

**BILL OF QUANTITY-CUM-PRICE SCHEDULE****Name of Project : 765KV SUBSTATION AT SEONI****Name of Work : CIVIL WORKS OF SUBSTATION**

S.No.	Description of Item	Quantity	Unit	Unit Rate (Rs)	Amount (Rs)
<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 .	1000	cum	101.85	101850.00
<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 .	100	cum	103.40	10340.00
<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.	400	cum	45.70	18280.00
<b>4</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.	200	cum	49.42	9884.00
<b>(b)</b>	Lead upto 3 km.	200	cum	63.32	12664.00
<b>(c)</b>	Lead upto 5 km.	80	cum	76.48	6118.40
<b>5</b>	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work upto plinth level.				
<b>(a)</b>	1:4:8(1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size)	50	cum	2449.00	122450.00
<b>(b)</b>	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size)	20	cum	2713.05	54261.00

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<b>6</b>	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				
<b>(a)</b>	1:1.5:3 (1 cement: 1.5 coarse sand:3 graded stone aggregate 20mm nominal size)	420	cum	3732.00	1567440.00
<b>7</b>	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 level excluding cost of centering, shuttering, finishing and reinforcement:				
<b>(a)</b>	1:1.5:3 (1 cement:1.5 coarse sand:3 graded stone aggregate 20mm nominal size)	60	cum	4092.35	245541.00
<b>8</b>	Centering and shuttering including strutting, propping, etc., and removal of form at all heights for.				
<b>(a)</b>	Foundations, footings, bases of columns, etc., for mass concrete.	120	sqm	119.25	14310.00
<b>(b)</b>	Columns, Pillars, Piers, Posts and Struts .	250	sqm	238.40	59600.00
<b>(c)</b>	RCC walls at all levels (any thickness).	430	sqm	180.40	77572.00
<b>(d)</b>	Lintels, beams, plinth beams and cantilevers.	10	sqm	162.65	1626.50
<b>9</b>	Steel reinforcement -Cold twisted bars /TMT/HCR				
<b>(a)</b>	Including supply and bending, binding (i/c cost of binding wire), placing in position, etc., all labour & material, complete.	30000	kg	42.70	1281000.00
<b>10</b>	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.	2000	kg	46.35	92700.00
<b>11</b>	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.				
<b>(a)</b>	In transformer gratings, ISMBs, ISMCs, rails and similar works.	12000	kg	51.20	614400.00

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12	Providing and fixing (all dia & length) foundation bolts in position with help of proper templates including supply of templates ,nuts and washers all complete as per specs, drawings & directions of Engr-in-Charge	1000	kg	62.75	62750.00
13	Extra over Item above for providing galvanised bolts (Mass of zinc coating = 610gms/sqm), nuts & washer .	1000	kg	8.00	8000.00
14	Fixing (all dia & length) foundation bolts in position with help of proper templates( template to be supplied by contractor) all complete as per specs, drawings & directions of Engr-in-Charge.Bolts to be provided by BHEL free of cost.	500	kg	7.00	3500.00
15	Providing and laying non-pressure NP2 class (light 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)	250mm dia. RCC pipe	20	RM	258.20	5164.00
16	Grouting of block outs, pockets, foundations, bolts holes and underside of base plates with ready mixed grout or grout consisting of 2 parts by weight of sand, 1 part by weight of cement including approved plasticizer, non-shrink admixture, in the required proportion as recommended by manufacturer/Engineer, 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.	1	cum	10000.00	10000.00
17	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.	20	cum	800.00	16000.00

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18	Chipping the existing R.C.C of any Grade 50-100mm and exposind the existing reinforcement in foundations, including cleaning, diposal of unserviceable material within a lead of 100m and preparing the surface all complete as per drawing and direction of Engineer -in-charge.	20	sqm	60.00	1200.00
19	Providing and Laying layerwise selected well compacted non-swelling soil below Concrete slab and foundations as necessary as per drawing and direction of Engineer -in-charge.	80	cum	600.00	48000.00
					4444650.90