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | sqm  | 25       | 1840.85       | 46021.25   |
| 38    | Providing and fixing ball bearing for rolling shutters.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | each | 6        | 429.85        | 2579.10    |
| 39    | Extra for providing mechanical device chain and crank operation for operating rolling shutters                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |      |          |               |            |
|       | Exceeding 10.00sqm and upto 16.8sqm in the area                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | sqm  | 25       | 627.35        | 15683.75   |
| 40    | Providing and fixing factory made ISI marked steel glazed doors, windows and ventilators, side/top/centre hung, with beading and all members such as F7D, F4B, K11B and K12B etc. complete of standard hot rolled steel sections, joint mitred and flash butt welded and sash bars tenoned and riveted, including providing and fixing of hinges, pivots, including priming coat of approved steel primer, but excluding the cost of other fittings, complete all as per approved design, (sectional weight of only steel members shall be measured for payment) |      |          |               |            |
|       | Fixing with 15 x 3mm lugs 10cm long embedded in cement concrete block 15 x 10x10cm of CC 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size)                                                                                                                                                                                                                                                                                                                                                                                           | KG   | 200      | 96.45         | 19290.00   |

| S.No. | Description of Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Unit | Quantity | Unit Rate(Rs) | Amount(Rs) |
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| 41    | Providing and fixing pressed <b>steel door frames</b> manufactured from commercial mild steel sheet of 1.25mm thickness including hinges, jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50X25mm, or base ties of 1.25mm pressed mild steel welded or rigidly fixed together by mechanical means, adjustable lugs with spit end tail to each jamb including steel butt hinges 2.5mm thick with mortar guards, lock strike plate and shock absorbers as specified and applying a coat of approved steel primer after pre-treatment of the surface as directed by Engineer-in-Charge:                                                          |      |          |               |            |
|       | Profile C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | RM   | 35       | 370.00        | 12950.00   |
| 42    | Providing and fixing circular/Hexagonal cast iron or MS sheet box for ceiling fan clamp of internal dia 140mm, 73mm height, 3mm thick rim, top and bottom lid of 1.5mm thick MS sheet with its top surface hacked for proper bonding, top lid shall be scewed into the cast iron/ MS sheet box by means of 3.3mm dia. round headed screws, one lock at the corners. Clamp shall be made of 12mm dia MS bar bent to shape as per standard drawings with overall length as 80cm.                                                                                                                                                                                                     | each | 10       | 117.45        | 1174.50    |
| 43    | Steelwork welded in built up sections/framed work including providing, cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc., as required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |      |          |               |            |
| (a)   | In covering of floors/trenches of control room building with chequered plates, stringers, treads, landings, etc., of staircases involving use of chequered plates, wherever required, all complete.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | kg   | 6000     | 67.20         | 403200.00  |
| (b)   | In gratings, frames, ladders, stair railings, rails, ISMB, ISMC and similar works.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | kg   | 4000     | 77.90         | 311600.00  |
| 44    | Providing and fixing <b>stainless steel</b> (Grade 304) railing made of Hollow tubes, channels, plats etc, including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts, bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc. of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts fasteners etc.) | kg   | 125      | 558.00        | 69750.00   |
| 45    | Cement concrete flooring 1:2:4 (1cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement including cement slurry, but excluding the cost of nosing of steps, etc., complete.                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |          |               |            |
|       | 40mm thick with 20mm nominal size stone aggregate.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | sqm  | 10       | 280.05        | 2800.50    |

| S.No. | Description of Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Unit | Quantity | Unit Rate(Rs) | Amount(Rs) |
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| 46    | 52mm thick CC flooring with " Hardcrete" concrete hardner topping under layer 40mm thick cement concrete 1:2:4 (1cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) and top layer 12 mm thick Hardcrete cement hardner consisting of mix 1:2 (1 cement hardner mix: 2 stone aggregate 6mm nominal size) by volume with which Hardcrete hardening compound of approved quality is mixed @ 2 liter Hardcrete per 50 Kg of cement including cement slurry, but excluding the cost of nosing of steps etc., complete. | sqm  | 270      | 420.55        | 113548.50  |
| 47    | Cement plaster skirting (upto 30cm height) with cement mortar 1:3 (1cement: 3 coarse sand) finished with a floating coat of neat cement.                                                                                                                                                                                                                                                                                                                                                                                            |      |          |               |            |
|       | 21mm thick                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | sqm  | 20       | 258.20        | 5164.00    |
| 48    | Providing and fixing glass strips in joints of terrazzo/cement concrete floors                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |          |               |            |
|       | 40mm wide and 4mm thick                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | RM   | 275      | 29.40         | 8085.00    |
| 49    | Providing and fixing 1st quality ceramic glazed tiles conforming to IS:15622 (thickness to be specified by manufacture) of approved make in all colours (shades as approved by Engineer-in-Charge) in skirting,risers of steps and dados over 12 mm thick bed of Cement mortar 1:3 (1 Cement:3 coarse sand ) and jointing with grey cement slurry @3.3 kg/sqm including pointing in white cement mixed with pigment of matching shade complete.                                                                                     | sqm  | 500      | 724.25        | 362125.00  |
| 50    | Providing and laying 1st quality ceramic glazed floor tiles 300X300 mm (thickness to be specified by manufacturer ) conforming to IS:15622 of approved make in colours as approved by Engineer in Charge laid on 20mm mm thick bed of cement mortar 1:4 ( 1 cement : 4 coarse sand) including pointing the joints with white cement mixed with pigment of matching shade complete.                                                                                                                                                  | sqm  | 25       | 764.55        | 19113.75   |
| 51    | Providing and laying polished vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption's less than 0.08% and conforming to IS: 15622 of approved make in all colours and shades laid over 20mm thick cement mortar 1:4 (1 Cement:4 coarse sand) including grouting the joints with white cement and matching pigments etc. complete as per direction of Engineer-in charge.                                                                                                   |      |          |               |            |
|       | Size of tile 60 x 60 cm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | sqm  | 425      | 1337.10       | 568267.50  |

