

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT FOR PUMPING STATION AT PADEGAON

| Sr no | Description | Amount (Rs) |
|--------------|------------------------|--------------------|
| | | |
| 1 | Civil Works | 2,479,825 |
| | | |
| 2 | Mechanical Works | 6,631,612 |
| | | |
| 3 | Electrical Works | 6,156,996 |
| | | |
| | Total Cost (Rs) | 15,268,434 |

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT FOR PUMPING STATION PADEGAON- CIVIL

| Sr. No | Ref no | Item Description | Qty. | Rate (Rs) | Unit | Amount (Rs) |
|--------|-----------------|---|------|-----------|------|-------------|
| 1 | (DSR-I-1/P-112) | Designing (aesthetically), and constructing RCC ground service reservoirs / RCC sump in M-250 mix. Of required capacity including excavation in all types of strata, foundation concrete, container walls, bottom slab top RCC roof slab / or dome, 20 mm thick cement plaster with water proofing compound in CM 1:3 proportion. To inside face of the container, including epoxy paint from inside including refilling and disposing of surplus stuff within lead of 50 M, all labour and material charges, for laying and jointing of pipe assembly for inlet, outlet washout, over flow and bye-pass arrangement consisting of C.I./M.S. D/F. pipes, specials and valves of given diameters. providing and fixing accessories such as M.S. ladder inside and outside, C.I. Manhole frame and cover, at top slab, B.B. masonry chamber for all valves, ventilating shafts, including giving satisfactory hydraulic test and water tightness test as per IS code and providing three coat of cement paints to all expose surface of structure including roof surface etc. Complete as per design data, criteria, obligatory requirements and detailed specifications. Anti-termite treatment shall be given for | | | | |
| | | Note : | | | | |
| 1) | | The design shall be in accordance with various relevant I.S. specification (I.S.456/2000, I.S. 875- 1987, I.S. 3370-1965 or revised | | | | |
| 2) | | Only M.S bars grade I conforming to I.S. 432 Part_] or high yield strength deformed bars conforming to I.S. 1786 or I.S. 1139 shall be used grade II M.S. bars shall not be used | | | | |
| 3) | | Entier struture shall be in M-250 only. | | | | |
| | | | | | | |

| Sr. No | Ref no | Item Description | Qty. | Rate (Rs) | Unit | Amount (Rs) |
|--------|--------|---|------|-----------|------|-------------|
| 4) | | The scope of pipe assembly work shall be upto 5 Meter beyond outside face of the wall, cost of pipes valves and specials is not included in the rate but labour cost for laying and jointing is included | | | | |
| 5) | | The G.S.R./ Sump above 15 lakh liter capacity shall be in two compartment | | | | |
| 6) | | The job includes designing the structure for uplift pressure and dewatering if require during entire execution and disposal of surplus excavated stuff within lead of 50 Meter as directed by Engineer-in-charge. If up lifts considered in design then these rate shall be increased by 7.5% | | | | |
| 7) | | G.S.R. outlets shall be with bell mouth of approved pattern in bottom slab and cost of designing bell mouth is included in the rate Sump well includes cost of suction pit required at bottom. | | | | |
| 8) | | For pipes diameters upto 300mm only CI specials shall be used. For pipe diameters above 300mm M.S. pipes and specials of thickness minimum 10mm shall be used with proper anticorrosive epoxy treatment from inside and outside | | | | |
| 9) | | Cost of pump house is not included in these rates. | | | | |
| 10) | | Above rates are applicable for seismic zones- 2,3, and 4 | | | | |
| 11) | | 75% part rate shall be payable for reinforcement, concrete and plastering item of all types of G.S.R's and sump till satisfactory hydraulic testing for water tightness test is given ; and till that work shall be treated as incomplete. | | | | |
| = | | Note:- Condition from Sr. No.1 to 11 shall form a part and parcel of tender and must be included in the Draft tender papers for work of RCC GSRs and sump. | | | | |

| Sr. No | Ref no | Item Description | Qty. | Rate (Rs) | Unit | Amount (Rs) |
|--------|--------|--|-------------------|---------------------|----------------|-------------------|
| 11) | | Staging shall have to be designed with stresses of M -150 concrete but actual construction shall be done in M-200 concrete with sections worked out with M-150 Design. | | | | |
| 12) | | These rates are including cost of uplift pressure if any and entire dewatering during execution. | | | | |
| 13) | | All conditions given in the member secretary's circular No. MJP/TS-1/350/1668 dated 2/8/97 shall be strictly followed and additional cost if ay due to these conditions is included in the rates mensioned below. | | | | |
| 14) | | 75% part rate shall be payable for reinforcement concrete and plastering items of containers of ESRs till satisfactory hydraulic testing for water tightness is given and till that work shall be treated as incomplete. | | | | |
| 15) | | The rates are applicable for staging height of 12 m 2% of these rates shall be increased or decreased or per meter variation in this staging height, VIZ : difference between G.L. and L.W.L. in the container. | | | | |
| | | Note : Conditions from Sr. No. 1 to 15 shall form a part and partial of tender and must be included in the draft tranfer papers for work of R.C.C. E.S.R.s. | | | | |
| a. | | Sewage Pumping Station at Padegaon of Capacity | 44.1786467 | 9.2 | 406444 | |
| | | | | Say (Litres) | 410,000 | |
| | | Cost of 3,00,000 Litres | | | | 1,777,545 |
| | | Add cost of 110000 Litres | 110000 | 3.56 | | 411180 |
| | | Sub Total Rs. | | | | 2,188,725 |
| | | Add 10% for Over Head Pump House | | | | 218,873 |
| | | Total Cost | | | | 2,407,598 |
| | | Contengencis @ 3% | | | | 72227.93 |
| | | Grant Total | | | | 2479825.43 |

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT FOR PUMPING STATION AT PADEGAON - MECHANICAL

| Sr. No | Ref no | Item Description | Qty. | Unit | Rate (Rs) | Amount (Rs) |
|--------|--|--|------|------|-----------|-------------|
| | | MECHANICAL | | | | |
| 1 | Quotation | Providing, Installing, Testing, Commissioning of non clog Submersible Sewage Pumps , as specified below. Capacity - 639.00 m3/Hrs. Pump Head in mWC- 020 mtr. Efficiency of the pumps 75% Required Motor rating HP- 80 Solid Handling size – 100mm Sp Gravity – 1.05 MOC Casing – CI IS 210 Gr. FG 220 Impeller – CF8M Shaft and Sleeve – SS 316 Motor Parts – CI IS 210 Gr. FG 220 Fastners – BHT Steel Guide Pipe – Carban Steel Lifting Chain – Carban Steel Mech. Seal – Motor Side – Carban / Crome Steel - Pump Side – SiC V/s SiC | 3 | No | 782125 | 2346375 |
| 2 | MJP DSR11-12,pg no.155,item no 3b vii | Butterfly Valve Providing,double flanged short body pattern type manually operated Butterfly Valve PN 1.6 rating with bypass arrangement having body,disc and end cover in graded cast iron to IS 210 Gr.CF 200 generally confirming in IS-13095-1991,Synthetic rubber faced ring secured on disc by retaining ring with stainless steel screw stub shaft of stainless steel screw stub shaft of stainless steel riding in teflon bearing excluding C.C. foundation/Structural steel support. Size : 500 mm for Comman Header | 1 | No | 100214 | 100214 |
| 3 | MJP DSR11-12,pg no.147,item no 1© vi | NRV Providing & supplying ISI mark CI D/F Reflux valve(non return valve) PN 1.6 rating without bypass arrangement,as per IS 5312 Part I (1984), including all taxes,inspection charges,transportation etc. complete. Size :500 mm for Comman Header | 1 | No | 226539 | 226539 |
| 4 | MJP DSR11-12,pg no.155,item no 4 x | Lowering,laying & jointing in position following C.I.D/F Reflex valves,Butterfly valves & Sluice valves including cost of all labour jointing material,including nut bolts & giving satisfactory hydraulic testing etc. complete Size : 00 mm for Comman Header | 2 | No | 6800 | 13600 |
| 5 | MJP DSR11-12,pg no.152,item no 2©,vii | SLUICE VALVE Providing double flange Sluice Valve PN 1.6 rating without bypass arrangement,confirming for IS-2906/14846 including worn gear arrangements as per test pressure stainless steel spindle,caps including all taxes transportation etc. complete. Size -400 mm | 3 | No | 108695 | 326084.40 |
| 6 | MJP DSR11-12,pg no.155,item no 3b vii | Butterfly Valve Providing,double flanged short body pattern type manually operated Butterfly Valve PN 1.6 rating with bypass arrangement having body,disc and end cover in graded cast iron to IS 210 Gr.CF 200 generally confirming in IS-13095-1991,Synthetic rubber faced ring secured on disc by retaining ring with stainless steel screw stub shaft of stainless steel screw stub shaft of stainless steel riding in teflon bearing excluding C.C. foundation/Structural steel support. Size : 400 mm | 3 | No | 78999 | 236996.52 |
| 7 | MJP DSR11-12,pg no.147,item no 1© vii | NRV Providing & supplying ISI mark CI D/F Reflux valve(non return valve) PN 1.6 rating without bypass arrangement,as per IS 5312 Part I (1984), including all taxes,inspection charges,transportation etc. complete. Size :400 mm | 3 | No | 118182 | 354546.48 |
| 8 | MJP DSR11-12, pg no.156,item no 4 viii | Lowering,laying & jointing in position following C.I.D/F Reflex valves,Butterfly valves & Sluice valves including cost of all labour jointing material,including nut bolts & giving satisfactory hydraulic testing etc. complete Size : 400 | 9 | No | 6800 | 61201.80 |
| 9 | Electro Mechanical MJP DSR11-12 pg no.16 | Providing , Erecting Tripple Spur Gear Chain Pulley Block with Travelling Trolley suitable for 3T Capacity with 6 m lift complete With load chain and hand chain suitable for above lift, Tested to 50% overload as per IS 3832 Carving ISI Mark | 1 | No | 69130 | 69130.00 |

