

| <b>Bill of Quantity-cum-Price Schedule</b>                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                 |             |                 |                       |                    |
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| Name of Project : <b>+ -800kV NE AGRA HVDC PROJECT</b><br>Name of Work : <b>CIVIL WORKS FOR BOUNDARY WALL AND OTHER ALLIED WORKS AT EARTH ELECTRODE STATION AT VILLAGE SERAV, TAHASIL BAH,DISTT. AGRA UNDER NE-AGRA HVDC PROJECT AT AGRA</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                 |             |                 |                       |                    |
| <b>S.No.</b>                                                                                                                                                                                                                                 | <b>Description of Item</b>                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Unit</b> | <b>Quantity</b> | <b>Unit Rate (Rs)</b> | <b>Amount (Rs)</b> |
| <b>1</b>                                                                                                                                                                                                                                     | 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.                                                                                 |             |                 |                       |                    |
| <b>(a)</b>                                                                                                                                                                                                                                   | All kinds of soil .                                                                                                                                                                                                                                                                                                                                                                                                             | cum         | 3100            | 129.35                | 400985.00          |
| <b>2</b>                                                                                                                                                                                                                                     | 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. |             |                 |                       |                    |
| <b>(a)</b>                                                                                                                                                                                                                                   | All kinds of soil .                                                                                                                                                                                                                                                                                                                                                                                                             | cum         | 100             | 130.80                | 13080.00           |
| <b>3</b>                                                                                                                                                                                                                                     | 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         | 2300            | 83.80                 | 192740.00          |
| <b>4</b>                                                                                                                                                                                                                                     | Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15cm deep and disposal of rubbish, lead up to 50m and lift up to 1.5m                                                                                                                                                                                                                                                              |             |                 |                       |                    |
| <b>(a)</b>                                                                                                                                                                                                                                   | All kinds of soil .                                                                                                                                                                                                                                                                                                                                                                                                             | 100 sqm     | 250             | 935.25                | 233812.50          |
| <b>5</b>                                                                                                                                                                                                                                     | 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 -.                                                                                                                                                                                 |             |                 |                       |                    |
| <b>(a)</b>                                                                                                                                                                                                                                   | Lead upto 1 km.                                                                                                                                                                                                                                                                                                                                                                                                                 | cum         | 500             | 82.78                 | 41390.00           |
| <b>(b)</b>                                                                                                                                                                                                                                   | Lead upto 2 km.                                                                                                                                                                                                                                                                                                                                                                                                                 | cum         | 200             | 93.94                 | 18788.00           |
| <b>(c)</b>                                                                                                                                                                                                                                   | Lead upto 3 km.                                                                                                                                                                                                                                                                                                                                                                                                                 | cum         | 100             | 104.98                | 10498.00           |
| <b>(d)</b>                                                                                                                                                                                                                                   | Lead upto 5 km.                                                                                                                                                                                                                                                                                                                                                                                                                 | cum         | 100             | 125.92                | 12592.00           |

| S.No. | Description of Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Unit             | Quantity | Unit Rate (Rs) | Amount (Rs) |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------|----------------|-------------|
| 6     | 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 : 2coarse sand : 4 graded stone aggregate 20mm nominal size)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | cum              | 50       | 4404.05        | 220202.50   |
| (b)   | 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | cum              | 10       | 3888.20        | 38882.00    |
| (c)   | 1:4:8(1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | cum              | 210      | 3593.30        | 754593.00   |
| 7     | Providing and laying in position machine batched and machine mixed design mix M25 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) |                  |          |                |             |
| (a)   | All works upto plinth level                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | cum              | 650      | 5242.15        | 3407397.50  |
| (b)   | All works upto above plinth level upto floor V level                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | cum              | 150      | 5781.5         | 867225.00   |
| 8     | Add for using extra cement in the items of design mix over and above the specified cement content therein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | quintal          | 575      | 589.80         | 339135.00   |
| 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 | 50       | 35.35          | 1767.50     |
| 10    | Centering and shuttering as per Customer's Specification Clause No 8.11.13 including strutting, propping, etc., and removal of form at all heights for.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                  |          |                |             |
| (a)   | Foundations, footings, bases of columns, etc., for mass concrete.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | sqm              | 1300     | 166.90         | 216970.00   |
| (b)   | Lintels, beams, plinth beams and cantilevers.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | sqm              | 1600     | 262.25         | 419600.00   |
| (c)   | Columns, Pillars, Piers, Posts and Struts .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | sqm              | 3600     | 365.60         | 1316160.00  |
| 11    | 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               | 5000     | 62.25          | 311250.00   |
| (b)   | Excluding supply but including transporting from SAIL stockyard/AGRA HVDC station 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               | 75000    | 10.50          | 787500.00   |