| S.No. | Description of Item                                                                                                                                                                                                                                                                                                                                                                                                                                        | Unit | Quantity | Unit Rate(Rs) | Amount(Rs) |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|---------------|------------|
| 52    | Providing and laying polished vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption's less than 0.08% and conforming to IS: 15622 of approved make in all colours and shades, in skirting, riser of steps, over 12mm thick cement mortar 1:4 (1 Cement:4 coarse sand) including grouting the joints with white cement and matching pigments etc. complete as per direction of Engineer-in charge. |      |          |               |            |
|       | Size of tile 60 x 60 cm                                                                                                                                                                                                                                                                                                                                                                                                                                    | sqm  | 45       | 1331.28       | 59907.60   |
| 53    | Providing non-asbestos high impact Polypropylene reinforced cement 6mm thick corrugated sheets (as per IS:14871) roofing up to any pitch and fixing with polymer coated J, or L hooks, bolts and nuts 8mm dia GI plain and bitumen washers or with self drilling fastener and EPDM washers etc. complete (excluding the cost of purlins, rafters and trusses), including cutting sheets to size and shape wherever required.                               | Sqm  | 225      | 375.75        | 84543.75   |
| 54    | Providing and laying pressed <b>mangalore tiles</b> (as per approved pattern 20mm nominal thickness of approved size) on roofs jointed with cement mortar 1:4 (1 cement : 4 coarse sand) mixed with 2% integral water proofing compound, laid over a bed of 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) and finish neat complete                                                                                                               | Sqm  | 250      | 431.90        | 107975.00  |
| 55    | Making <b>khurras</b> 45X45cm with average minimum thickness of 5cm cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate of 20mm nominal size) over PVC sheet 1mX1mX400micron, finished with 12mm cement plaster 1:3 (1 cement: 3 coarse sand) and a coat of neat cement rounding the edges and making and finishing the outlet complete.                                                                                              | Each | 12       | 148.75        | 1785.00    |
| 56    | Providing and fixing on wall face unplasticised Rigid <b>PVC rain water pipes</b> conforming to IS : 13592 Type A including jointing with seal ring conforming to IS:5382 leaving 10mm gap for thermal expansion. (i) Single socketed pipes.                                                                                                                                                                                                               |      |          |               |            |
|       | 110mm diameter                                                                                                                                                                                                                                                                                                                                                                                                                                             | RM   | 90       | 206.90        | 18621.00   |
| 57    | Providing and fixing on wall face unplasticised PVC moulded fittings/accessories for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS:5382 leaving 10mm gap for thermal expansion. (i) Single socketed pipes.                                                                                                                                                                   |      |          |               |            |
|       | 110mm bend 87.5 degree                                                                                                                                                                                                                                                                                                                                                                                                                                     | each | 12       | 156.95        | 1883.40    |
|       | 110mm Shoe plain                                                                                                                                                                                                                                                                                                                                                                                                                                           | each | 12       | 287.05        | 3444.60    |

| S.No. | Description of Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Unit | Quantity | Unit Rate(Rs) | Amount(Rs) |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|---------------|------------|
| 58    | Providing and fixing unplasticised - PVC pipe clips of approved design to unplasticised- PVC rain water pipes by means of 50x50x50mm hard wood plugs, screwed with MS screws of required length including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4coarse sand ) and making good the wall etc. complete                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |          |               |            |
|       | 110mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | each | 60       | 144.60        | 8676.00    |
| 59    | Providing & fixing 15mm thick densified tegular edged eco friendly light weight calcium silicate <b>false ceiling</b> tiles of approved texture spintone/cosmos/Hexa or equivalent of size 595 x 595mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanised steel sections (galvanising @120grams per sqm including both side) consisting of main 'T' runner suitably spaced at joints to get required length and of size 24x38mm made from 0.33mm thick (minimum) sheet, spaced 1200mm centre to centre, and cross "T" of size 24 x 28mm made out of 0.33mm thick (minimum) sheet, 1200mm long spaced between main 'T' at 600mm centre to centre to form a grid of 1200 x 600mm and secondary cross 'T' of length 600mm and size 24x38mm made from 0.33mm thick (minimum) sheet to be inter locked at middle of the 1200 x 600mm panel to form grid of size 600x600mm, resting on periphery walls/partitions on a Perimeter wall angle pre-coated steel of size (24x24x3000mm grade of 0.40mm thick (minimum) sheet with the help of rawl plugs at 450mm centre to centre with 25mm long dry wall screws @230mm interval and laying 15mm thick densified edges calcium silicate ceiling tiles of approved texture (Spintone/Cosmos/hexa) in the grid, including, cutting/ making opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc.wherever required. Main 'T' runners to be suspended from ceiling with 12.5mm dia and 50mm long dash fasteners, 4mm GI adjustables rods with galvanised steel level clips of size 85x30x0.8mm, spaced at 1200mm centre to centre along main 'T', bottom exposed with 24mm of all T-sections shall be pre-painted with polyester baked paint, for all heights as per specifications, drawings and directions of Engineer-in-charge.<br>(Note:- Only calcium silicate false ceiling area will be measured from wall to wall. No deduction shall be made for exposed frames/opening (cut outs) having area less than 0.3sqm. The calcium silicate ceiling tile shall have NRC value of 0.5 (Minimum), light reflection>85%, non-combustible as per BS476 part IV, 100% humidity resistance and also having thermal conductivity<0.043 w/m 0KC.) |      |          |               |            |
|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | sqm  | 600      | 1566.00       | 939600.00  |