| Sr. No | Ref no | Item Description | Qty. | Unit | Rate (Rs) | Amount (Rs) |
|--------|--|--|------|------|-----------|-------------|
| 10 | MIDC DSR 2009-10, Pg. No-147 | Providing and erecting Cast Iron Sluice Gates manufactured & tested as per IS3042-1965. Gates to be provided with brass seats and spindle of MS bright bar of required height to enable to operate the gate from operating slab of intake structure including GM nut bolts SS304 hardware, necessary wedges to be provided to achieve leak tightness, including operational wheel headstock, foundation material, labour etc. complete including taxes & duties, as per detailed specification & as directed by Engineer In charge. Size 1000*1000 mm | 1 | No | 268565.00 | 268565.00 |
| 11 | Market Rate | Providing, installing a SS Screens alongwith the channel guide, & railing accessories as per detailed specifications & as directed by Engineer. | 300 | kg. | 800.00 | 240000.00 |
| 12 | MJP DSR 11-12, Item no-11, Pg. No- | Providing and supplying ISI standard welded DIDF pipe including all taxes (central & local) railway freight, insurance, unloading from railway wagon, loading into truck transport to store / site, unloading, stacking etc. complete as directed by Engineer -in- charge. (for 2.75 m here nine) | | | | |
| | | 400 mm Dia for Delivery lines | 60 | mtrs | 9504.80 | 570288.00 |
| | | 500 mm Dia for Rising Main | 10 | mtrs | 13199.90 | 131999.00 |
| 13 | MJP DSR 11-12, Item no-2, Pg. No- | Lowering, Laying, and Jointing with SBR rubber gasket of DI pipes of following diameters in proper position, grade and alignment as directed by engineer incharge including conveyance of materials from stores to site of work, including cost of jointing materials and rubber rings labour, giving hydraulic testing etc Complete. | | | | |
| | | 400 mm Dia for Delivery lines | 60 | mtrs | 253.00 | 15180.00 |
| | | 500 mm Dia for Rising Main | 10 | mtrs | 308.00 | 3080.00 |
| 14 | MJP DSR Electmechancal 11-12, pg no.9, Item No.PM11-2 | Providing, installing, testing & commissioning of 150 mm dia bourden type Pressure Gauges complete with siphon U tube, isolating cock, C-class heavy duty 15 mm GI Pipe & brought out on wall for observation at place directed by engineer. Range 0 to 15 kg/Cm ² . as per detailed specifications & as directed by Engineer. | 5 | No. | 747.00 | 3735.00 |
| 15 | MJP Electro-mech DSR 11-12, Section-17, Item No-4, Pg No-91-97 | Ultrasonic Flowmeter Providing, Installing & giving satisfactory test and trial of ultrasonic clamp on fixed type flowmeter working on conditions and specifications, calibration, inspection, testing, training, guarantees, and manufacturers test certificate along with mandatory accessories given below complete with detailed specifications and as directed by engineer incharge | 1 | No | 325000.00 | 325000.00 |
| | | 500 mm Dia. For Rising Main | | | | |
| | | Providing, laying and jointing with test & trial of SENSOR/TRANSMITTER CABLE: - Providing, Laying and jointing with test and trail of sensor / transmitter cable 4 x 0.38 mm PVC cable common, braided copper shield etc. as per detailed specification | 100 | Mtrs | 230.00 | 23000.00 |
| | | Conduit Pipe: - Providing conduit pipe (PVC/HDPE Plumbing) 32 mm dia. With suitable rating.- Suitable conduit duct for routeing of cable with suitable digging, laying & concealing the duct. | 100 | Mtrs | 18.00 | 1800.00 |
| | | PANEL CABINET :- Fixing of flow meter transmitter to internal walls of binding /inside suitable designed panel cabinet with proper locking arrangement with glass window on front door for seeing reading of flow transmitter and data logger without opening of panel cabinet | 2 | No | 26500.00 | 53000.00 |
| 16 | MJP DSR 11-12, item no- XIII, Sec-E-2, Pg No- | Excavation for foundation in earth, soils of all types sand, gravel & soft murum including removing the excavated material upto a distance of 50m and lift 1.5m. stacking & spreading as directed, dewatering, preparing die bed for the foundation and necessary back filling, ramming, watering (including shoring and strutting), etc. complete | 3 | Cum | 156.22 | 468.66 |
| 17 | MJP DSR 11-12, item no- XXI, F, Pg No- | Providing and constructing B.B. masonry Valve Chamber with 15 cm. thick 1:3:6 proportion PCC bedding, excluding B.B. masonry in CM. 1:5 proportion precast RCC frame and cover, etc. complete | | | | |
| | | As Above of 1.2 x 1.2 M Internal Size and depth upto 1.5 M with precast RCC Slab Cover. | 1 | No | 13007.50 | 13007.50 |
| 18 | MJP DSR 11-12, Section. F, Item no-5, Pg. No- | Providing Structural steel work in rolled sections like joints, channels, angles, tees ect. As per detailed design and drawing including fix in position without connecting plates, braces ect. And one coat of anticorrosive paint and over it two coats of oil painting, of approved quality and shade, complete. | 1.5 | MT | 59739.36 | 89609.04 |
| 19 | MJP Pune DSR 11-12, Item no- 10, Pg. No- | DI Specials- Providing and supplying ISI standard DI specials and fitting with sealing rubber gasket of SBR complete with cast iron follower gland MS nut bolts coated or otherwise protected from rusting and suitable for DI pipes including cost of labour, materials and transportation to store/ site loading and unloading including all taxes etc. complete as per IS 9523 | | | | |
| | | 80 to 300 mm Dia | 0 | kg | 109.14 | 0 |

| Sr. No | Ref no | Item Description | Qty. | Unit | Rate (Rs) | Amount (Rs) |
|--------|-------------------------------------|--|--------|------|---------------|-------------------|
| | | 350mm to above Dia | 5847.1 | kg | 132.6 | 775325.46 |
| 20 | MJP DSR 11-12, Item No-2, Pg 45 | RCC | 5 | cum | 5992.14 | 29960.7 |
| 21 | MJP DSR11-12,pg no.160,item no 9b i | Providing & supplying Kinetic Double Orifice type air valves PN1.6 rating combined with screw down isolating sluice valve etc complete Size :100mm | 6 | No. | 26625.43 | 159752.58 |
| | | Sub Total | | | TOTAL: | 6438458.11 |
| | | Contengencis @ 3% | | | | 193153.74 |
| | | Grant Total | | | | 6631611.85 |

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT FOR PUMPING STATION AT PADEGAON - ELECTRICAL

| Sr. No. | Reference | Description | Qty | UOM | Rates | Amount |
|---------|---------------------------------------|---|-----|------|------------|---------|
| | | L.T. Control Panel Board | | | | |
| | | Designing, Providing , Erecting, Testing & Commissioning with Satisfactory Test & Trial of Various Panel Boards as per Detailed specifications. | | | | |
| | | A) L.T.Main Control Panel Board | | | | |
| 1 | As per PANEL RA enclosed | Designing, Providing , Erecting,Main L. T. Control Panel Board comprises of 250 Amp. MCCB for Incoming & 100 Amp. MCCB for outgoing as per Detailed specification enclosed. | 1 | each | 252,688.85 | 252689 |
| | | B) Soft starter | | | | |
| | MJP EM CSR 2011-12, PG 53, LG-6-3 | Supply erecting, commissioning electrical soft star starter of three wire system to operate on 380/440 Volts 3 phase 50 Hz consisting of, 1) Main contactor AC- 3 Duty and 1.5 times of full load current rating; 2) Suitable Thyresters, 3) Ammeter with selector switch & CTs, 4) Motor Protection relay with protection CTs for Protection against a) SinglePhasing (Current Sensing) b) under voltage and over voltage c) Over current relay having IDMT characteristic. of rating suitable for 80 HP pumps - | 3 | each | 160334.9 | 481005 |
| | | Transformer | | | | |
| 2 | MJP E/M DSR 2011-12, pg 29 TR 1-5 | Suppling & erecting approved make of 250 kVA 50 c/s oil immersed and naturally cooled indoor /outdoor type , copper wound transfoemer with delta conn. on HV side & star conn. on LV side with additional neutral brought out in load side , voltage rating 11/0.433 vV with tapping of +/- 2.5 % - 5 % ,continuously rated for full load with standered accessories complete with test certificate with losses below 550 watts at no load , 3600 watts at full load asp er IS 2026. and approved by engineering incharge. | 1 | each | 377475.1 | 377475 |
| 3 | PWD DSR 11-12 Pg 79, 6-4-1 | H T Metering Kiosk: Supplying ,erecting testing (By Licencee) , commissioning cubical comprising 11kV HT metering resin cast CTs, PTs, as per lincencees requirement. DO fuse set, AB Switch 200-400 A capacity duly interconnected with use of suitable insulators by maintaining adequate clearances as per IS, complete housed in the enclosure made up of MS structure and fibre glass 3 mm thick with gearbox & handle brought out for operating GOD, suitable door openings, locking arrangement as per approved design by Engineering incharge. | 1 | Each | 171329 | 171329 |
| 4 | As per SS 315 KVA - RA enclosed | H.T. sub station Providing, supplying and erecting 11 Kv/ 0.433 Kv H T Substation as per Detailed specification. | 1 | Each | 1723603.38 | 1723603 |
| 5 | | Cables | | | | |
| | | 1. 1 kv Aluminum PVC armoured cable from MSEB Supply to AMF panel & DG to AMF Panel to L.T. panel | | | | |
| | MJP E/M DSR 11-12 Pg. 61 Item CB 5-9 | 3.5 Core 240 Sq. MM Aluminium Armoured Cable | 120 | Rmt | 1934 | 232080 |
| | MJP E/M DSR 11-12 Pg. 61 Item CB 5-3 | 3.5 core x 50 sqmm | 50 | Rmt | 478.2 | 23910 |
| | MJP E/M DSR 11-12 Pg. 61 Item CB 5-2 | 3.5 core x 35 sqmm | 50 | Rmt | 379 | 18950 |
| | MJP E/M DSR 11-12 Pg. 62 Item CB 6-3 | 4 Core 10 Sq. MM Aluminium Armoured Cable | 50 | Rmt | 222 | 11100 |
| | MJP E/M DSR 11-12 Pg. 63 Item CB7-2-2 | 3 Core 2.5 Sq. MM CU UnArmoured Cable | 50 | Rmt | 217.2 | 10860 |

| Sr. No. | Reference | Description | Qty | UOM | Rates | Amount |
|---------|--|--|-----|------|----------|--------|
| 6 | | HT CABLE | | | | |
| | MJP E/M DSR 11-12 Pg. 65 Item CB 11-4 | 11 kv XLPE cable 3 core x 95 sqmm | 100 | Rmt | 1037.7 | 103770 |
| | MJP E/M DSR 11-12 Pg. 71 Item CB 25-2 | Indoor termination kit 11 kv | 2 | Each | 8552.9 | 17106 |
| | MJP E/M DSR 11-12 Pg. 71 Item CB 26-2 | Out door termination kit 11 kv | 2 | Each | 12702.9 | 25406 |
| 7 | PWD DSR 2011-12, Item no- CW-16-1-2, Pg. No-148 | Cable Trench - Making the trench in hard murum/ tar road of suitable width and depth for laying provided L.T. Cable of 10 sq mm complete as per detailed specifications. | 100 | m | 80 | 8000 |
| 8 | PWD DSR 2011-12, Item no- CW-16-1-3, Pg. No-148 | Making the trench in hard murum/ tar road of suitable width and depth for laying provided L.T. Cable of 25 sq mm & above covered with half round hume pipe complete as per detailed specifications. | 100 | m | 240 | 24000 |
| 9 | MJP E/M DSR 2010-11, Item no- CB 34-2 Pg No-74 | Cable Tray - Providing, fabricating and fixing G.I. perforated cable tray for cables as per requirement and specifications - 200 x 20 mm | 100 | Mtr | 169 | 16900 |
| 10 | | Capacitor | | | | |
| | | Providing Erecting Individual Mixed dia electric type Capacitor of required capacity for each Submersible Pumpset | | | | |
| | PWD DSR 11-12 Pg. 56, 4-4-8 | supply & erecting 125 kVAR 440 V three phase 50 cycles thyrester switched Micro APFC passive filter panel consisting of (25 x 2 +15x2) steps of APP type capacitor units conforming to IS: 13585 (part -1) with harmonic filter reactors suitable for 150 KW load as per specifications. | 1 | No | 341590 | 341590 |
| 11 | | Earthing Strip GI | | | | |
| | PWD DSR 10-11 Page No 85 Item No.9-2-3 | Providing erectimg GI earth strip | 300 | Kg | 76 | 22800 |
| 12 | PWD DSR 11-12 Page No 106 Item No.9-1-1 | GI Earthing - Supplying & erecting GI earth plate size 60x 60x6 cms complete with all materials, testing & recording results as per specifications . As per IS 3043-1987 & as directed by engineering incharge. | 10 | each | 1955 | 19550 |
| 13 | PWD DSR 11-12 Page No 106 Item No.9-1-2 | Copper Earthing - Supplying & erecting copper earth plate size 30 x 30 x 0.6 cms complete with all materials, testing & recording results as per specifications . As per IS 3043-1987 & as directed by engineering incharge. | 10 | Each | 3144 | 31440 |
| | | Earthing Strip | | | | |
| 14 | PWD DSR 10-11 Page No 85 Item No.9-2-3 | Providing erectimg GI earth strip | 200 | Kg | 99 | 19800 |
| 15 | | Providing, erecting CU earth strip | 100 | Kg | 617 | 61700 |
| 16 | | Pipe type earthing | | | | |
| 17 | PWD DSR 10-11 Page No 85 Item No.9-1-1 | Providing erecting pipe type earthing with double earthing to the all equipments as per Detailed specifications. | 6 | Each | 742 | 4452 |
| | As per RA enclosed | Tools Providing Tools as per Detailed specification enclosed. | 1 | Lot | 63641.00 | 63641 |
| 18 | | In door lighting | | | | |
| 19 | As per RA enclosed | The lighting shall comprise fleuorescent - 4 nos Bulkhead fitting - 3 nos D.B. - 2 nos Suitable size conductors with fuses,switches including H.G.conduit etc. | 1 | Job | 12680.00 | 12680 |
| | | Area lighting | | | | |
| 20 | As per RA enclosed | The area lighting shall comprise 2 250 w mercury vapour lamps with and mounted on tubular swivelled pole 7 m high including ballast, condensor,fuse reflector,cable and control switch etc out of the two lams.one shall be in the substation yard and the second lamp shall be erected for area lighting. | 1 | Job | 38736.16 | 38736 |

| Sr. No. | Reference | Description | Qty | UOM | Rates | Amount |
|---------|----------------------------------|---|-----|------|---------|---------------------|
| 21 | PWD DSR Pg- 121 Item No. 11-1-17 | Diesel Generating Set Supplying Errecting diesel generating set 180 KVA capacity with AMF Panel as per Detailed specification with water cooled engine set including inspection charges . | 1 | Each | 1578444 | 1578444 |
| | | Sub Total (Rs) | | | | 5,693,015 |
| | | Sub total 1 | | | | 5,693,015 |
| | | Add for Work in Municipal Corporation Area @ 5% on the above sub total A | | | | 284,650.77 |
| | | Sub total 2 | | | | 5,977,666.25 |
| | | Add for Contengency @ 3% | | | | 179,329.99 |
| | | Total Gross Cost (Rs) | | | | 6,156,996.24 |

