

**Bill Of Quantities & Price Schedule for Construction of  
D.G. Set & Comand associated Works at B H E L, Rudrapur**

| S. N. | Code No | Particular of Items  | Qty   | Unit | Rate (Rs.) |          | Amount (Rs.) |
|-------|---------|--|-------|------|------------|----------|--------------|
|       |         |  |       |      | In Figures | In Words |              |
|       |         | <b><u>1. EARTH WORK</u></b>  |       |      |            |          |              |
| 1     | 2.8     | Earth work in excavation by mechanical means [ Hydraulic exceeding ] manual in foundation trenches of drains [ not exceeding 1.5 M in width or 10 Sqm on plan ] including dressing of sides and ramming of bottoms, lift up to 1.5 M, including getting out the excavated soil and disposal of surplus excavated soil as directed, with in a lead of 50 M .                    | 75.93 | Cum  |            |          |              |
| 2     | 2.25    | Filling available excavated earth [ excluding rock ] in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating earth deposited layers by ramming and watering, lead up to 50 M to 1.5 M .  | 75.93 | Cum  |            |          |              |
| 3     | 2.27    | Sand filling in plinth.  | 5.64  | Cum  |            |          |              |
|       |         | <b><u>2. PLAIN CEMENT CONCRETE</u></b>   |       |      |            |          |              |
| 1     | 4.1.9   | Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level<br>1:4:8 [ 1 cement : 4 fine sand : 8 graded stone aggregate 40mm nominal size ] .  | 6.51  | Cum  |            |          |              |
|       |         | <b><u>3. Damp Proof Course</u></b>   |       |      |            |          |              |
| 1     | 4.1     | Providing and laying damp - proof course 40mm thick with cement concrete 1:2:4 [ 1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size ].  | 8.35  | Sqm  |            |          |              |
|       |         | <b><u>4. REINFORCED CEMENT CONCRETE</u></b>  |       |      |            |          |              |
| 1     | 5.1.3   | Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level<br>1:2:4 [ 1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size ]   | 11.13 | Cum  |            |          |              |
| 2     | 5.2.3   | Reinforced cement concrete work in walls [ any thickness ], including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. up to floor five excluding cost of centering, shuttering, finishing and reinforcement<br>1:2:4 [ 1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size ] . | 11.06 | Cum  |            |          |              |

|    |        |  |       |     |  |  |  |
|----|--------|--|-------|-----|--|--|--|
| 3  | 5.3    | Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15 landings, balconies, shelves, chajjas, bands, plain window sills, staicases and spiral star cases up to floor five level excluding the cost of centering, shuttering, finishing and reinforcement with 1:2:4 [ 1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size ] . | 2.80  | Cum |  |  |  |
|    |        | <b><u>5. FORM WORK</u></b>   |       |     |  |  |  |
| 1A | 5.9.1  | Centering and shuttering including strutting, propping etc. and removal of form for Foundations, floorings, bases of columns, etc. for mass concrete .   | 14.88 | Sqm |  |  |  |
| 1B | 5.9.5  | Lintels, beams, plinth beams, girders, bressumers and cantilevers .  | 74.84 | Sqm |  |  |  |
| 1C | 5.9.6  | Columns, Pillars, Piers, Abutments, Posts and Struts .   | 46.75 | Sqm |  |  |  |
|    |        | <b><u>6. REINFORCEMENT WORK</u></b>  |       |     |  |  |  |
| 1  | 5.22.1 | Mild steel and medium Tensile steel bars.  | 39.94 | Qtl |  |  |  |
|    |        | <b><u>7. BRICK WORK</u></b>  |       |     |  |  |  |
| 1  | 6.1.2  | Brick work with F.P.S. bricks of class designation 75 in foundation and plinth in Cement mortar 1:6 [ 1 cement : 6 coarse sand ] .   | 3.42  | Cum |  |  |  |
| 2  | 6.4.2  | Brick work with F.P.S. bricks of class designation 75 in superstructure above plinth level up to floor V level in all shapes and size in Cement mortar 1:6 [ 1 cement : 6 coarse sand ] .  | 22.08 | Cum |  |  |  |
|    |        | <b><u>8. FLOORING WORK</u></b>   |       |     |  |  |  |
| 1  | 11.3.1 | Cement concrete flooring 1:2:4 [ 1 cement : 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 .   | 50.06 | Sqm |  |  |  |
| 2  | 11.2   | Dry brick on edge flooring in required pattern with brick of class design. 75 on a bed of 12mm mud mortar including filling joints with jamuna sand complete.  | 50.06 | Sqm |  |  |  |
| 3  | 5.1.3  | Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering,  |       |     |  |  |  |