| S.No. | Description of Item                                                                                                                                                                                                            | Unit | Quantity | Unit Rate(Rs) | Amount(Rs) |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|---------------|------------|
| 60    | 12mm cement plaster on even side of the walls in the mix:                                                                                                                                                                      |      |          |               |            |
|       | 1:6 (1cement :6 fine sand)                                                                                                                                                                                                     | sqm  | 600      | 112.50        | 67500.00   |
| 61    | 12mm cement plaster finished with a floating coat of neat cement of mix:                                                                                                                                                       |      |          |               |            |
|       | 1:6 (1cement :6 fine sand)                                                                                                                                                                                                     | sqm  | 7200     | 142.42        | 1025424.00 |
| 62    | 15mm cement plaster on even side of the walls in the mix:                                                                                                                                                                      |      |          |               |            |
|       | 1:6 (1cement :6 fine sand)                                                                                                                                                                                                     | sqm  | 750      | 130.20        | 97650.00   |
| 63    | 18mm cement plaster on external face of walls in two coats with under layer 12mm thick cement plaster 1:5 (1 cement :5 coarse sand ) finished with a top layer of 6mm thick 1:6 cement plaster(1cement : 6 fine sand)          | sqm  | 975      | 182.90        | 178327.50  |
| 64    | 6mm cement plaster to ceiling of mix                                                                                                                                                                                           |      |          |               |            |
|       | 1:3 (1 cement : 3 fine sand)                                                                                                                                                                                                   | sqm  | 1100     | 101.00        | 111100.00  |
| 65    | Providing and applying <b>white cement based putty</b> of average thickness 1mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth as directed by engineer-in-charge. | sqm  | 2325     | 76.05         | 176816.25  |
| 66    | Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade                                                                                                                         |      |          |               |            |
|       | New work (two or more coats) over and including priming coat with cement primer.(Work to be carried as per relevant IS codes.)                                                                                                 | sqm  | 50       | 64.65         | 3232.50    |
| 67    | Distempering with first quality acrylic washable distemper (ready mixed) of approved manufacturer and of required shade and colour complete as per manufacturer's specification                                                |      |          |               |            |
|       | New work (two or more coats)                                                                                                                                                                                                   | sqm  | 50       | 37.35         | 1867.50    |
| 68    | Applying one coat of water thinable cement primer of approved brand and manufacture on wall surface:                                                                                                                           |      |          |               |            |
|       | Water thinnable cement primer                                                                                                                                                                                                  | sqm  | 540      | 25.50         | 13770.00   |
| 69    | Finishing walls with water proofing cement paint of required shade:                                                                                                                                                            |      |          |               |            |
|       | New Work (Two or more coats applied @3.84kg/10sqm)                                                                                                                                                                             | sqm  | 20       | 44.95         | 899.00     |
| 70    | Finishing walls with <b>Premium Acrylic</b> smooth exterior paint with Silicone additives of required shade:                                                                                                                   |      |          |               |            |
|       | New work : (Two or more coats applied @1.43ltr/10 sqm over and including priming coat of exterior primer applied @2.2kg/10sqm).                                                                                                | sqm  | 950      | 80.45         | 76427.50   |

| S.No. | Description of Item                                                                                                                                                                                                                                                                                                                                                  | Unit | Quantity | Unit Rate(Rs) | Amount(Rs) |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|---------------|------------|
| 71    | Applying priming coat                                                                                                                                                                                                                                                                                                                                                |      |          |               |            |
| (a)   | With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron/ steel works.                                                                                                                                                                                                                                             | sqm  | 50       | 20.70         | 1035.00    |
| 72    | Finishing with <b>Epoxy paint</b> (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete.                                                                                                                                                          |      |          |               |            |
| (a)   | On steel Work                                                                                                                                                                                                                                                                                                                                                        | sqm  | 20       | 105.50        | 2110.00    |
| (b)   | On concrete Work                                                                                                                                                                                                                                                                                                                                                     | sqm  | 20       | 108.55        | 2171.00    |
| 73    | Wall/ceiling painting with <b>plastic emulsion paint</b> of approved brand and manufacture to give an even shade.                                                                                                                                                                                                                                                    |      |          |               |            |
|       | Two or more coats on new work.                                                                                                                                                                                                                                                                                                                                       | sqm  | 375      | 60.25         | 22593.75   |
| 74    | Painting with <b>synthetic enamel paint</b> of approved brand and manufacture of required colour to give an even shade:                                                                                                                                                                                                                                              |      |          |               |            |
|       | Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture.                                                                                                                                                                                                                                            | sqm  | 50       | 78.80         | 3940.00    |
| 75    | French spirit polishing:                                                                                                                                                                                                                                                                                                                                             |      |          |               |            |
|       | Two or more coats on new works including a coat of wood filler                                                                                                                                                                                                                                                                                                       | sqm  | 15       | 137.45        | 2061.75    |
| 76    | Forming groove of uniform size from 12X12mm and upto 25X15mm in plastered surface and joints of ceiling and wall as per approved pattern using wooden battens, nailed to the underlayer including removal of wooden battens, repairs to the edges of plaster panel and finishing the groove complete as per specifications and directions of the Engineer-in-charge. | RM   | 475      | 72.15         | 34271.25   |
| 77    | Wall painting with <b>acrylic emulsion paint</b> having VOC (Volatile Organic Compound) content less than 50grams/litre, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and colour:                                                                                                                 |      |          |               |            |
|       | Two or more coats on new work.                                                                                                                                                                                                                                                                                                                                       | sqm  | 1350     | 56.60         | 76410.00   |
| 78    | <b>Breaking of pile head</b> for 450 and 600mm dia piles manually including stacking of steel bars and disposal of unserviceable material within 50metres lead as per direction of Engineer-in-charge                                                                                                                                                                | cum  | 50       | 978.95        | 48947.50   |
| 79    | Extra for scrapping, cleaning and straightening reinforcement from pile head and binding with pile cap reinforcement all complete as per direction of Engineer-in-charge                                                                                                                                                                                             | kg   | 4600     | 2.60          | 11960.00   |

| S.No. | Description of Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Unit | Quantity | Unit Rate(Rs) | Amount(Rs) |
|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|---------------|------------|
| 80    | Providing and laying 60mm thick factory made cement concrete <b>interlocking paver block</b> of M-30 grade made by block making machine with strong vibratory compaction, of approved size , design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of coarde sand , filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.                                                                                                                                                                                                 | sqm  | 860      | 536.65        | 461519.00  |
| 81    | Providing and laying at or near ground level factory made <b>kerb stone</b> of grade M25 cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement : 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not be more than 5mm), including making drainage opening wherever required complete etc. all complete as per the direction of Engineer-in-charge. (Length of finished kerb edging shall be measured for payment). (Precast CC kerb stone shall be approved by Engineer-in-charge) | cum  | 96       | 5046.80       | 484492.80  |
| 82    | Providing and fixing water closet squatting pan (Indian type WC pan) with 100mm sand cast Iron P or S trap ,10 liter low level white PVC flushing cistern with manually controlled device (handle lever) conforming to IS 7231 with all fittings and fixtures complete including cutting and making good the walls and floors wherever required:                                                                                                                                                                                                                                                              |      |          |               |            |
|       | White vitreous china orissa pattern WC pan of size 580 X 440mm with integral type foot rests.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | each | 1        | 2964.10       | 2964.10    |
| 83    | Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing & C. P. flush bend with fittings and C. I. breackets, 40mm flush bend, overflow arrangement with specials of standrad make and mosquito proof coupling of approved municipal design complete including painting of fittings and brackets, cutting and making good the walls and floors wherever required:                                                                                                                                            |      |          |               |            |
|       | W.C. pan with ISI marked solid plastic seat and lid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | each | 2        | 4201.05       | 8402.10    |
| 84    | Extra for using coloured pedestal type W. C. pan (European type) with low level cistern of same colour instead of white vitreous china W.C. pan and cistern.                                                                                                                                                                                                                                                                                                                                                                                                                                                  | each | 2        | 1173.10       | 2346.20    |