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT FOR PUMPING STATION 1 AT GOLWADI

| Sr no | Description | Amount (Rs) |
|--------------|------------------------|--------------------|
| | | |
| 1 | Civil Works | 20,264,855 |
| | | |
| 2 | Mechanical Works | 57,672,360 |
| | | |
| 3 | Electrical Works | 36,550,621 |
| | | |
| | Total Cost (Rs) | 114,487,836 |

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT FOR PUMPING STATION 1 AT GOLWADI- CIVIL

| Sr. No | Ref no | Item Description | Qty. | Rate (Rs) | Unit | Amount (Rs) |
|--------|-----------------|---|------|-----------|------|-------------|
| 1 | (DSR-I-1/P-112) | Designing (aesthetically), and constructing RCC ground service reservoirs / RCC sump in M-250 mix. Of required capacity including excavation in all types of strata, foundation concrete, container walls, bottom slab top RCC roof slab / or dome, 20 mm thick cement plaster with water proofing compound in CM 1:3 proportion. To inside face of the container, including epoxy paint from inside including refilling and disposing of surplus stuff within lead of 50 M, all labour and material charges, for laying and jointing of pipe assembly for inlet, outlet washout, over flow and bye-pass arrangement consisting of C.I./M.S. D/F. pipes, specials and valves of given diameters. providing and fixing accessories such as M.S. ladder inside and outside, C.I. Manhole frame and cover, at top slab, B.B. masonry chamber for all valves, ventilating shafts, including giving satisfactory hydraulic test and water tightness test as per IS code and providing three coat of cement paints to all expose surface of structure including roof surface etc. Complete as per design data, criteria, obligatory requirements and detailed specifications. Anti-termite treatment shall be given for | | | | |
| | | Note : | | | | |
| 1) | | The design shall be in accordance with various relevant I.S. specification (I.S.456/2000, I.S. 875- 1987, I.S. 3370-1965 or revised | | | | |
| 2) | | Only M.S bars grade I confirming to I.S. 432 Part_1 or high yield strength deformed bars confirming to I.S. 1786 or I.S. 1139 shall be used grade II M.S. bars shall not be used | | | | |
| 3) | | Entire structure shall be in M-250 only. | | | | |
| | | | | | | |

| Sr. No | Ref no | Item Description | Qty. | Rate (Rs) | Unit | Amount (Rs) |
|--------|--------|--|------|-----------|------|-------------|
| 4) | | The scope of pipe assembly work shall be upto 5 Meter beyond outside face of the wall, cost of pipes valves and specials is not included in the rate but labour cost for laying and jointing is included | | | | |
| 5) | | The G.S.R./ Sump above 15 lakh liter capacity shall be in two compartment | | | | |
| 6) | | The job includes designing the structure for uplift pressure and dewatering if require during entire execution and disposal of surplus excavated stuff with in lead of 50 Meter as directed by Engineer-in-charge. If up lifts considered in design then these rate shall be increased by 7.5% | | | | |
| 7) | | G.S.R. outlets shall be with bell mouth of approved pattern in bottom slab and cost of designing bell mouth is included in the rate Sump well includes cost of suction pit required at bottom. | | | | |
| 8) | | For pipes diameters upto 300mm only CI specials shall be used. For pipe diameters above 300mm M.S. pipes and specials of thickness minimum 10mm shall be used with proper anticorrosive epoxy treatment from inside and outside | | | | |
| 9) | | Cost of pump house is not included in these rates. | | | | |
| 10) | | Above rates are applicable for seismic zones- 2,3, and 4 | | | | |
| 11) | | 75% part rate shall be payable for reinforcement, concrete and plastering item of all types of G.S.R's and sump till satisfactory hydraulic testing for water tightness test is given ; and till that work shall be treated as incomplete. | | | | |
| = | | Note:- Condition from Sr. No.1 to 11 shall from a part and parcel of tender and must be included in the Draft tender papers for work of RCC GSRs and sump. | | | | |
| | | | | | | |

| Sr. No | Ref no | Item Description | Qty. | Rate (Rs) | Unit | Amount (Rs) |
|--------|--------|--|--------------------|---------------------|-------------------|--------------------|
| 11) | | Staging shall have to be designed with stresses of M -150 concrete but actual construction shall be done in M-200 concrete with sections worked out with M-150 Design. | | | | |
| 12) | | These rates are including cost of uplift pressure if any and entire dewatering during execution. | | | | |
| 13) | | All conditions given in the member secretary's circular No. MJ/TS-1/350/1668 dated 2/8/97 shall be strictly followed and additional cost if any due to these conditions is included in the rates mentioned below. | | | | |
| 14) | | 75% part rate shall be payable for reinforcement concrete and plastering items of containers of ESRs till satisfactory hydraulic testing for water tightness is given and till that work shall be treated as incomplete. | | | | |
| 15) | | The rates are applicable for staging height of 12 m 2% of these rates shall be increased or decreased or per meter variation in this staging height, VIZ : difference between G.L. and L.W.L. in the container. | | | | |
| | | Note : Conditions from Sr. No. 1 to 15 shall form a part and partial of tender and must be included in the draft tender papers for work of R.C.C. E.S.R.s. | | | | |
| a. | | Sewage Pumping Station at Golwadi of Capacity | 530.9291585 | 13.25 | 7034811 | |
| | | | | Say (Litres) | 7,035,000 | |
| | | Cost of 15,00,000 Litres | | | | 5,332,635 |
| | | Cost of (70,35,000 - 15,00,000) | 5,535,000 | 2.268 | per litres | 12,553,380 |
| | | Total | | | | 17,886,015 |
| | | Add 10% for Over Head Pump House | | | | 1,788,602 |
| | | Contengencies @ 3% | | | | 590238.50 |
| | | Grant Total Rs | | | | 20264855.00 |

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT FOR PUMPING STATION 1 AT GOLWADI - MECHANICAL

| Sr. No | Ref no | Item Description | Qty. | Unit | Rate (Rs) | Amount (Rs) |
|--------|---|--|------|------|-----------|-------------|
| | | MECHANICAL | | | | |
| 1 | Quotation; Kishor Pump | Providing, Installing, Testing, Commissioning of non clog Submersible Sewage Pumps , as specified below. Capacity - 10267 m3/hr Pump Head in mWC- 28 mtr. Efficiency of the pumps 75% Required Motor rating HP- 300 Solid Handling size – 100mm Sp Gravity – 1.05 MOC Casing – CI IS 210 Gr. FG 220 Impeller – CF8M Shaft and Sleeve – SS 316 Motor Parts – CI IS 210 Gr. FG 220 Fastners – BHT Steel Guide Pipe – Carban Steel Lifting Chain – Carban Steel Mech. Seal – Motor Side – Carban / Crome Steel | 9 | No | 3980000 | 35820000 |
| 2 | MJP DSR12-13.pg no.154,item no 3b viii | Butterfly Valve Providing,double flanged short body pattern type manually operated Butterfly Valve PN 1.6 rating with bypass arrangement having body,disc and end cover in graded cast iron to IS 210 Gr.CF 200 generally confirming in IS-13095-1991,Synthetic rubber faced ring secured on disc by retaining ring with stainless steel screw stub shaft of stainless steel screw stub shaft of stainless steel riding in teflon bearing excluding C.C. foundation/Structural steel support. Size : 1400 mm for Common Header | 1 | No | 1200295 | 1200295 |
| 3 | MJP DSR12-13.pg no.147,item no 1© xi | NRV Providing & supplying ISI mark CI D/F Reflux valve(non return valve) PN 1.6 rating without bypass arrangement,as per IS 5312 Part I (1984), including all taxes,inspection charges,transportation etc. complete. Size :1400 mm for Common Header | 1 | No | 1698195 | 1698195 |
| 4 | MJP DSR12-13.pg no.155,item no 4 x | Lowering,laying & jointing in position following C.I.D/F Reflux valves,Butterfly valves & Sluice valves including cost of all labour jointing material,including nut bolts & giving satisfactory hydraulic testing etc. complete Size : 1400 mm for common header | 2 | No | 8796 | 17593 |
| 5 | MJP DSR12-13.pg no.151,item no 2©,xi | SLUICE VALVE Providing double flange Sluice Valve PN 1.6 rating without bypass arrangement,confirming for IS-2906/14846 including worn gear arrangements as per test pressure stainless steel spindle,caps including all taxes transportation etc. complete. Size -600 mm for Pump delivery | 9 | No | 279344 | 2514098 |
| 6 | MJP DSR12-13.pg no.154,item no 3b viii | Butterfly Valve Providing,double flanged short body pattern type manually operated Butterfly Valve PN 1.6 rating with bypass arrangement having body,disc and end cover in graded cast iron to IS 210 Gr.CF 200 generally confirming in IS-13095-1991,Synthetic rubber faced ring secured on disc by retaining ring with stainless steel screw stub shaft of stainless steel screw stub shaft of stainless steel riding in teflon bearing excluding C.C. foundation/Structural steel support. Size : 600 mm for Pump Delivery | 9 | No | 129886 | 1168977 |
| 7 | MJP DSR12-13.pg no.147,item no 1© xi | NRV Providing & supplying ISI mark CI D/F Reflux valve(non return valve) PN 1.6 rating without bypass arrangement,as per IS 5312 Part I (1984), including all taxes,inspection charges,transportation etc. complete. Size :600 mm for Pump Delivery | 9 | No | 349359 | 3144234 |
| 8 | MJP DSR12-13.pg no.155,item no 4 xii | Lowering,laying & jointing in position following C.I.D/F Reflux valves,Butterfly valves & Sluice valves including cost of all labour jointing material,including nut bolts & giving satisfactory hydraulic testing etc. complete Size : 600 mm Dia. | 27 | No | 9969 | 269158 |

| Sr. No | Ref no | Item Description | Qty. | Unit | Rate (Rs) | Amount (Rs) |
|--------|--|---|----------------------|--------------------------|--|--|
| 9 | Electro Mechanical MJP DSR11-12,pg no.17-18, | Electric Operated Circular or Rectangular Travelling Travelling Crane Providing,erecting & commissioning single girder electric operated circular/ rectangular over head travelling crane with10 m lift complete with wire rope hoist, class II duty, all three motions electrically operated of suitable rating motor IP54 etc. complete as per detailed specifications & as directed by Engineer : 5 Tonne Capacity. add 30 % for spam up to 20 mtrs | 1 | No | 298581 | 298581 |
| 10 | MIDC DSR 2009-10, Pg. No-147 | Providing and erecting Cast Iron Sluice Gates manufactured & tested as per IS3042-1965.Gates to be provided with brass seats and spindle of MS bright bar of required height to enable to operate the gate from operating slab of intake structure including GM nut bolts SS304 hardware,necessary wedges to be provided to achieve leak tightness,including operational wheel headstock,foundation material,labour etc. complete including taxes & duties ,as per detailed specification & as directrd by Engineer In charge. Size :1000*1000 mm | 2 | No | 279307.60 | 558615.20 |
| 11 | Market Rate | Providing ,installing a SS Screens alongwith the channel guide, & railing accessories as per detailed specifications & as directed by Engineer. | 1000 | kg. | 800.00 | 800,000.00 |
| 12 | MJP DSR 12-13, Item no-11, Pg. No- | Providing and supplying ISI standard welded DIDF pipe including all taxes (central & local) railway freight, insurance, unloading from railway wagon, loading into truck transport to store / site, unloading, stacking etc. complete as directed by Engineer -in-charge. (for 2.75 m bare pipe) 600 mm Dia for Delivery lines 1350 mm Dia for Rising Main | 180 10 | mtrs mtrs | 16583.84 36634.00 | 2985091.20 366340.00 |
| 13 | MJP DSR Electrmechanical 10-11,pg no.9,Item No.PM11-2 | Providing, installing, testing & commissioning of 150 mm dia bourden type Pressure Gauges complete with siphon U tube,isolating cock,C-class heavy duty 15 mm GI Pipe & brought out on wall for observation at place directed by engineer.Range 0 to 15 kg/Cm ² .as per detailed specifications & as directed by Engineer | 20 | No. | 751.10 | 15022.00 |
| 14 | MJP Electro-mech DSR 10-11, Section-17, Item No-4, Pg No-91-97 | Ultrasonic Flowmeter Providing, Installing & giving satisfactory test and trial of ultrasonic clamp on fixed type flowmeter working on conditions and specifications, calibration, inspection, testing, training, guarantees, and manufacturers test certificate along with mandatory accessories given bellow complete with detailed specifications and as directed by engineer incharge 1350 mm Dia for Rising Main Providing, laying and jointing with test & trial of SENSOR/TRANSMITTER CABLE : - Providing, Laying and jointing with test and trail of sensor / transmitter cable 4 x 0.38 mm PVC cable common, braided copper shield etc. as per detailed specification Conduit Pipe: - Providing conduit pipe (PVC/HDPE Plumbing) 32 mm dia. With suitable rating.- Suitable conduit duct for routeing of cable with suitable digging, laying & concealing the duct PANEL CABINET :- Fixing of flow meter transmitter to internal walls of binding /inside suitable designed panel cabinet with proper locking arrangement with glass window on front door for seeing reading of flow transmitter and data logger without opening of panel cabinet | 1 100 100 2 | No Mtrs Mtrs No | 371800.00 253.00 19.80 29150.00 | 371800.00 25300.00 1980.00 58300.00 |
| 15 | MJP DSR 12-13,item no-XIII,Sec-E-2, Pg No- | Excavation for foundation in earth, soils of all types sand, gravel & soft murum including removing the excavated material upto a distance of 50m and lift 1.5m. stacking & spreading as directed, dewatering, preparing die bed for the foundation and necessary back filling, ramming, watering (including shoring and strutting), etc. complete | 6 | Cum | 171.84 | 1031.05 |
| 16 | MJP DSR 12-13,item no-XXI,F, Pg No- | Providing and constructing B.B. masonry Valve Chamber with 15 cm. thick 1:3:6 proportion PCC bedding, excluding B.B. masonry in CM. 1:5 proportion precast RCC frame and cover, etc. complete As Above of 1.2 x 1.2 M Internal Size and depth upto 1.5 M with precast RCC Slab Cover. | 2 | No | 13007.50 | 26015.00 |
| 17 | MJP Pune DSR 12-13, Section. F, Item no-5, Pg. No- | Providing Structural steel work in rolled sections like joints, channels, angles, tees ect. As per detailed design and drawing including fix in position without connecting plates, braces ect. And one coat of anticorrosive paint and over it two coats of oil painting, of approved quality and shade, complete. | 15 | MT | 61345.28 | 920179.26 |