|   |        |   |        |     |  |  |  |
|---|--------|---|--------|-----|--|--|--|
|   |        | finishing and reinforcement - All work up to plinth level<br>1:2:4 [ 1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size ]  | 20.73  | Cum |  |  |  |
| 4 | 11.4   | 62mm thick CC flooring with concrete hardner topping under layer 50mm th. cement concrete 1:2:4 & top layer 12 mm thick cement hardner consisting mix 1:2 cement & 6mm nominal size stone agg. Hardening compound is mixed @ 2 litre per 50 Kg of cement or as per manufactures specifications.   | 138.20 | Sqm |  |  |  |
| 5 | 16.11  | Dry stone pitching 22.5 cm thick including supply of stone & preparing surface complete. (By road roller)   | 138.20 | Sqm |  |  |  |
|   |        | <b><u>9. PLASTERING WORK</u></b>  |        |     |  |  |  |
| 1 | 13.19  | Rough cast plaster upto 10m height above ground level with a mixture of sand and gravel or crushed stone from 6mm 10 10mm nominal size dashed over and including the fresh plaster in two layers, under layer 12mm cement plaster 1:4 [ 1 cement : 4 coarse sand ] and top layer 10mm cement plaster 1:3 [ 1 cement : 3 fine sand ] mixed with 10% finely grounded hydrated lime by valume of cement .  | 147.66 | Sqm |  |  |  |
| 2 | 13.5.2 | 15mm cement plaster of mix : 1:6 [ 1 cement : 6 Coarse sand ] .   | 132.66 | Sqm |  |  |  |
|   |        | <b><u>10. STEEL WORK</u></b>  |        |     |  |  |  |
| 1 | 10.6.2 | Supplying and Fixing rolling shutters of approved make, made of required size M.S. 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 push and pull operaion complete including the cost of providing and fixing necessary 27.5cm long wire springs grade No.2 and M.S. top cover of required thickness for rolling shutters . 80 x 1.20mm M.S. laths with 1.20mm thick top cover . | 13.50  | Sqm |  |  |  |
| 2 | 10.7   | Providing and Fixing ball bearing for rolling shutters .  | 2      | Nos |  |  |  |
| 3 | 10.8.2 | Extra for providing mechanica device chain and crank operation for operating rolling shutters .<br>Exceeding 16.80 Sqm in Area .  | 13.50  | Sqm |  |  |  |
|   |        | <b><u>11. PAINTING WORK</u></b>   |        |     |  |  |  |