| S.No. | Description of Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Unit | Quantity | Unit Rate(Rs) | Amount(Rs) |
|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|---------------|------------|
| 85    | Providing and fixing coloured vitreous china flat back half stall urinal of size 580x380x350mm with PVC automatic flushing cistern, Parryware/Hindware/Seabird/Orient (Coral) with fittings, standard size C. P. brass flush pipe, spreaders with unions and clamps (all in C. P. brass) with waste fitting as per IS: 2556, C.I. trap with outlet grating and other couplings in C. P. brass including painting of fittings, cutting and making good the walls and floors wherever required: |      |          |               |            |
|       | Single half stall urinal with 10 litre P.V.C automatic flushing cistern of approved make.                                                                                                                                                                                                                                                                                                                                                                                                     | each | 2        | 5354.50       | 10709.00   |
| 86    | Providing and fixing wash basin of approved colour and size with CI bracket, 15 mm C.P. brass pillar taps, close hole basin mixer 32 mm C.P. brass waste and bottle trap of standard pattern, including painting of fittings etc. cutting and making good the walls wherever required:                                                                                                                                                                                                        |      |          |               |            |
|       | Vitreous China counter type wash basin size 630 x 450mm with a pair of 15mm C. P. brass pillars taps                                                                                                                                                                                                                                                                                                                                                                                          | each | 1        | 1848.35       | 1848.35    |
|       | Vitreous China Flat back wash basin size 550 x 400mm with a pair of 15mm C. P. brass pillars taps                                                                                                                                                                                                                                                                                                                                                                                             | each | 2        | 1679.95       | 3359.90    |
| 87    | Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS 13983 with C. I. brackets and stainless steel plug 40mm with provision of 2 nos. CP brass long body bib cock conforming to IS standrad and weighing not less than 650gm for CP bottle trap complete including painting of fittings and brackets, cutting and making good the wall wherver required.                                                                                                              |      |          |               |            |
|       | 460 x 915 mm bowl depth 178mm with drain board                                                                                                                                                                                                                                                                                                                                                                                                                                                | each | 1        | 3385.00       | 3385.00    |
| 88    | Providing and fixing 100 mm sand cast iron grating for gully, floor or Nahani trap.                                                                                                                                                                                                                                                                                                                                                                                                           | each | 10       | 24.60         | 246.00     |
| 89    | Providing and fixing 1000 x 600 x 6 mm thick bevelled edge mirror of float glass ( of approved quality ) complete shall be fixed mounted on 12 mm thick water proof plywood backing and hardwood beading all-round and mirror fixed to the backing with 4 nos. of CP cap screws & washers, including fixing the mirror to the wall with necessary screws, plugs & washers etc. with each wash basin                                                                                           | each | 3        | 1000.00       | 3000.00    |
| 90    | Providing and fixing 600 x 120 x 5 mm glass shelf with edges rounded off supported on anodised aluminium angle frame with C.P. Brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs etc. complete.                                                                                                                                                                                                                                                                 | each | 3        | 341.25        | 1023.75    |
| 91    | Providing and fixing toilet paper holder.                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |          |               |            |
|       | CP brass.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | each | 3        | 250.95        | 752.85     |

| S.No. | Description of Item                                                                                                                                                                                                                                                                                                        | Unit | Quantity | Unit Rate(Rs) | Amount(Rs) |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|---------------|------------|
| 92    | Providing and fixing soil,waste and vent pipes:                                                                                                                                                                                                                                                                            |      |          |               |            |
|       | 100 mm dia.                                                                                                                                                                                                                                                                                                                |      |          |               |            |
|       | Sand cast iron S & S pipe.                                                                                                                                                                                                                                                                                                 | RM   | 20       | 734.30        | 14686.00   |
| 93    | Providing and fixing M.S holder-bat clamps of approved design to Sand Cast iron/ cast iron ( spun ) pipe embedded in and including cement concrete blocks 10 x 10 cm of 1:2:4 mix ( 1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including cost of cutting holes and making good the walls etc. |      |          |               |            |
|       | For 100 mm dia pipe                                                                                                                                                                                                                                                                                                        | each | 10       | 112.50        | 1125.00    |
| 94    | Providing lead caulked joints to SCI pipes and fittings of diameter                                                                                                                                                                                                                                                        |      |          |               |            |
|       | 100mm                                                                                                                                                                                                                                                                                                                      | each | 10       | 207.85        | 2078.50    |
| 95    | Providing and fixing SCI trap of self cleansing design with SCI screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors:                                                                                                                          |      |          |               |            |
|       | 100mm inlet and 100mm outlet.                                                                                                                                                                                                                                                                                              | each | 2        | 801.70        | 1603.40    |
| 96    | Providing and fixing PTMT liquid soap container 109mm wide,125mm high and 112mm distance from wall of standard shape with bracket of same materials with snap fittings of approved quality ,colour and make ,weighing not less than 105 gm (Prayag or equivalent).                                                         | each | 3        | 180.10        | 540.30     |
| 97    | Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with C.P. Brass screws with concealed fitting arrangement of approved quality and make.                                                                                                                                                 |      |          |               |            |
|       | 600 mm long and min. 25mm dia towel rail with total length of 645mm,width 78mm and effective height 88mm,weighing not less than 190gms.                                                                                                                                                                                    | each | 3        | 415.20        | 1245.60    |
| 98    | Providing and fixing G.I. Pipes (medium grade) as per IS 1239 Part I & II complete with G.I. Fitting and clamps , including cutting and making good the walls etc. (exposed internal work).                                                                                                                                |      |          |               |            |
| (a)   | 15 mm dia nominal bore.                                                                                                                                                                                                                                                                                                    | RM   | 30       | 161.60        | 4848.00    |
| (b)   | 20 mm dia nominal bore.                                                                                                                                                                                                                                                                                                    | RM   | 20       | 188.05        | 3761.00    |
| (c)   | 25 mm dia nominal bore.                                                                                                                                                                                                                                                                                                    | RM   | 10       | 243.15        | 2431.50    |
| (d)   | 40 mm dia nominal bore.                                                                                                                                                                                                                                                                                                    | RM   | 10       | 364.10        | 3641.00    |
| 99    | Providing and fixing G.I. Pipes (medium grade) as per IS 1239 Part I & II complete with G.I. Fitting and clamps , including cutting chases and making good the walls etc. (Concealed pipe including painting with anti corrosive bitumastic paint)                                                                         |      |          |               |            |
| (a)   | 15 mm dia nominal bore.                                                                                                                                                                                                                                                                                                    | RM   | 20       | 230.00        | 4600.00    |
| (b)   | 20 mm dia nominal bore.                                                                                                                                                                                                                                                                                                    | RM   | 10       | 252.20        | 2522.00    |