| Sr. No | Ref no | Item Description | Qty. | Unit | Rate (Rs) | Amount (Rs) |
|--------|--|---|---------|------|-----------|--------------------|
| 18 | MJP Pune DSR 12-13, Item no- 10, Pg. No- | DI Specials- Providing and supplying ISI standard DI specials and fitting with sealing rubber gasket of SBR complete with cast iron follower gland MS nut bolts coated or otherwise protected from rusting and suitable for DI pipes including cost of labour, materials and transportation to store/ site loading and unloading including all taxes etc. complete as per IS 9523 350mm to above Dia | 25461.1 | kg | 135.2 | 3442340.72 |
| 19 | MJP DSR 12-13, Item No-2, Pg 45 | Providing and laying insitu Cement concrete of trap/granite/quartzite / gneiss metal for RCC work in foundation like raft, grillage, strip foundation and footing of RCC columns and steel stanchions including dewatering, formwork, compaction finishing & curing etc, complete.(By weigh batching and mix design for M-250 and M-300 only.) Use of L&T, A.C.C., Ambuja, Birla Gold, Manikgad, Rajashree etc cement is permitted) (excluding M.S. or Tor reinforcement) | 10 | cum | 5992.14 | 59921.4 |
| 20 | MJP DSR10-11.pg no.160,item no 9b i | Providing & supplying Kinetic Double Orifice type air valves PN1.6 rating combined with screw down isolating sluice valve etc complete Size :100mm | 9 | No. | 25501.79 | 229516.09 |
| | | Sub Total | | | | 55,992,582 |
| | | Contengencies @ 3% | | | | 1679777.47 |
| | | Grant Total | | | | 57672359.86 |

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT FOR PUMPING STATION 1 AT GOLWADI -ELECTRICAL

| Sr. No. | Reference | Description | Qty | UOM | Rates | Amount |
|---------|--------------------------------------|---|------|------|------------|------------|
| | | L.T. Control Panel Board | | | | |
| | | Designing, Providing , Erecting, Testing & Commissioning with Satisfactory Test & Trial of Various Panel Boards as per Detailed specifications. | | | | |
| | | A) L.T.Main Control Panel Board | | | | |
| | As per PANEL RA enclosed | Designing, Providing , Erecting,Main L. T. Control Panel Board comprises of 2000 Amp. ACB for Incoming & 300 Amp. MCCB for outgoing as per Detailed specification enclosed. | 1 | each | 2906543.79 | 2906543.79 |
| | | B) Soft starter | | | | |
| 1 | MJP EM CSR 2011-12, PG 53, LG-6-12 | Supply erecting, commissioning electrical soft star starter of three wire system to operate on 380/440 Volts 3 phase 50 Hz consisting of, 1) Main contactor AC- 3 Duty and 1.5 times of full load current rating; 2) Suitable Thyresters, 3) Ammeter with selector switch & CTs, 4) Motor Protection relay with protection CTs for Protection against a) SinglePhasing (Current Sensing) b) under voltage and over voltage c) Over current relay haviing IDMT characteristic. of rating suitable for 300 HP pumps | 9 | each | 355728 | 3201552 |
| | | Transformer | | | | |
| 2 | MJP E/M DSR 2011-12, pg 31 TR 4-3 | Suppling & erecting approved make of 1250 kVA 50 c/s oil immersed and naturally cooled indoor /outdoor type , copper wound transfoemer with delta conn. on HV side & star conn. on LV side with additional neutral brought out in load side , voltage rating 11/0.433 vV with tapping of +/- 2.5 % -5 % ,continuously rated for full load with standered accessories complete with test certificate with losses below 850 watts at no load , 5800 watts at full load asp er IS 2026. and approved by engineering incharge. | 2 | each | 1565532.1 | 3131064 |
| 3 | PWD DSR 12-13 Pg 79, 6-4-1 | HT Metering Kiosk: Supplying ,erecting testing (By Licencee) , commissioning cubical comprising 11kv HT metering resin cast CTs, PTs, as per lincencees requirement. DO fuse set, AB Switch 200-400 A capacity duly interconnected with use of suitable insulators by mainteninig adequate clearances as per IS, complete housed in the enclosure made up of MS structure ans fibre glass 3 mm thick with gearbox & handle brought out for operating GOD, suitable door openings, locking arremgement as per approved design by Engineering incharge. | 2 | Each | 170956 | 341912 |
| 4 | As per SS 315 KVA - RA enclosed | H.T. sub station Providing, supplying and erecting 11 Kv/ 0.433 Kv H T Substation as per Detailed specification. | 2 | Each | 4002892.61 | 8005785 |
| 5 | | Cables | | | | |
| | | 1.1 kv Aluminum PVC armoured cable from MSEB Supply to AMF panel & DG to AMF Panel to L.T.panel | | | | |
| | MJP E/M DSR 12-13 Pg. 61 Item CB 5-9 | 3 Run 3.5 Core 400 Sq. MM Aluminium Armoured Cable | 1000 | Rmt | 2948 | 2948000 |
| | MJP E/M DSR 12 | 3.5 core x 50 sqmm | 100 | Rmt | 478.2 | 47820 |
| | MJP E/M DSR 12 | 3.5 core x 35 sqmm | 100 | Rmt | 379 | 37900 |
| | MJP E/M DSR 12 | 4 Core 10 Sq. MM Aluminium Armoured Cable | 100 | Rmt | 222 | 22200 |
| | MJP E/M DSR 12 | 3 Core 2.5 Sq. MM CU UnArmoured Cable | 100 | Rmt | 217.2 | 21720 |
| 6 | | HT CABLE | | | | |
| | MJP E/M DSR 12 | 11 kv XLPE cabc 3 core x 150 sqmm | 300 | Rmt | 1982.1 | 594630 |
| | MJP E/M DSR 12 | Indoor termination kit 11 kv | 4 | Each | 8552.9 | 34212 |

| Sr. No. | Reference | Description | Qty | UOM | Rates | Amount |
|---------|---|--|-----|------|-----------|----------------------|
| 7 | PWD DSR 2012-13, Item no- CW-16-1-2, Pg. No-148 | Cable Trench - Making the trench in hard murum/ tar road of suitable width and depth for laying provided L.T. Cable of 10 sq mm complete as per detailed specifications. | 300 | m | 82.01 | 24602 |
| 8 | PWD DSR 2011-12, Item no- CW-16-1-3, Pg. No-148 | Making the trench in hard murum/ tar road of suitable width and depth for laying provided L.T. Cable of 25 sq mm & above covered with half round hume pipe complete as per detailed specifications. | 300 | m | 246.13 | 73838 |
| 9 | MJP E/M DSR 2010-11, Item no- CB 34-2 Pg No-74 | Cable Tray - Providing, fabricating and fixing G.I. perforated cable tray for cables as per requirement and specifications - 200 x 20 mm | 300 | Mtr | 185.9 | 55770 |
| 10 | | Capacitor | | | | |
| | | Providing Erecting Individual Mixed dia electric type Capacitor of required capacity for each Submersible Pumpset | | | | |
| | PWD DSR 12-13 Pg. 56, 4-4-8 | supply & erecting 250 kVAR 440 V three phase 50 cycles thyrester switched Micro APFC passive filter panel consisting of (50x2+25 x4 +15x1 +10x1) steps of APP type capacitor units conforming to IS: 13585 (part -1) with harmonic filter reactors suitable for 150 KW load as per specifications. | 5 | Nos | 342912.88 | 1714564 |
| 11 | PWD DSR 12-13 Page No 106 Item No.9-1-1 | GI Earthing - Supplying & erecting GI earth plate size 60x 60x6 cms complete with all materials, testing & recording results as per specifications . As per IS 3043-1987 & as directed by engineering incharge. | 20 | each | 1971.65 | 39433 |
| 12 | PWD DSR 12-13 Page No 106 Item No.9-1-2 | Copper Earthing - Supplying & erecting copper earth plate size 30 x 30 x 0.6 cms complete with all materials, testing & recording results as per specifications . As per IS 3043-1987 & as directed by engineering incharge. | 10 | Each | 3162.88 | 31629 |
| | | Earthing Strip | | | | |
| 13 | PWD DSR 10-11 Page No 85 Item No.9-2-3 | Providing erecting GI earth strip | 300 | Kg | 100.06 | 30017 |
| 14 | | Providing, erecting CU earth strip | 100 | Kg | 618.06 | 61806 |
| | | Pipe type earthing | | | | |
| 15 | PWD DSR 10-11 Page No 85 Item No.9-1-1 | Providing erecting pipe type earthing with double earthing to the all equipments as per Detailed specifications. | 6 | Each | 797.7475 | 4786 |
| 16 | As per RA enclosed | Tools Providing Tools as per Detailed specification enclosed. | 1 | Lot | 63641.00 | 63641 |
| | | In door lighting | | | | |
| 17 | As per RA enclosed | The lighting shall comprise fluourescent - 4 nos Bulkhead fitting - 3 nos D.B. - 2 nos Suitable size conductors with fuses,switches including H.G.conduit etc. | 1 | Job | 43311.00 | 43311 |
| | | Area lighting | | | | |
| 18 | As per RA enclosed | The area lighting shall comprise 2 250 w mercury vapour lamps with and mounted on tubular swivelled pole 7 m high including ballast, condensor,fuse reflector,cable and control switch etc out of the two lams.one shall be in the substation yard and the second lamp shall be erected for area lighting. | 1 | Job | 61055.57 | 61056 |
| 19 | Market rate | Diesel Generating Set Supplying Erecting diesel generating set 2000 KVA capacity with AMF Panel as per Detailed specification with water cooled engine set including inspection charges .21% | 1 | Each | 10247625 | 10247625 |
| | | Sub Total (Rs) | | | | 33,796,229 |
| | | Sub total | | | | 33,796,229 |
| | | Add for Work in Municipal Corporation Area @ 5% on the above | | | | 1,689,811.44 |
| | | Sub total | | | | 35,486,040.17 |
| | | Add for Contengency @ 3% | | | | 1,064,581.21 |
| | | Total Gross Cost (Rs) | | | | 36,550,621.38 |