| S.No. | Description of Item                                                                                                                                                                                                                                                                                                                                                                                    | Unit                  | Quantity | Unit Rate (Rs) | Amount (Rs)       |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|----------|----------------|-------------------|
| 12    | Brick work with FPS bricks of class designation 75 in foundation and plinth in:                                                                                                                                                                                                                                                                                                                        |                       |          |                |                   |
|       | Cement mortar 1:6 (1 cement:6 coarse sand)                                                                                                                                                                                                                                                                                                                                                             | cum                   | 1075     | 3316.55        | 3565291.25        |
| 13    | 12mm cement plaster mix:                                                                                                                                                                                                                                                                                                                                                                               |                       |          |                |                   |
|       | 1:6 (1 cement: 6 coarse sand)                                                                                                                                                                                                                                                                                                                                                                          | sqm                   | 4600     | 121.05         | 556830.00         |
| 14    | 15mm cement plaster mix:                                                                                                                                                                                                                                                                                                                                                                               |                       |          |                |                   |
|       | 1:6 (1 cement: 6 coarse sand)                                                                                                                                                                                                                                                                                                                                                                          | sqm                   | 4600     | 140.45         | 646070.00         |
| 15    | 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)   | Angle, gratings etc similar works.                                                                                                                                                                                                                                                                                                                                                                     | kg                    | 8000     | 77.90          | 623200.00         |
| 16    | 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 | 50       | 430.30         | 21515.00          |
| 17    | Finishing walls with water proofing cement paint of required shade                                                                                                                                                                                                                                                                                                                                     |                       |          |                |                   |
| a     | New work (Two or more coats applied @3.84kg/10sqm)                                                                                                                                                                                                                                                                                                                                                     | sqm                   | 9200     | 44.95          | 413540.00         |
| 18    | Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade:                                                                                                                                                                                                                                                                                       |                       |          |                |                   |
| a     | Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture                                                                                                                                                                                                                                                                               | sqm                   | 350      | 78.80          | 27580.00          |
| 19    | Painting with black anti-corrosive bitumastic paint of approved brand and manufacture to give an even shade:                                                                                                                                                                                                                                                                                           |                       |          |                |                   |
| a     | Two or more coats on new work                                                                                                                                                                                                                                                                                                                                                                          | sqm                   | 25       | 44.55          | 1113.75           |
| 20    | Providing and fixing <b>GI barbed wire</b> with GI staples/GI binding wire (circular and straight) over boundary wall all complete as per specification, drawing and direction of Engineer-in-charge. (Rate shall be inclusive of GI barbed wire, GI staples/ GI binding wire, tension clamps, hardware, labour, T & P etc.):<br>Payment to be made per metre cost of total length of barbed wire used | m                     | 28750    | 7.40           | 212750.00         |
| 21    | Providing and fixing <b>gate</b> made of medium duty MS pipe including all allied activities, all complete as per customer's specification, drawing and direction Engineer in charge. (Rate shall be inclusive of all labour, material items like medium duty pipe, fabrication, welding etc.)                                                                                                         | kg                    | 1000     | 77.90          | 77900.00          |
|       |                                                                                                                                                                                                                                                                                                                                                                                                        |                       |          | Total =        | <b>15750358.0</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.: 11(b) above shall be deemed to be inclusive of cost against all activities required including transportation of material from SAIL stockyard/AGRA HVDC site.