| S.No. | Description of Item                                                                                                                                                                          | Unit | Quantity | Unit Rate(Rs) | Amount(Rs) |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|---------------|------------|
| 100   | Providing and fixing G.I. Pipes (medium grade) complete with G.I. Fitting and clamps , including trenching sand cushion and refilling, anticorrosive bitumastic paint etc. ( external work). |      |          |               |            |
| (a)   | 25 mm dia nominal bore.                                                                                                                                                                      | RM   | 40       | 209.40        | 8376.00    |
| (b)   | 40 mm dia nominal bore.                                                                                                                                                                      | RM   | 30       | 294.20        | 8826.00    |
| (c)   | 50 mm dia nominal bore.                                                                                                                                                                      | RM   | 20       | 355.95        | 7119.00    |
| (d)   | 80 mm dia nominal bore.                                                                                                                                                                      | RM   | 15       | 573.40        | 8601.00    |
| 101   | Making connection of GI distribution branch with GI main of following sizes by providing and fixing tee, including cutting and threading the pipe etc., complete.                            |      |          |               |            |
|       | 25 to 40mm nominal bore.                                                                                                                                                                     | each | 3        | 277.35        | 832.05     |
|       | 50 to 80mm nominal bore.                                                                                                                                                                     | each | 2        | 630.15        | 1260.30    |
| 102   | Providing and fixing C.P. brass bib cock of approved quality conforming to IS: 8931                                                                                                          |      |          |               |            |
|       | 15mm nominal bore                                                                                                                                                                            | each | 5        | 397.50        | 1987.50    |
| 103   | Providing and fixing C.P. brass stop angle valve for basin and cistern points of approved quality conforming to IS:8931.                                                                     |      |          |               |            |
|       | 15mm nominal bore                                                                                                                                                                            | each | 5        | 449.35        | 2246.75    |
| 104   | Providing and fixing brass gate valve with CI wheel of approved quality (screwed end)                                                                                                        |      |          |               |            |
| (a)   | 25mm nominal bore                                                                                                                                                                            | each | 1        | 372.95        | 372.95     |
| (b)   | 40mm nominal bore                                                                                                                                                                            | each | 1        | 546.05        | 546.05     |
| (c)   | 50mm nominal bore                                                                                                                                                                            | each | 1        | 780.60        | 780.60     |
| 105   | Providing and fixing gun metal ball valve with operating lever of approved quality complete.                                                                                                 |      |          |               |            |
|       | High or low pressure with plastic floats                                                                                                                                                     |      |          |               |            |
|       | 15mm nominal bore                                                                                                                                                                            | each | 1        | 258.05        | 258.05     |
| 106   | Providing and fixing gun metal non-return valve of approved quality complete.                                                                                                                |      |          |               |            |
|       | 25mm nominal bore                                                                                                                                                                            |      |          |               |            |
|       | Horizontal                                                                                                                                                                                   | each | 1        | 383.45        | 383.45     |
|       | Vertical                                                                                                                                                                                     | each | 1        | 395.05        | 395.05     |
|       | 40mm nominal bore                                                                                                                                                                            |      |          |               |            |
|       | Horizontal                                                                                                                                                                                   | each | 1        | 620.25        | 620.25     |
|       | Vertical                                                                                                                                                                                     | each | 1        | 817.70        | 817.70     |
|       | 50mm nominal bore                                                                                                                                                                            |      |          |               |            |
|       | Horizontal                                                                                                                                                                                   | each | 1        | 936.35        | 936.35     |
|       | Vertical                                                                                                                                                                                     | each | 1        | 1110.55       | 1110.55    |
|       | 80mm nominal bore                                                                                                                                                                            |      |          |               |            |
|       | Horizontal                                                                                                                                                                                   | each | 1        | 2392.95       | 2392.95    |
|       | Vertical                                                                                                                                                                                     | each | 1        | 3089.85       | 3089.85    |

| S.No. | Description of Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Unit               | Quantity | Unit Rate(Rs) | Amount(Rs) |
|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|----------|---------------|------------|
| 107   | Constructing masonry Chamber 600x600x750mm or matching with site condition inside , in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with CI surface boc 100mm top diameter, 160mm bottom diameter and 180mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3 (1 cement:3 coarse sand) 12mm thick, finished with a floting coat of neat cement complete as per standard design: |                    |          |               |            |
|       | With FPS bricks of class 75                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | each               | 1        | 5251.80       | 5251.80    |
| 108   | Providing and placing on terrace ( at all floor levels ) polyethylene <b>water storage tank</b> conforms to IS 12701 of approved brand and manufacture with cover and suitable locking arrangement, float valve and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank. The tank should be ISI marked .                                                                                                                                                                                                                                                                                                       | per litre capacity | 3000     | 6.10          | 18300.00   |
| 109   | Providing, laying and jointing glazed stoneware pipes grade 'A' with stiff mixture of cement mortar in the proportion of 1:1 ( 1 cement : 1 fine sand) including testiing of joints etc. complete.                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                    |          |               |            |
| (a)   | 100 mm diameter.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | RM                 | 25       | 150.10        | 3752.50    |
| (b)   | 150 mm diameter.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | RM                 | 10       | 219.05        | 2190.50    |
| (c)   | 200 mm diameter.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | RM                 | 15       | 323.05        | 4845.75    |
| 110   | Providing, laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40mm nominal size) all round SW pipes including bed concrete as per standrad design:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                    |          |               |            |
| (a)   | 100 mm diameter.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | RM                 | 25       | 496.90        | 12422.50   |
| (b)   | 150 mm diameter.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | RM                 | 10       | 607.70        | 6077.00    |
| (c)   | 200 mm diameter.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | RM                 | 15       | 708.40        | 10626.00   |
| 111   | Providing and fixing square-mouth S.W. Gully trap grade 'A' complete with C.I. Grating brick masonry chamber with bricks of class designation 75 and water tight C.I. Cover with frame of 300 x 300 mm size ( inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as standard design.:                                                                                                                                                                                                                                                                                                                                          |                    |          |               |            |
|       | 100 x 100 mm size P type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                    |          |               |            |
|       | With F.P.S bricks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | each               | 3        | 1258.05       | 3774.15    |