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT FOR PUMPING STATION AT ZALTA

| Sr no | Description | Amount (Rs) |
|--------------|------------------------|--------------------|
| | | |
| 1 | Civil Works | 7,729,608 |
| | | |
| 2 | Mechanical Works | 8,964,159 |
| | | |
| 3 | Electrical Works | 8,607,156 |
| | | |
| | Total Cost (Rs) | 25,300,923 |

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT FOR PUMPING STATION ZALTA- CIVIL

| Sr. No | Ref no | Item Description | Qty. | Rate (Rs) | Unit | Amount (Rs) |
|--------|-----------------|--|------|-----------|------|-------------|
| | | | | | | |
| 1 | (DSR-I-1/P-112) | Designing (aesthetically), and constructing RCC ground service reservoirs / RCC sump in M-250 mix. Of required capacity including excavation in all types of strata, foundation concrete, container walls, bottom slab top RCC roof slab / or dome, 20 mm thick cement plaster with water proofing compound in CM 1:3 proportion. To inside face of the container, including epoxy paint from inside including refilling and disposing of surplus stuff within lead of 50 M, all labour and material charges, for laying and jointing of pipe assembly for inlet, outlet washout, over flow and bye-pass arrangement consisting of C.I./M.S. D/F. pipes, specials and valves of given diameters. providing and fixing accessories such as M.S. ladder inside and outside, C.I. Manhole frame and cover, at top slab, B.B. masonry chamber for all valves, ventilating shafts, including giving satisfactory hydraulic test and water tightness test as per IS code and providing three coat of cement paints to all expose surface of structure including roof surface etc. Complete as per design data, criteria, obligatory requirements and detailed specifications. Anti-termite treatment | | | | |
| | | Note : | | | | |
| 1) | | The design shall be in accordance with various relevant I.S. specification (I.S.456/2000, I.S. 875- 1987, I.S. 3370 1965 or revised | | | | |
| 2) | | Only M.S bars grade I confirming to I.S. 432 Part_] or high yield strength deformed bars confirming to I.S. 1786 or I.S. 1139 shall be used grade II M.S. bars shall not be used | | | | |
| 3) | | Entire structure shall be in M-250 only. | | | | |
| | | | | | | |

| Sr. No | Ref no | Item Description | Qty. | Rate (Rs) | Unit | Amount (Rs) |
|--------|--------|--|------|-----------|------|-------------|
| 4) | | The scope of pipe assembly work shall be upto 5 Meter beyond outside face of the wall, cost of pipes valves and specials is not included in the rate but labour cost for laying and jointing is included | | | | |
| 5) | | The G.S.R./ Sump above 15 lakh liter capacity shall be in two compartment | | | | |
| 6) | | The job includes designing the structure for uplift pressure and dewatering if require during entire execution and disposal of surplus excavated stuff with in lead of 50 Meter as directed by Engineer-in-charge. If up lifts considered in design then these rate shall be increased by 7.5% | | | | |
| 7) | | G.S.R. outlets shall be with bell mouth of approved pattern in bottom slab and cost of designing bell mouth is included in the rate Sump well includes cost of suction pit required at bottom. | | | | |
| 8) | | For pipes diameters upto 300mm only CI specials shall be used. For pipe diameters above 300mm M.S. pipes and specials of thickness minimum 10mm shall be used with proper anticorrosive epoxy treatment from inside and outside | | | | |
| 9) | | Cost of pump house is not included in these rates. | | | | |
| 10) | | Above rates are applicable for seismic zones- 2,3, and 4 | | | | |
| 11) | | 75% part rate shall be payable for reinforcement, concrete and plastering item of all types of G.S.R's and sump till satisfactory hydraulic testing for water tightness test is given ; and till that work shall be treated as incomplete. | | | | |
| = | | Note:- Condition from Sr. No.1 to 11 shall from a part and parcel of tender and must be included in the Draft tender papers for work of RCC GSRs and sump. | | | | |
| 11) | | Staging shall have to be designed with stresses of M -150 concrete but actual construction shall be done in M-200 concrete with sections worked out with M-150 Design. | | | | |

| Sr. No | Ref no | Item Description | Qty. | Rate (Rs) | Unit | Amount (Rs) |
|--------|--------|--|-------------------|---------------------|--------------------|-------------------|
| 12) | | These rates are including cost of uplift pressure if any and entire dewatering during execution. | | | | |
| 13) | | All conditions given in the member secretary's circular No. MJP/TS-1/350/1668 dated 2/8/97 shall be strictly followed and additional cost if any due to these conditions is included in the rates mentioned below. | | | | |
| 14) | | 75% part rate shall be payable for reinforcement concrete and plastering items of containers of ESRs till satisfactory hydraulic testing for water tightness is given and till that work shall be treated as incomplete. | | | | |
| 15) | | The rates are applicable for staging height of 12 m 2% of these rates shall be increased or decreased or per meter variation in this staging height, VIZ : difference between G.L. and L.W.L. in the container. | | | | |
| | | Note : Conditions from Sr. No. 1 to 15 shall form a part and partial of tender and must be included in the draft tranfer papers for work of R.C.C. E.S.R.s. | | | | |
| a. | | Sewage Pumping Station at Zalta of Capacity | 33.1830724 | 8 | 265464.5792 | |
| | | | | Say (Litres) | 265,000 | |
| | | Cost of 2,00,000 Litres | | | | 728,750 |
| | | Cost of (2,65,000 - 2,00,000) = 65,000 litres | 65,000 | 3.85 | per litres | 250,250 |
| | | Total Cost | | | | 979,000.00 |
| | | Add 10 % for Over Head Pump House | | | | 97,900 |
| | | Total Cost | | | | 1,076,900 |
| | | Contengencis @ 3% | | | | 32307.00 |
| | | Grant Total | | | | 2186107.00 |

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT FOR PUMPING STATION AT ZALTA - MECHANICAL

| Sr. No | Ref no | Item Description | Qty. | Unit | Rate (Rs) | Amount (Rs) |
|--------|--|--|------|------|-----------|-------------|
| | | MECHANICAL | | | | |
| 1 | Quotation | Providing, Installing, Testing, Commissioning of non clog Submersible Sewage Pumps , as specified below. Capacity - 640.00 m3/Hrs. Pump Head in mWC- 20 mtr. Efficiency of the pumps 75% Required Motor rating HP- 80 Solid Handling size – 100mm Sp Gravity – 1.05 MOC Casing – CI IS 210 Gr. FG 220 Impeller – CF8M Shaft and Sleeve – SS 316 Motor Parts – CI IS 210 Gr. FG 220 Fastners – BHT Steel Guide Pipe – Carban Steel Lifting Chain – Carban Steel Mech. Seal – Motor Side – Carban / Crome Steel | 6 | No | 619975 | 3719850 |
| 2 | MJP DSR11-12,pg no.151,item no 2©,x | SLUICE VALVE Providing double flange Sluice Valve PN 1.6 rating without bypass arrangement,confirming for IS-2906/14846 including worn gear arrangements as per test pressure stainless steel spindle,caps including all taxes transportation etc. complete. Size -350 mm for Delivery Pipe | 6 | No | 79364 | 476184 |
| 3 | MJP DSR11-12,pg no.154,item no 3b viii | Butterfly Valve Providing,double flanged short body pattern type manually operated Butterfly Valve PN 1.6 rating with bypass arrangement having body,disc and end cover in graded cast iron to IS 210 Gr.CF 200 generally confirming in IS-13095-1991,Synthetic rubber faced ring secured on disc by retaining ring with stainless steel screw stub shaft of stainless steel screw stub shaft of stainless steel riding in teflon bearing excluding C.C. foundation/Structural steel support. Size : 350 mm for Delivery Pipe | 6 | No | 73536 | 441215 |
| 4 | MJP DSR11-12,pg no.147,item no 1© xi | NRV Providing & supplying ISI mark CI D/F Reflex valve(non return valve) PN 1.6 rating without bypass arrangement,as per IS 5312 Part I (1984), including all taxes,inspection charges,transportation etc. complete. Size :350 mm for Delivery Pipe | 6 | No | 102264 | 613583 |
| 5 | MJP DSR11-12,pg no.155,item no 4 x | Lowering,laying & jointing in position following C.I.D/F Reflex valves,Butterfly valves & Sluice valves including cost of all labour jointing material,including nut bolts & giving satisfactory hydraulic testing etc. complete Size : 350 mm for Delivery Pipe | 18 | No | 5124 | 92228 |
| 6 | MJP DSR11-12,pg no.154,item no 3b vii | Butterfly Valve Providing,double flanged short body pattern type manually operated Butterfly Valve PN 1.6 rating with bypass arrangement having body,disc and end cover in graded cast iron to IS 210 Gr.CF 200 generally confirming in IS-13095-1991,Synthetic rubber faced ring secured on disc by retaining ring with stainless steel screw stub shaft of stainless steel screw stub shaft of stainless steel riding in teflon bearing excluding C.C. foundation/Structural steel support. Size : 750mm For comman Header | 1 | No | 248612 | 248611.56 |
| 7 | MJP DSR11-12,pg no.147,item no 1© vii | NRV Providing & supplying ISI mark CI D/F Reflex valve(non return valve) PN 1.6 rating without bypass arrangement,as per IS 5312 Part I (1984), including all taxes,inspection charges,transportation etc. complete. Size :750mm For comman Header | 1 | No | 461733 | 461732.72 |
| 8 | MJP DSR11-12, pg no.155,item no 4 vii | Lowering,laying & jointing in position following C.I.D/F Reflex valves,Butterfly valves & Sluice valves including cost of all labour jointing material,including nut bolts & giving satisfactory hydraulic testing etc. complete Size : 350 mm | 2 | No | 5124 | 10247.60 |

| Sr. No | Ref no | Item Description | Qty. | Unit | Rate (Rs) | Amount (Rs) |
|--------|--|---|------|------|-----------|-------------|
| 9 | Electro Mechanical MJP DSR11-12,pg no.16 | Providing , Erecting Tripple Spur Gear Chain Pulley Block with Travelling Trolley suitable for 3T Capacity with 6 m lift complete With load chain and hand chain suitable for above lift, Tested to 50% overload as per IS 3832 Carving ISI Mark | 1 | No | 69130 | 69130.00 |
| 10 | MIDC DSR 2009-10, Pg. No-147 | Providing and erecting Cast Iron Sluice Gates manufactured & tested as per IS3042-1965.Gates to be provided with brass seats and spindle of MS bright bar of required height to enable to operate the gate from operating slab of intake structure including GM nut bolts SS304 hardware,necessary wedges to be provided to achieve leak tightness,including operational wheel headstock,foundation material,labour etc. complete including taxes & duties ,as per detailed specification & as directrd by Engineer In charge Size :1000*1000 mm | 1 | No | 268565.00 | 268565.00 |
| 11 | Market Rate | Providing ,installing a SS Screens alongwith the channel guide, & railing accessories as per detailed specifications & as directed by Engineer. | 300 | kg. | 800.00 | 240000.00 |
| 12 | MJP DSR 11-12, Item no-11, Pg. No- | Providing and supplying ISI standard welded DIDF pipe including all taxes (central & local) railway freight, insurance, unloading from railway wagon, loading into truck transport to store / site, unloading, stacking etc. complete as directed by Engineer -in-charge (for 2.75 m bare pipe) | | | | |
| | | 350 mm Dia for Delivery lines | 120 | mtrs | 7851.27 | 942152.40 |
| | | 700 mm Dia for Rising Main | 10 | mtrs | 23388.13 | 233881.30 |
| 13 | MJP DSR 11-12, Item no-2, Pg. No- | Lowering, Laying, and Jointing with SBR ruber gasket of DI pipes of following diameters in proper position, grade and alignment as directed by engineer incharge including conveyance of materials from stores to site of work, including cost of jointing materials and rubber rings labour, giving hydraulic testing etc Complete. | | | | |
| | | 350 mm Dia for Delivery lines | 120 | mtrs | 204.60 | 24552.00 |
| | | 700 mm Dia for Rising Main | 10 | mtrs | 577.50 | 5775.00 |
| 14 | MJP DSR Electrmechanical 11-12,pg no.9,Item No.PM11-2 | Providing, installing, testing & commissioning of 150 mm dia bourden type Pressure Gauges complete with siphon U tube,isolating cock,C-class heavy duty 15 mm GI Pipe & brought out on wall for observation at place directed by engineer.Range 0 to 15 kg/Cm ² .as per detailed specifications & as directed by Engineer | 9 | No. | 747.00 | 6723.00 |
| 15 | MJP Electro-mech DSR 11-12, Section-17, Item No-4, Pg No-91-97 | Ultrasonic Flowmeter Providing, Installing & giving satisfactory test and trial of ultrasonic clamp on fixed type flowmeter working on conditions and specifications, calibration, inspection, testing, training, guarantees, and manufacturers test certificate along with mandatory accessories given bellow complete with detailed specifications and as directed by engineer incharge | | | | |
| | | 400 mm Dia. For Rising Main | 1 | No | 340000.00 | 340000.00 |
| | | Providing, laying and jointing with test & trial of SENSOR/TRANSMITTER CABLE:- Providing, Laying and jointing with test and trail of sensor / transmitter cable 4 x 0.38 mm PVC cable common, braided copper shield etc. as per detailed specification | 100 | Mtrs | 230.00 | 23000.00 |
| | | Conduit Pipe: - Providing conduit pipe (PVC/HDPE Plumbing) 32 mm dia. With suitable rating.- Suitable conduit duct for routeing of cable with suitable digging, laying & concealing the duct | 100 | Mtrs | 18.00 | 1800.00 |
| | | PANEL CABINET :- Fixing of flow meter transmitter to internal walls of binding /inside suitable designed panel cabinet with proper locking arrangement with glass window on front door for seeing reading of flow transmitter and data logger without opening of panel cabinet | 2 | No | 26500.00 | 53000.00 |
| 16 | MJP DSR 11-12,item no-XIII,Sec-E-2, Pg No- | Excavation for foundation in earth, soils of all types sand, gravel & soft murum including removing the excavated material upto a distance of 50m and lift 1.5m. stacking & spreading as directed, dewatering, preparing die bed for the foundation and necessary back filling, ramming, watering (including shoring and strutting), etc complete | 6 | Cum | 156.22 | 937.32 |
| 17 | MJP DSR 11-12,item no-XXI,F, Pg No- | Providing and constructing B.B. masonry Valve Chamber with 15 cm. thick 1:3:6 proportion PCC bedding, excluding B.B. masonry in CM. 1:5 proportion precast RCC frame and cover, etc. complete | | | | |
| | | As Above of 1.2 x 1.2 M Internal Size and depth upto 1.5 M with precast RCC Slab Cover. | 2 | No | 12652.75 | 25305.50 |
| 18 | MJP DSR 11-12, Section. F, Item no-5, Pg. No- | Providing Structural steel work in rolled sections like joints, channels, angles, tees ect. As per detailed design and drawing including fix in position without connecting plates, braces ect. And one coat of anticorrosive paint and over it two coats of oil painting, of approved quality and shade, complete. | 1.5 | MT | 59739.36 | 89609.04 |