|   |          |   |        |     |  |  |  |
|---|----------|---|--------|-----|--|--|--|
| 1 | 13.45.1  | Finishing walls with textured exterior paint of required shade :<br>New work [ Two or more coats applied @ 3.28 ltr / 10 Sqm ] over and including base coat of water proofing cement paint applied @ 2.20 Kg / 10 Sqm .                         | 147.66 | Sqm |  |  |  |
| 2 | 13.40    | Dry distemper   | 132.66 | Sqm |  |  |  |
| 3 | 13.43.1  | Applying one coat of cement primer of approved brand and manufacture on wall surface :<br>Two or more coats on New work .   | 280.32 | Sqm |  |  |  |
| 4 | 13.62.1  | Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :<br>Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture . | 33.75  | Sqm |  |  |  |
| 5 | 13.50.3  | Applying Priming Coat :<br>With ready mixed red oxide zinc chromate primer of approved brand and manufacture on stell galvanised iron / steel works .   | 33.75  | Sqm |  |  |  |
|   |          | <b><u>12. Drainage</u></b>  |        |     |  |  |  |
| 1 | 2.8      | Earth work in excavation in foundation  | 46.20  | Cum |  |  |  |
| 2 | 4.1.9    | PCC 1:4:8 in foundation .   | 6.60   | Cum |  |  |  |
| 3 | 6.1.2    | Brick work in 1:6 in foundation   | 16.56  | Cum |  |  |  |
| 4 | 11.3.1   | C C flooring 40mm thick.  | 27.00  | Sqm |  |  |  |
| 5 | 13.6.1   | 20mm cement plaster in 1:4  | 99.60  | Sqm |  |  |  |
| 7 | 5.16     | Precast RCC cover on drain.<br>600x 600 mm x50mm  | 1.80   | Cum |  |  |  |
| 8 | 5.22.1   | Reinforcement   | 214.50 | Kg  |  |  |  |
|   |          | <b><u>12. Anti termite treatment</u></b>  |        |     |  |  |  |
| 1 | 2.35.3.1 | Treatment of soil under floor using chemical emulsion @ one litre per hole , 300mm apart including drilling 12mm dia holes and plugging with cement mortar 1:2 with Chlorpyriphos/ Lindane E.C 20% with 1% concentration.                       | 188.26 | Sqm |  |  |  |
| 2 | 2.34.1   | Supplying chemical emulsion in sealed containers including delivery as specified.<br>Chlorpyriphos/ Lindane emulsifiable  |        |     |  |  |  |

|  |   |       |       |  |  |  |
|--|---|-------|-------|--|--|--|
|  | concentrate of 20%.   | 21.00 | Litre |  |  |  |
|  | <b><u>13. PRE ENGINEERED STEEL STRUCTURE</u></b>  |       |       |  |  |  |
|  | Type:-TCCS (Tapered Column Clear Span )<br>Width :- 10.00 m I/C of Steel Column<br>Length :- 12.00 m I/I of Steel Column<br>Eave Height :-5.00 m Clear Height under the Knee<br>Width Module :- 1 @ 10.00 m<br>Roof Slop :- 1:10<br>Bay Spacing :- 2 @ 6.00 m<br>Front End Frame :- Standered Post & Beam<br>Back End Frame :- Standered Post & Beam<br>Type of Bracing on Roof & Wall :- Diagonal Rod /<br>Angel Bracing ( as per design )<br>Roof panel :- 26 Ga Thick Bare<br>roof sheet 550 Mpa Steel.<br>Wall panel :- 26 Ga Thick wall sheet SMP Coated<br>550 Mpa Steel.<br>Girts :-Side wall girts & end wall girts are mounted on the<br>exterior face of the column.<br>Fasteners :- Mechanically galvanised Hex Washer head<br>self drilling fasteners with integral EPDMseals.<br>Accessories :- Flashing ,trims,eave gutters & down spouts.<br>Day lighting Panels:-2 mm thick FRP Day lighting panels<br>of size 1.0 m x 3.0 m for 4% of roof area.<br>Framed Opening :-1 No Framed opening of size 5.5m x5.0m<br>on end wall for Rolling Shutters.<br>1 No Framed opening of size 5.5m x5.0m on side wall for<br>Rolling Shutters.<br>Canopy :-1 No Canopy ( single sheeted ) of size 2.0 m (W)<br>6.0m (L) at 5.5 m clear ht on side wall.<br>1 No Canopy ( single sheeted ) of size 2.0 m (W)<br>6.0m (L) at 5.5 m clear ht on end wall.<br>Paint Finish :- All primary & Secondry members shall<br>be supplied with factory applied one coat of zinc<br>chromate red oxide primer and two coat of synthetic<br>enamel paint on structure will be applied at site.<br>( MARKET RATES ) |       |       |  |  |  |
|  |   | One   | job   |  |  |  |
|  | <b>14. TOTAL</b>  |       |       |  |  |  |
|  | <b>15. Service Tax including Ed.Cess ( if any)</b>  |       | %     |  |  |  |
|  | <b>16. Any Other Taxes/Duties(If any) Pl. Specify</b>   |       | %     |  |  |  |

**Signature & seal of the Tenderer**