| S.No. | Description of Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Unit | Quantity | Unit Rate(Rs) | Amount(Rs) |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|---------------|------------|
| 112   | Constructing brick masonry manhole with 75 class designation bricks in cement mortar 1:4 (1 cement: 4 coarse sand) RCC top slab with 1:2:4 mix(1 cement:2 coarse sand: 4 graded stone aggregate 20mm nominal size) foundation concrete 1:4:8 (1 cement: 4 coarse sand: 8 graded stone aggregate 40mm nominal size) inside plastering 12mm thick with cement mortar 1:3 (1 cement: 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 mix(1 cement:2 coarse sand: 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design. |      |          |               |            |
|       | Inside size 90X80cm and 45cm deep including CI cover with frame (light duty) 455X610mm internal dimensions total weight of cover and frame to be not less than 38kg (weight of cover 23kg and weight of frame 15kg)                                                                                                                                                                                                                                                                                                                                                                                                                            |      |          |               |            |
|       | With FPS bricks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | each | 1        | 7061.70       | 7061.70    |
|       | Inside size 120X90cm and 90cm deep including CI cover with frame (medium duty) 500mm internal diameter total weight of cover and frame to be not less than 116kg (weight of cover 58kg and weight of frame 58kg)                                                                                                                                                                                                                                                                                                                                                                                                                               |      |          |               |            |
|       | With FPS bricks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | each | 1        | 15223.25      | 15223.25   |
| 113   | Extra for depth for manholes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |      |          |               |            |
|       | Size 90X80cm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |      |          |               |            |
|       | With FPS bricks 75 class designation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | RM   | 4        | 4061.70       | 16246.80   |
| 114   | Providing MS foot rests including fixing in manholes with 20x20x10cm cement concrete blocks 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) as per standard design                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |          |               |            |
|       | With 20 x 20mm square bar                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | each | 12       | 228.85        | 2746.20    |
| 115   | Constructing brick masonry road gully chamber 50 x 45 x 60cm with bricks of class designation 75 in cement mortar 1:4 (1 cement: 4 coarse sand) including 500 x 450mm pre-cast RCC horizontal grating with frame complete as per standard design                                                                                                                                                                                                                                                                                                                                                                                               |      |          |               |            |
|       | With FPS bricks 75 class designation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | each | 4        | 3215.00       | 12860.00   |
| 116   | Making soak pit 2.5m diameter 3m deep with 45X45cm dry brick honeycomb shaft with bricks of class designation 75 and SW drain pipe 100mm diameter, 1.8m long complete as per standard design and specification.                                                                                                                                                                                                                                                                                                                                                                                                                                |      |          |               |            |
|       | With FPS bricks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | each | 2        | 14324.05      | 28648.10   |

| S.No. | Description of Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Unit | Quantity | Unit Rate(Rs) | Amount(Rs) |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|---------------|------------|
| 117   | Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded builtup standard tubular and other sections of approved make conforming to IS: 733 and IS:1285, fixed with rawl plugs and screws or with fixing clips or with expansion hold fasteners including necessary filling up of gaps at junctions at top , bottom and sides with required PVC/neoprene felt, etc. Aluminium sections shall be smooth , rust free, straight, mitred and jointed mechanically wherever required including cleat angle, aluminium snap beading for glazing/panelling, CP brass/stainless steel screws, all complete as per architectural drawings and direction of Engineer-in-charge. (Glazing and panelling to be paid for separately). |      |          |               |            |
| (a)   | For fixed portion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |          |               |            |
|       | Powder coated aluminium (minimum thickness of powder coating 50 micron)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | kg   | 840      | 387.60        | 325584.00  |
| (b)   | For shutters of doors, windows & ventilators including providing and fixing hinges/pivots and fittings wherever required including the cost of PVC/neoprene gasket required .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |          |               |            |
|       | Powder coated aluminium (minimum thickness of powder coating 50 micron)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | kg   | 1680     | 436.35        | 733068.00  |
| 118   | Providing and fixing 12mm thick prelaminated three layer medium density (exterior grade) particle board conforming to IS: 12823 Grade I Type II bonded with phenol formaldehyde synthetic resin of approved brand and manufacture, in panelling fixed in aluminum doors, windows shutters and partition frames with CP brass/stainless steel screws etc. complete as per architectural drawings and directions of Engineer-in-charge.                                                                                                                                                                                                                                                                                                                            |      |          |               |            |
|       | Pre laminated particle board with decorative lamination on both side                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | sqm  | 12       | 969.95        | 11639.40   |
| 119   | Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions, etc., with PVC/neoprene gasket, etc., complete as per the architectural drawings and directions of Engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |      |          |               |            |
|       | With glass panes of 5.5mm thickness (weight not less than 13.75kg/sqm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | sqm  | 100      | 905.75        | 90575.00   |
| 120   | Providing and fixing double action <b>hydraulic floor spring</b> of approved brand and manufacture IS 6315 marked "hardwyn" make (Model 3000) or equivalent for doors including cost of cutting floors as required, embedding in floors and cover plates with brass pivot and single piece M. S. sheet outer box with slide plate etc. complete as per direction of Engineer-in-charge.                                                                                                                                                                                                                                                                                                                                                                          |      |          |               |            |
|       | With Stainless steel cover plate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | each | 6        | 1953.10       | 11718.60   |