| Sr. No | Ref no | Item Description | Qty. | Unit | Rate (Rs) | Amount (Rs) |
|--------|--|--|------|------|---------------|---------------------|
| 19 | MJP Pune DSR 11-12, Item no- 10, Pg. No- | DI Specials- Providing and supplying ISI standard DI specials and fitting with sealing rubber gasket of SBR complete with cast iron follower gland MS nut bolts coated or otherwise protected from rusting and suitable for DI pipes including cost of labour, materials and transportation to store/ site loading and unloading including all taxes etc complete as per IS 9523 | | | | |
| | | 80 to 300 mm Dia | 0 | kg | 109.14 | 0 |
| | | 350mm to above Dia | 1000 | kg | 132.6 | 132600.00 |
| 20 | MJP DSR 11-12, Item No-2, Pg 45 | RCC | 5 | cum | 5992.14 | 29960.7 |
| 21 | MJP DSR11-12,pg no.160,item no 9b i | Providing & supplying Kinetic Double Orifice type air valves PN1.6 rating combined with screw down isolating sluice valve etc complete Size :100mm | 6 | No. | 25404.08 | 152424.48 |
| | | Sub Total | | | TOTAL: | 8,703,067.32 |
| | | Contengencis @ 3% | | | | 261092.02 |
| | | Grant Total | | | | 8964159.34 |

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT FOR PUMPING STATION AT ZALTA - ELECTRICAL

| Sr. No. | Reference | Description | Qty | Unit | Rates | Amount |
|---------|--------------------------------------|---|-----|------|------------|--------|
| | | L.T. Control Panel Board | | | | |
| 1 | | Designing, Providing , Erecting, Testing & Commissioning with Satisfactory Test & Trial of Various Panel Boards as per Detailed specifications. | | | | |
| | | A) L.T.Main Control Panel Board | | | | |
| | As per PANEL RA enclosed | Designing, Providing , Erecting,Main L. T. Control Panel Board comprises of 800 Amp. MCCB for Incoming & 100 Amp. MCCB for outgoing as per Detailed specification enclosed. | 1 | each | 347642.501 | 347643 |
| | | B) Soft starter | | | | |
| | MJP EM CSR 2011-12, PG 53, LG-6-3 | Supply erecting, commissioning electrical soft star starter of three wire system to operate on 380/440 Volts 3 phase 50 Hz consisting of, 1) Main contactor AC- 3 Duty and 1.5 times of full load current rating; 2) Suitable Thyresters, 3) Ammeter with selector switch & CTs, 4) Motor Protection relay with protection CTs for Protection against a) SinglePhasing (Current Sensing) b) under voltage and over voltage c) Over current relay having IDMT characteristic. of rating suitable for 80 HP pumps | 6 | each | 160334.9 | 962009 |
| 2 | | Transformer | | | | |
| | MJP E/M DSR 2011-12, pg 29 TR 1-8 | Suppling & erecting approved make of 500 kVA 50 c/s oil immersed and naturally cooled indoor /outdoor type , copper wound transfoemer with delta conn. on HV side & star conn. on LV side with additional neutral brought out in load side , voltage rating 11/0.433 vV with tapping of +/- 2.5 % -5 % ,continuosly rated for full load with standered accessories complete with test certificate with losses below 850 watts at no load , 5800 watts at full load as per IS 2026. and approved by engineering incharge. | 1 | each | 597274.1 | 597274 |
| 3 | PWD DSR 11-12 Pg 79, 6-4-1 | H T Metering Kiosk: Supplying ,erecting testing (By Licencee) , commissioning cubical comprising 11kV HT metering resin cast CTs, PTs, as per lincencees requirement. DO fuse set, AB Switch 200-400 A capacity duly interconnected with use of suitable insulators by mainteninig adequate clearances as per IS, complete housed in the enclosure made up of MS structure ans fibre glass 3 mm thick with gearbox & handle brought out for operating GOD, suitable door openings, locking arrangement as per approved design by Engineering incharge. | 1 | Each | 171328.7 | 171329 |
| 4 | As per SS 315 KVA - RA enclosed | H.T. sub station Providing, supplying and erecting 11 Kv/ 0.433 Kv H T Substation as per Detailed specification. | 1 | Each | 618951.30 | 618951 |
| 5 | | Cables | | | | |
| | | 1. 1 kv Aluminum PVC armoured cable from MSEB Supply to AMF panel & DG to AMF Panel to L.T. panel | | | | |
| | MJP E/M DSR 11-12 Pg. 61 Item CB 5-9 | 3.5 Core 240 Sq. MM Aluminium Armoured Cable | 120 | Rmt | 1934 | 232080 |
| | MJP E/M DSR 11-12 Pg. 61 Item CB 5-3 | 3.5 core x 50 sqmm | 50 | Rmt | 478.2 | 23910 |
| | MJP E/M DSR 11-12 Pg. 61 Item CB 5-2 | 3.5 core x 35 sqmm | 50 | Rmt | 379 | 18950 |

| Sr. No. | Reference | Description | Qty | Unit | Rates | Amount |
|---------|---|---|-----|------|------------|--------|
| | MJP E/M DSR 11-12 Pg. 62 Item CB 6-3 | 4 Core 10 Sq. MM Aluminium Armoured Cable | 50 | Rmt | 222 | 11100 |
| | MJP E/M DSR 11-12 Pg. 63 Item CB7-2-2 | 3 Core 2.5 Sq. MM CU UnArmoured Cable | 50 | Rmt | 217.2 | 10860 |
| 6 | | HT CABLE | | | | |
| | MJP E/M DSR 11-12 Pg. 65 Item CB 11-4 | 11 kv XLPE cable 3 core x 95 sqmm | 100 | Rmt | 1037.7 | 103770 |
| | MJP E/M DSR 11-12 Pg. 71 Item CB 25-2 | Indoor termination kit 11 kv | 2 | Each | 8552.9 | 17106 |
| | MJP E/M DSR 11-12 Pg. 71 Item CB 26-2 | Out door termination kit 11 kv | 2 | Each | 12702.9 | 25406 |
| 7 | PWD DSR 2011-12, Item no- CW-16-1-2, Pg. No-148 | Cable Trench - Making the trench in hard murum/ tar road of suitable width and depth for laying provided L.T. Cable of 10 sq mm complete as per detailed specifications. | 100 | m | 80 | 8000 |
| 8 | PWD DSR 2011-12, Item no- CW-16-1-3, Pg. No-148 | Making the trench in hard murum/ tar road of suitable width and depth for laying provided L.T. Cable of 25 sq mm & above covered with half round hume pipe complete as per detailed specifications. | 100 | m | 240 | 24000 |
| 9 | MJP E/M DSR 2010-11, Item no- CB 34-2 Pg No-74 | Cable Tray - Providing, fabricating and fixing G.I. perforated cable tray for cables as per requirement and specifications - 200 x 20 mm | 100 | Mtr | 169 | 16900 |
| 10 | | Capacitor | | | | |
| | | Providing Erecting Individual Mixed dia electric type Capacitor of required capacity for each Submersible Pumpset | | | | |
| | PWD DSR 12-13 Pg. 56, 4-4-10 | supply & erecting 250 kVAR 440 V three phase 50 cycles thyrester switched Micro APFC passive filter panel consisting of (25 x4 +15x1 +10x2) steps of APP type capacitor units conforming to IS: 13585 (part -1) with harmonic filter reactors suitable for 250 KW load as per specifications. | 1 | | 601287.875 | 601288 |
| | | Earthing Strip GI | | | | |
| 11 | PWD DSR 13-13 Page No 106 Item No.9-1-1 | GI Earthing - Supplying & erecting GI earth plate size 60x 60x6 cms complete with all materials, testing & recording results as per specifications . As per IS 3043-1987 & as directed by engineering incharge. | 10 | each | 1971.6543 | 19717 |
| 12 | PWD DSR 12-13 Page No 106 Item No.9-1-2 | Copper Earthing - Supplying & erecting copper earth plate size 30 x 30 x 0.6 cms complete with all materials, testing & recording results as per specifications . As per IS 3043-1987 & as directed by engineering incharge. | 10 | Each | 3162.8823 | 31629 |
| | | Earthing Strip | | | | |
| 13 | PWD DSR 10-11 Page No 85 Item No.9-2-3 | Providing erecting GI earth strip | 200 | Kg | 99 | 19800 |
| 14 | | Providing, erecting CU earth strip | 100 | Kg | 617 | 61700 |
| 15 | | Pipe type earthing | | | | |
| 16 | PWD DSR 12-13 Page No 85 Item No.7-2-12 | Providing erecting pipe type earthing with double earthing to the all equipments as per Detailed specifications. | 6 | Each | 742.9469 | 4458 |
| 17 | As per RA enclosed | Tools Providing Tools as per Detailed specification enclosed. | 1 | Lot | 63641.00 | 63641 |
| 18 | | In door lighting | | | | |

| Sr. No. | Reference | Description | Qty | Unit | Rates | Amount |
|---------|--|---|-----|------|----------|---------------------|
| | As per RA enclosed | The lighting shall comprise fluorescent - 4 nos Bulkhead fitting - 3 nos D.B. - 2 nos Suitable size conductors with fuses, switches including H.G. conduit etc. | 1 | Job | 12680.00 | 12680 |
| 19 | | Area lighting | | | | |
| 20 | As per RA enclosed | The area lighting shall comprise 2 250 w mercury vapour lamps with and mounted on tubular swivelled pole 7 m high including ballast, condensor, fuse reflector, cable and control switch etc out of the two lams. one shall be in the substation yard and the second lamp shall be erected for area lighting. | 1 | Job | 38736.16 | 38736 |
| 21 | Market rate (Powerica Genset price shedule) | Diesel Generating Set Supplying Erecting diesel generating set 500 KVA capacity with AMF Panel as per Detailed specification with water cooled engine set including inspection charges .21% | 1 | Each | 3915600 | 3915600 |
| | | Sub Total (Rs) | | | | 7,958,536 |
| | | Sub total 1 | | | | 7,958,536 |
| | | Add for Work in Municipal Corporation Area @ 5% on the above sub total A | | | | 397,926.78 |
| | | Sub total 2 | | | | 8,356,462.46 |
| | | Add for Contengency @ 3% | | | | 250,693.87 |
| | | Total Gross Cost (Rs) | | | | 8,607,156.33 |

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT FOR PUMPING STATION AT Ward 98

| Sr no | Description | Amount (Rs) |
|--------------|------------------------|--------------------|
| | | |
| 1 | Civil Works | 2,861,941 |
| | | |
| 2 | Mechanical Works | 4,293,150 |
| | | |
| 3 | Electrical Works | 3,276,989 |
| | | |
| | Total Cost (Rs) | 10,432,080 |

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT FOR PUMPING STATION WARD NO 98- CIVIL

| Sr. No | Ref no | Item Description | Qty. | Rate (Rs) | Unit | Amount (Rs) |
|--------|-----------------|--|------|-----------|------|-------------|
| 1 | (DSR-I-1/P-112) | Designing (aesthetically), and constructing RCC ground service reservoirs / RCC sump in M-250 mix. Of required capacity including excavation in all types of strata, foundation concrete, container walls, bottom slab top RCC roof slab / or dome, 20 mm thick cement plaster with water proofing compound in CM 1:3 proportion. To inside face of the container, including epoxy paint from inside including refilling and disposing of surplus stuff within lead of 50 M, all labour and material charges, for laying and jointing of pipe assembly for inlet, outlet washout, over flow and bye-pass arrangement consisting of C.I./M.S. D/F. pipes, specials and valves of given diameters. providing and fixing accessories such as M.S. ladder inside and outside, C.I. Manhole frame and cover, at top slab, B.B. masonry chamber for all valves, ventilating shafts, including giving satisfactory hydraulic test and water tightness test as per IS code and providing three coat of cement paints to all exposed surface of structure including roof surface etc. Complete as per design data, criteria, obligatory requirements and detailed specifications. Anti- | | | | |
| | | Note : | | | | |
| 1) | | The design shall be in accordance with various relevant I.S. specification (I.S.456/2000, I.S. 875- 1987, I.S. 3370-1965 or revised | | | | |
| 2) | | Only M.S bars grade I confirming to I.S. 432 Part_1 or high yield strength deformed bars confirming to I.S. 1786 or I.S. 1139 shall be used grade II M.S. bars shall not be used | | | | |
| 3) | | Entire structure shall be in M-250 only. | | | | |
| 4) | | The scope of pipe assembly work shall be upto 5 Meter beyond outside face of the wall, cost of pipes valves and specials is not included in the rate but labour cost for laying and jointing is included | | | | |

| Sr. No | Ref no | Item Description | Qty. | Rate (Rs) | Unit | Amount (Rs) |
|--------|--------|---|------|-----------|------|-------------|
| 5) | | The G.S.R./ Sump above 15 lakh liter capacity shall be in two compartment | | | | |
| 6) | | The job includes designing the strututre for uplift preseure and dewatering if require duing entire execution and disposal of surplus excavated stuff with in lead of 50 Meter as directed by Engineer-in-charge. If up lifts considered in design then these rate shall be increased by 7.5% | | | | |
| 7) | | G.S.R. outlets shall be with bell mouth of approved pattern in bottom slab and cost of designing bell mouth is included in the rate Sump well includes cost of suction pit required at bottom. | | | | |
| 8) | | For pipes diameters upto 300mm only CI specials shall be used. For pipe diameters above 300mm M.S. pipes and specials of thickness minimum 10mm shall be used with proper anticorrosive epoxy treatment from inside and outside | | | | |
| 9) | | Cost of pump house is not included in these rates. | | | | |
| 10) | | Above rstes are applicible for seismic zones- 2,3, and 4 | | | | |
| 11) | | 75% part rate shall be payable for reinforcement, concrete and plastering item of all types of G.S.R's and sump till satisfactory hydraulic testing for water tightness test is given ; and till that work shall be treated as incomplete. | | | | |
| = | | Note:- Condition from Sr. No.1 to 11 shall from a part and parcel of tender and must be included in the Draft tender papers for work of RCC GSRs and sump. | | | | |
| 11) | | Staging shall have to be designed with stresses of M -150 concrete but actual construction shall be done in M-200 concrete with sections worked out with M-150 Design. | | | | |
| 12) | | These rates are including cost of uplift pressure if any and entire dewatering during execution. | | | | |

| Sr. No | Ref no | Item Description | Qty. | Rate (Rs) | Unit | Amount (Rs) |
|--------|--------|--|--------------------|-------------------------|--------------------|-------------------|
| 13) | | All conditions given in the member secretary's circular No. MJP/TS-1/350/1668 dated 2/8/97 shall be strictly followed and additional cost if any due to these conditions is included in the rates mentioned below. | | | | |
| 14) | | 75% part rate shall be payable for reinforcement concrete and plastering items of containers of ESRs till satisfactory hydraulic testing for water tightness is given and till that work shall be treated as incomplete. | | | | |
| 15) | | The rates are applicable for staging height of 12 m 2% of these rates shall be increased or decreased or per meter variation in this staging height, VIZ : difference between G.L. and L.W.L. in the container. | | | | |
| | | Note : Conditions from Sr. No. 1 to 15 shall form a part and partial of tender and must be included in the draft tender papers for work of R.C.C. E.S.R.s. | | | | |
| a. | | Sewage Pumping Station at Ward No 98 of Capacity | 50.26548246 | 10 | 502654.8246 | |
| | | | | Say (Litres) | 500,000 | |
| | | Cost of 5,00,000 Litres | | | | 2,525,985 |
| | | Total Cost | | | | 2,525,985 |
| | | Add 10% for over Head pump house | | | | 252,599 |
| | | Contengencis @ 3% | | | | 83357.51 |
| | | Grant Total | | | | 2861941.01 |

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT FOR PUMPING STATION AT WARD NO 98 - MECHANICAL

| Sr. No | Ref no | Item Description | Qty. | Unit | Rate (Rs) | Amount (Rs) |
|--------|--|---|------|------|-----------|-------------|
| | | MECHANICAL | | | | |
| 1 | Quotation | Providing, Installing, Testing, Commissioning of non clog Submersible Sewage Pumps , as specified below. Capacity - 266.00 m3/Hrs. Pump Head in mWC- 25 mtr. Efficiency of the pumps 75% Required Motor rating HP- 40 Solid Handling size – 100mm Sp Gravity – 1.05 MOC Casing – CI IS 210 Gr. FG 220 Impeller – CI IS 210 Gr. FG 220 Shaft and Sleeve – SS 316 Motor Parts – CI IS 210 Gr. FG 220 Fastners – BHT Steel Guide Pipe – Carban Steel Lifting Chain – Carban Steel Mech. Seal – Motor Side – Carban / Crome Steel - Pump Side – SiC V/s SiC | 3 | No | 429763 | 1289288 |
| 2 | MJP DSR11-12,pq no.155,item no 3b vii | Butterfly Valve Providing,double flanged short body pattern type manually operated Butterfly Valve PN 1.6 rating with bypass arrangement having body,disc and end cover in graded cast iron to IS 210 Gr.CF 200 generally confirming in IS-13095-1991,Synthetic rubber faced ring secured on disc by retaining ring with stainless steel screw stub shaft of stainless steel screw stub shaft of stainless steel riding in teflon bearing excluding C.C. foundation/Structural steel support. Size : 350 mm For Comman Header | 1 | No | 73536 | 73536 |
| 3 | MJP DSR11-12,pq no.148,item no 1© viii | NRV Providing & supplying ISI mark CI D/F Reflux valve(non return valve) PN 1.6 rating without bypass arrangement,as per IS 5312 Part I (1984), including all taxes,inspection charges,transportation etc. complete. Size :350 mm For Comman Header | 1 | No | 102264 | 102264 |
| 4 | MJP DSR11-12,pq no.155,item no 4 x | Lowering,laying & jointing in position following C.I.D/F Reflex valves,Butterfly valves & Sluice valves including cost of all labour jointing material,including nut bolts & giving satisfactory hydraulic testing etc. complete Size : 350 mm For Comman Header | 2 | No | 5031 | 10062 |
| 5 | MJP DSR11-12,pq no.152,item no 2©,viii | SLUICE VALVE Providing double flange Sluice Valve PN 1.6 rating without bypass arrangement,confirming for IS-2906/14846 including worn gear arrangements as per test pressure stainless steel spindle,caps including all taxes transportation etc. complete. Size -250 mm for Delivery Pipe | 3 | No | 40746.38 | 122239.14 |
| 6 | MJP DSR11-12,pq no.155,item no 3b vii | Butterfly Valve Providing,double flanged short body pattern type manually operated Butterfly Valve PN 1.6 rating with bypass arrangement having body,disc and end cover in graded cast iron to IS 210 Gr.CF 200 generally confirming in IS-13095-1991,Synthetic rubber faced ring secured on disc by retaining ring with stainless steel screw stub shaft of stainless steel screw stub shaft of stainless steel riding in teflon bearing excluding C.C. foundation/Structural steel support. Size : 250 mm for Delivery Pipe | 3 | No | 22851.85 | 68555.55 |
| 7 | MJP DSR11-12,pq no.148,item no 1© viii | NRV Providing & supplying ISI mark CI D/F Reflux valve(non return valve) PN 1.6 rating without bypass arrangement,as per IS 5312 Part I (1984), including all taxes,inspection charges,transportation etc. complete. Size :250 mm for Delivery Pipe | 3 | No | 42494.74 | 127484.22 |
| 8 | MJP DSR11-12, pq no.155,item no 4 vii | Lowering,laying & jointing in position following C.I.D/F Reflex valves,Butterfly valves & Sluice valves including cost of all labour jointing material,including nut bolts & giving satisfactory hydraulic testing etc. complete Size : 250 mm for Delivery Pipe | 9 | No | 4849.68 | 43647.12 |
| 9 | Electro Mechanical MJP DSR11-12,pq no.16 | Providing , Erecting Tripple Spur Gear Chain Pulley Block with Travelling Trolley suitable for 3T Capacity with 6 m lift complete With load chain and hand chain suitable for above lift, Tested to 50% overload as per IS 3832 Carving ISI Mark | 1 | No | 69130 | 69130.00 |