| S.No. | Description of Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Unit  | Quantity | Unit Rate(Rs) | Amount(Rs) |
|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|----------|---------------|------------|
| 121   | Providing and fixing double glazed <b>hermetically sealed glazing</b> in aluminum windows, ventilators and partition etc. with 6mm thick clear float glass both side having 12mm air gap, including providing EPDM gasket, perforated aluminum spacers, desiccants, sealant (Both primary and secondary sealet) etc. as per specifications, drawings and direction of Engineer-in-charge.                                                                                                                                             | sqm   | 50       | 3328.40       | 166420.00  |
| 122   | Providing and placing in position suitable PVC water stops conforming to IS 12200 of Deep-Jyoti or equivalent for construction/expansion joints between two RCC members and fixed to the reinforcement with binding wire before pouring concrete etc. complete.                                                                                                                                                                                                                                                                       |       |          |               |            |
|       | Serrated with central bulb(225mm wide,8-11mm thick)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | meter | 500      | 459.15        | 229575.00  |
| 123   | Providing, laying cement based water proofing treatment including preparation of surface as required for treatment of roofs,balconies,terraces etc consisting of following operations:                                                                                                                                                                                                                                                                                                                                                |       |          |               |            |
|       | a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with proprietry water proofing compound conforming to IS:2645 and approved by Engineer-in-charge shall be applied and grouted over the RCC slab including adjoining walls upto 300mm height including cleaning the surface before treatment.                                                                                                                                                                                                             |       |          |               |            |
|       | b) Laying plain cement concrete 1:5:10 (1cement : 5 fine sand : 10 burnt brick aggregate of 40mm nominal size) admixed with proprietry water proofing compound conforming to IS:2645 and approved by Engineer-in-charge over 20mm thick layer of cement mortar of mix 1:5 (1 cement: 5 coarse sand) admixed with water proofing compound conforming to IS:2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs. |       |          |               |            |
|       | c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS:2645 and approved by Engineer-in-charge.                                                                                                                                                                                                                                                                                                                                 |       |          |               |            |
|       | d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1cement:4coarse sand) admixed with water proofing compound conforming to IS:2645 and approved by Engineer-in-charge and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square.                                                                                                                                                                                                                      |       |          |               |            |

| S.No. | Description of Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Unit | Quantity | Unit Rate(Rs) | Amount(Rs) |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|---------------|------------|
|       | e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test.All above operations to be done in order and as directed and specified by the Engineer-in-charge:                                                                                                                                                                                                                                                                               |      |          |               |            |
|       | With average thickness of 120 mm and minimum thickness at khurra as 65 mm                                                                                                                                                                                                                                                                                                                                                                                                                                    | sqm  | 475      | 747.70        | 355157.50  |
|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |          |               |            |
| 124   | Filling of approved materials i/c cost of materials, labour and equipment for handling, transportation, placing and compacting as required to the required density and to the required elevations as per specification, drawings and directions of Engineer-in-Charge.                                                                                                                                                                                                                                       |      |          |               |            |
|       | Broken/crushed/non crushed stone of size 40 to 60mm for placing over transformer grating.                                                                                                                                                                                                                                                                                                                                                                                                                    | cum  | 14       | 1100.80       | 15411.20   |
|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |          |               |            |
| 125   | Preparation and consolidation of subgrade with power road roller of 8 to 10 tonne capacity after excavating earth to an average of 22.5cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earth lead upto 50m.                                                                                                                                                                                  | sqm  | 6874     | 61.25         | 421032.50  |
|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |          |               |            |
| 126   | Extra for compaction of earthwork in embankment under optimum moisture conditions to give at least 95% of the maximum dry density (Proctor density)                                                                                                                                                                                                                                                                                                                                                          | cum  | 1547     | 7.75          | 11989.25   |
|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |          |               |            |
| 127   | Supplying and stacking of graded stone aggregate at site of size range                                                                                                                                                                                                                                                                                                                                                                                                                                       |      |          |               |            |
| (a)   | 90mm to 45mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | cum  | 928      | 1010.75       | 937976.00  |
| (b)   | 63mm to 45mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | cum  | 928      | 1100.80       | 1021542.40 |
| (c)   | 53mm to 22.4 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | cum  | 928      | 1190.80       | 1105062.40 |
|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |          |               |            |
| 128   | Laying spreading and compacting stone aggregate of specified sizes to WBM specifications including spreading in uniform thickness, hand picking, rolling with 3 wheeled road/vibratory roller 8-10tonne in stages to proper grade and camber, applying and brooming requisite type of screening/binding material to fill up interstices of coarse aggregate water and compacting to the required density (payment for stone aggregate, screenings, kankar, moorum and red bajri etc., to be made separately) | cum  | 2060     | 330.15        | 680109.00  |
|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |          |               |            |
| 129   | Supplying and stacking of stone screenings/chippings at site                                                                                                                                                                                                                                                                                                                                                                                                                                                 |      |          |               |            |
| (a)   | 13.2 mm nominal size (Type A)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | cum  | 280      | 1338.75       | 374850.00  |
| (b)   | 11.2 mm nominal size (Type B)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | cum  | 280      | 1425.85       | 399238.00  |
|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |          |               |            |
| 130   | Supplying and stacking of moorum at site.                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | cum  | 200      | 624.45        | 124890.00  |
|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |          |               |            |

| S.No. | Description of Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Unit | Quantity | Unit Rate(Rs) | Amount(Rs) |
|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|---------------|------------|
| 131   | Providing and laying polythene sheet of 125 microns in road work as directed by Engineer-in-charge.                                                                                                                                                                                                                                                                                                                                                                                                             | sqm  | 6874     | 74.97         | 515343.78  |
| 132   | Providing and fixing fire proof door including frame conform to IS:3614 (Part-I) & (Part-II) with metal covered on both side having insulating core filled up with mineral wool. The door shall be provided with all accessories and hardware and zinc silicate primer (minimum DFT 75 microns) after blast cleaning the surface to near white metal surface (Sa 2 1/2). The door shall be finished with suitable fire retardant painting system                                                                |      |          |               |            |
|       | Fire proof door with minimum 3 hours fire rating                                                                                                                                                                                                                                                                                                                                                                                                                                                                | sqm  | 10       | 11950.00      | 119500.00  |
| 133   | Providing and laying non-pressure NP3 class (Heavy duty) RCC pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement: 2 fine sand) including testing of joints etc., complete.                                                                                                                                                                                                                                                                                        |      |          |               |            |
| (a)   | 100mm dia. RCC pipe                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | RM   | 40       | 519.80        | 20792.00   |
| (a)   | 250mm dia. RCC pipe                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | RM   | 80       | 835.80        | 66864.00   |
| (b)   | 300mm dia. RCC pipe                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | RM   | 461      | 906.30        | 417804.30  |
| (c)   | 450mm dia. RCC pipe                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | RM   | 77       | 1587.60       | 122245.20  |
| 134   | Grouting of block outs, pockets, foundations, bolts holes and underside of base plates with cement, sand aggregate ( of size 6 mm and down) grout 1:1:2 with non-shrink additive and shall be of strength not less than M30 including placing, curing, cleaning, surface preparation, testing, etc. complete with labour, materials, equipment, handling, testing, etc. all complete as per specifications, drawings and instructions of the Engineer.                                                          | cum  | 10       | 17750.00      | 177500.00  |
| 135   | Providing & fixing in position precast cement concrete trench covers, coping, roof units, fascia, RCC grills, etc., at various elevations in all kinds of work including moulding, formwork, mixing, laying out, compacting and curing, storing, transportation, erection without damage, setting in position with cement and sand mortar, grouting etc all as per specs, drawings and directions of Engr-in-Charge but excluding the cost of reinforcement, inserts, edge angles, etc, and of following grade: |      |          |               |            |
| (a)   | M25                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | cum  | 120      | 6747.30       | 809676.00  |

| S.No. | Description of Item                                                                                                                                                                                                                                                                                                                                                                                                                                | Unit | Quantity | Unit Rate(Rs) | Amount(Rs) |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|---------------|------------|
| 136   | Fixing (all dia & length) foundation bolts in position with help of proper templates( template to be supplied by contractor) including nuts and washers all complete as per specs, drawings & directions of Engr-in-Charge.(Foundation bolts shall be supplied by BHEL. The dia of bolts shall generally be upto 80mm)                                                                                                                             | kg   | 60000    | 9.75          | 585000.00  |
| 137   | Providing & fixing <b>galvanised chainlink fencing</b> including all allied activities, all complete as per POWERGRID Technical specification clause no. 9.0, drawing (C/ENGG/CVL/SYD/FENCE/101) and direction of Engineer incharge. (Rates shall be inclusive of all labour material items like galvanised chainlink fence fabric, galvanised tubular post, flats, PCC(1:4:8), CC (1:2:4), plaster, brickwork, cement painting, etc.all complete) | RM   | 960      | 2430.00       | 2332800.00 |
| 138   | Providing & fixing <b>gate</b> made of medium duty MS pipe including all allied activities, all complete as per POWERGRID Technical specification clause no. 9.0, drawing (C/ENGG/CVL/SYD/GATE/002) and direction of Engineer incharge. (Rates shall be inclusive of all labour material items like medium duty pipe, fabrication, welding etc.all complete)                                                                                       | kg   | 800      | 77.90         | 62320.00   |
| 139   | Providing & fixing <b>10mm thick toughened glass</b> with reflecting film in Aluminum glazing at all levels complete as per drawing, specification and direction of Engineer-in-charge                                                                                                                                                                                                                                                             | Sqm  | 50       | 1500.00       | 75000.00   |
| 140   | Supplying, laying 200mm thick hard core <b>stone ballast</b> interstics filled with sand, rammed and well compacted to desired thickness all complete as per drawing, specification and direction of Engineer-in-charge (Rate shall be inclusive of material like stone ballast 40mm, sand etc., labour, T & P all complete)                                                                                                                       | Sqm  | 100      | 280.10        | 28010.00   |
| 141   | Supplying, laying well compacted <b>stone packing</b> (150mm to 25mm size) interstics filled with sand over well compacted earth surface (95% proctor density), of desired thickness all complete as per drawing, specification and direction of Engineer-in-charge (Rate shall be inclusive of material like stone , sand, etc., well compacted earth, labour, T & P all complete)                                                                | Cum  | 170      | 1284.36       | 218341.20  |
| 142   | Providing and laying 600mm wide 75mm thk <b>PCC 1:4:8</b> (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size) <b>shoulder</b> over well compacted earth on both side of road all complete as per drawing, specification and direction of Engineer-in-charge (Rate shall be inclusive of material, well compacted earth, labour, T & P etc.)                                                                                    | sqm  | 1280     | 269.50        | 344960.00  |

| S.No. | Description of Item                                                                                                                                                                                                                                                         | Unit | Quantity | Unit Rate(Rs) | Amount(Rs)         |
|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|---------------|--------------------|
| 143   | Providing and fixing <b>Chicken wire mesh</b> of 22G x 12mm on wall, floor and roof of switchyard panel room all complete as per drawing, specification and direction of Engineer-in-charge (Rate shall be inclusive of all material chicken wire mesh, labour, T & P etc.) | Sqm  | 1000     | 108.30        | 108300.00          |
| 144   | Supplying and erection of <b>dewatering pumps</b> at desired location as per specification and direction of Engineer-in-charge (Rate shall be inclusive of all material like pump,piping, electricity connection, T & P etc.all complete)                                   |      |          |               |                    |
| (a)   | 5HP                                                                                                                                                                                                                                                                         | Each | 1        | 40000.00      | 40000.00           |
| 145   | <b>Rain water harvesting</b> - Providing recharge structures with bore wells all complete as per POWERGRID's specification clause no. 6.0, drawing (C/ENGG/STD/RWH-01) and direction of Engineer-in-charge                                                                  | Each | 1        | 153000.00     | 153000.00          |
|       |                                                                                                                                                                                                                                                                             |      |          | <b>Total:</b> | <b>83123848.53</b> |

**NOTE:**

- 1 Reinforcement steel shall be supplied by BHEL free of cost as per norms indicated in conditions of contract. The rate quoted against **Item no.: 20(b)** above shall be deemed to be inclusive of cost against all activities required including transportation of material from SAIL stockyard to site.