| Sr. No | Ref no | Item Description | Qty. | Unit | Rate (Rs) | Amount (Rs) |
|--------|--|---|---------|------|-----------|-------------|
| 10 | MIDC DSR 2009-10, Pg. No-147 | Providing and erecting Cast Iron Sluice Gates manufactured & tested as per IS3042-1965. Gates to be provided with brass seats and spindle of MS bright bar of required height to enable to operate the gate from operating slab of intake structure including GM nut bolts SS304 hardware, necessary wedges to be provided to achieve leak tightness, including operational wheel headstock, foundation material, labour etc. complete including taxes & duties, as per detailed specification & as directed by Engineer In charge. Size :1000*1000 mm | 1 | No | 268565.00 | 268565.00 |
| 11 | Market Rate | Providing, installing a SS Screens along with the channel guide, & railing accessories as per detailed specifications & as directed by Engineer. | 300 | kg. | 800.00 | 240000.00 |
| 12 | MJP DSR 11-12, Item no-11, Pg. No- | Providing and supplying ISI standard welded DIDF pipe including all taxes (central & local) railway freight, insurance, unloading from railway wagon, loading into truck transport to store / site, unloading, stacking etc. complete as directed by Engineer -in- charge. (for 2.75 m bare pipe) | | | | |
| | | 250 mm Dia for Delivery lines | 60 | mtrs | 4789.46 | 287367.60 |
| | | 400 mm Dia for Rising Main | 10 | mtrs | 9504.80 | 95048.00 |
| 13 | MJP DSR 11-12, Item no-2, Pg. No- | Lowering, Laying, and Jointing with SBR rubber gasket of DI pipes of following diameters in proper position, grade and alignment as directed by engineer in charge including conveyance of materials from stores to site of work, including cost of jointing materials and rubber rings labour, giving hydraulic testing etc Complete. | | | | |
| | | 250 mm Dia for Delivery lines | 50 | mtrs | 148.50 | 7425.00 |
| | | 400 mm Dia for Rising Main | 10 | mtrs | 253.00 | 2530.00 |
| 14 | MJP DSR Electromechanical 11-12, pg no.9, Item No. PM11-2 | Providing, installing, testing & commissioning of 150 mm dia bourden type Pressure Gauges complete with siphon U tube, isolating cock, C-class heavy duty 15 mm GI Pipe & brought out on wall for observation at place directed by engineer. Range 0 to 15 kg/Cm ² . as per detailed specifications & as directed by Engineer. | 5 | No. | 747.00 | 3735.00 |
| 15 | MJP Electro-mech DSR 11-12, Section-17, Item No-4, Pg No-91-97 | Ultrasonic Flowmeter Providing, Installing & giving satisfactory test and trial of ultrasonic Insertion fixed type flowmeter working on conditions and specifications, calibration, inspection, testing, training, guarantees, and manufacturers test certificate along with mandatory accessories given below complete with detailed specifications and as directed by engineer in charge | 1 | No | 325000.00 | 325000.00 |
| | | 350 mm Dia. For Rising Main | | | | |
| | | Providing, laying and jointing with test & trial of SENSOR/TRANSMITTER CABLE: - Providing, Laying and jointing with test and trial of sensor / transmitter cable 4 x 0.38 mm PVC cable common, braided copper shield etc. as per detailed specification | 100 | Mtrs | 230.00 | 23000.00 |
| | | Conduit Pipe: - Providing conduit pipe (PVC/HDPE Plumbing) 32 mm dia. With suitable rating.- Suitable conduit duct for routing of cable with suitable digging, laying & concealing the duct. | 100 | Mtrs | 18.00 | 1800.00 |
| | | PANEL CABINET :- Fixing of flow meter transmitter to internal walls of binding /inside suitable designed panel cabinet with proper locking arrangement with glass window on front door for seeing reading of flow transmitter and data logger without opening of panel cabinet | 2 | No | 26500.00 | 53000.00 |
| 16 | MJP DSR 11-12, item no- XIII, Sec-E-2, Pg No- | Excavation for foundation in earth, soils of all types sand, gravel & soft murum including removing the excavated material upto a distance of 50m and lift 1.5m. stacking & spreading as directed, dewatering, preparing die bed for the foundation and necessary back filling, ramming, watering (including shoring and strutting), etc. complete | 6 | Cum | 156.22 | 937.32 |
| 17 | MJP DSR 11-12, item no- XXI, F, Pg No- | Providing and constructing B.B. masonry Valve Chamber with 15 cm. thick 1:3:6 proportion PCC bedding, excluding B.B. masonry in CM. 1:5 proportion precast RCC frame and cover, etc. complete | | | | |
| | | As Above of 1.2 x 1.2 M Internal Size and depth upto 1.5 M with precast RCC Slab Cover. | 2 | No | 12652.75 | 25305.50 |
| 18 | MJP Pune DSR 11-12, Section. F, Item no-5, Pg. No- | Providing Structural steel work in rolled sections like joints, channels, angles, tees ect. As per detailed design and drawing including fix in position without connecting plates, braces ect. And one coat of anticorrosive paint and over it two coats of oil painting, of approved quality and shade, complete. | 1.5 | MT | 59633.28 | 89449.92 |
| 19 | MJP Pune DSR 11-12, Item no- 10, Pg. No- | DI Specials- Providing and supplying ISI standard DI specials and fitting with sealing rubber gasket of SBR complete with cast iron follower gland MS nut bolts coated or otherwise protected from rusting and suitable for DI pipes including cost of labour, materials and transportation to store/ site loading and unloading including all taxes etc. complete as per IS 9523 | | | | |
| | | 80 to 300 mm Dia | 0 | kg | 109.14 | 0 |
| | | 350mm to above Dia | 4949.87 | kg | 132.6 | 656352.762 |

| Sr. No | Ref no | Item Description | Qty. | Unit | Rate (Rs) | Amount (Rs) |
|--------|-------------------------------------|--|------|------|---------------|-------------------|
| 20 | MJP DSR 11-12, Item No-2, Pg 45 | RCC | 5 | cum | 5992.14 | 29960.7 |
| 21 | MJP DSR11-12,pg no.160,item no 9b i | Providing & supplying Kinetic Double Orifice type air valves PN1.6 rating combined with screw down isolating sluice valve etc complete Size :100mm | 6 | No. | 25404.08 | 152424.48 |
| | | Sub Total | | | TOTAL: | 4168106.73 |
| | | Contengencis @ 3% | | | | 125043.20 |
| | | Grant Total | | | | 4293149.93 |

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT FOR PUMPING STATION AT WARD NO 98 - ELECTRICAL

| Sr. No. | Reference | Description | Qty | Unit | Rates | Amount |
|---------|--------------------------------------|--|-----|------|------------|--------|
| 1 | | L.T. Control Panel Board | | | | |
| | | Designing, Providing , Erecting, Testing & Commissioning with Satisfactory Test & Trial of Various Panel Boards as per Detailed specifications. | | | | |
| | | A) L.T.Main Control Panel Board | | | | |
| | As per PANEL RA enclosed | Designing, Providing , Erecting,Main L. T. Cantrol Panel Board comprises of 250 Amp. MCCB for Incoming & 63 Amp. MCCB for outgoing as per Detailed specification enclosed. | 1 | each | 121,249.91 | 121250 |
| | | B) Soft starter | | | | |
| | MJP EM CSR 2011-12, PG 53, LG-6-1 | Supply erecting, commissioning electrical soft star starter of three wire system to operate on 380/440 Volts 3 phase 50 Hz consisting of, 1) Main contactor AC- 3 Duty and 1.5 times of full load current rating; 2) Suitable Thyresters, 3) Ammeter with selector switch & CTs, 4) Motor Protection relay with protection CTs for Protection against a) SinglePhasing (Current Sensing) b) under voltage and over voltage c) Over current relay haviing IDMT characteristic. of rating suitable for 40 HP pumps | 3 | each | 94916.9 | 284751 |
| 2 | | Transformer | | | | |
| | MJP E/M DSR 2011-12, pg 29 TR 1-3 | Suppling & erecting approved make of 160 kVA 50 c/s oil immersed and naturally cooled indoor /outdoor type , copper wound transfoemer with delta conn. on HV side & star conn. on LV side with additional neutral brought out in load side , voltage rating 11/0.433 vV with tapping of +/- 2.5 % -5 % ,continously rated for full load with standered accessories complete with test certificate with losses below 260 watts at no load , 1760 watts at full load asp er IS 2026. and approved by engineering incharge. | 1 | each | 265914.1 | 265914 |
| 3 | PWD DSR 11-12 Pg 79, 6-4-1 | H T Metering Kiosk: Supplying ,erecting testing (By Licencee) , commissioning cubical comprising 11kV HT metering resin cast CTs, PTs, as per lincencees requiredment. DO fuse set, AB Switch 200-400 A capacity duly interconnected with use of suitable insulators by mainteninig adequate clearances as per IS, complete housed in the enclosure made up of MS structure ans fibre glass 3 mm thick with gearbox & handle brought out for operating GOD, suitable door openings, locking arrangement as per approved design by Engineering incharge. | 1 | Each | 170956 | 170956 |
| 4 | As per SS 315 KVA - RA enclosed | H.T. sub station Providing, supplying and erecting 11 Kv/ 0.433 Kv H T Substation as per Detailed specification. | 1 | Each | 616694.84 | 616695 |
| 5 | | Cables | | | | |
| | | 1. 1 kv Aluminum PVC armoured cable from MSEB Supply to AMF panel & DG to AMF Panel to L.T. panel | | | | |
| | MJP E/M DSR 11-12 Pg. 61 Item CB 5-9 | 3.5 Core 240 Sq. MM Aluminium Armoured Cable | 120 | Rmt | 1934 | 232080 |
| | MJP E/M DSR 11-12 Pg. 61 Item CB 5-3 | 3.5 core x 50 sqmm | 50 | Rmt | 478.2 | 23910 |

| Sr. No. | Reference | Description | Qty | Unit | Rates | Amount |
|---------|---|--|-----|------|---------|--------|
| 6 | MJP E/M DSR 11-12 Pg. 61 Item CB 5-2 | 3.5 core x 35 sqmm | 50 | Rmt | 379 | 18950 |
| | MJP E/M DSR 11-12 Pg. 62 Item CB 6-3 | 4 Core 10 Sq. MM Aluminium Armoured Cable | 50 | Rmt | 222 | 11100 |
| | MJP E/M DSR 11-12 Pg. 63 Item CB7-2-2 | 3 Core 2.5 Sq. MM CU UnArmoured Cable | 50 | Rmt | 217.2 | 10860 |
| | | HT CABLE | | | | |
| | MJP E/M DSR 11-12 Pg. 65 Item CB 11-4 | 11 kv XLPE cable 3 core x 95 sqmm | 500 | Rmt | 1037.7 | 518850 |
| | MJP E/M DSR 11-12 Pg. 71 Item CB 25-2 | Indoor termination kit 11 kv | 2 | Each | 8552.9 | 17106 |
| 7 | MJP E/M DSR 11-12 Pg. 71 Item CB 26-2 | Out door termination kit 11 kv | 2 | Each | 12702.9 | 25406 |
| | PWD DSR 2011-12, Item no- CW-16-1- 2, Pg. No-148 | Cable Trench - Making the trench in hard murum/ tar road of suitable width and depth for laying provided L.T. Cable of 10 sq mm complete as per detailed specifications. | 100 | m | 80 | 8000 |
| | PWD DSR 2011-12, Item no- CW-16-1- 3, Pg. No-148 | Making the trench in hard murum/ tar road of suitable width and depth for laying provided L.T. Cable of 25 sq mm & above covered with half round hume pipe complete as per detailed specifications. | 100 | m | 240 | 24000 |
| | MJP E/M DSR 2010-11, Item no- CB 34-2 Pg No-74 | Cable Tray - Providing, fabricating and fixing G.I. perforated cable tray for cables as per requirement and specifications - 200 x 20 mm | 100 | Mtr | 169 | 16900 |
| 10 | | Capacitor | | | | |
| | | Providing Erecting Individual Mixed dia electric type Capacitor of required capacity for each Submersible Pumpset | | | | |
| 11 | PWD DSR 11- 12 Pg. 56, 4-4- 7 | supply & erecting 80 kVAR 440 V three phase 50 cycles thyrester switched Micro APFC passive filter panel consisting of (10x3) steps of APP type capacitor units confirming to IS: 13585 (part -1) with harmonic filter reactors suitable for 50 KW load as per specifications. | 1 | | 257283 | 257283 |
| | | Earthing Strip GI | | | | |
| | PWD DSR 11- 12 Page No 106 Item No.9- 1-1 | GI Earthing - Supplying & erecting GI earth plate size 60x 60x6 cms complete with all materials, testing & recording results as per specifications . As per IS 3043-1987 & as directed by engineering incharge. | 10 | each | 1955 | 19550 |
| 12 | PWD DSR 11- 12 Page No 106 Item No.9- 1-2 | Copper Earthing - Supplying & erecting copper earth plate size 30 x 30 x 0.6 cms complete with all materials, testing & recording results as per specifications . As per IS 3043-1987 & as directed by engineering incharge. | 10 | Each | 3144 | 31440 |
| | | Earthing Strip | | | | |

| Sr. No. | Reference | Description | Qty | Unit | Rates | Amount |
|---------|--|--|-----|------|----------|---------------------|
| 13 | PWD DSR 10-11 Page No 85 Item No.9-2-3 | Providing erectimng GI earth strip | 200 | Kg | 99 | 19800 |
| 14 | | Providing, erecting CU earth strip | 100 | Kg | 617 | 61700 |
| | | Pipe type earthing | | | | |
| 15 | PWD DSR 10-11 Page No 85 Item No.9-1-1 | Providing erecting pipe type earthing with double earthing to the all equipments as per Detailed specifications. | 6 | Each | 742 | 4452 |
| 16 | As per RA enclosed | Tools Providing Tools as per Detailed specification enclosed. | 1 | Lot | 63641.00 | 63641 |
| | | In door lighting | | | | |
| 17 | As per RA enclosed | The lighting shall comprise fleuorescent - 4 nos Bulkhead fitting - 3 nos D.B. - 2 nos Suitable size conductors with fuses,switches including H.G.conduit etc. | 1 | Job | 12680.00 | 12680 |
| 18 | | Area lighting | | | | |
| | As per RA enclosed | The area lighting shall comprise 2 250 w mercury vapour lamps with and mounted on tubular swivelled pole 7 m high including ballast, condensor,fuse reflector,cable and control switch etc out of the two lams.one shall be in the substation yard and the second lamp shall be erected for area lighting. | 1 | Job | 38736.16 | 38736 |
| 19 | PWD DSR Pg-108 Item No. 10-1-2 | Diesel Generating Set Supplying Errecting diesel generating set 100 KVA capacity with AMF Panel as per Detailed specification with water cooled engine set including inspection charges . | 1 | Each | 154031 | 154031 |
| | | Sub Total (Rs) | | | | 3,030,040 |
| | | Sub total 1 | | | | 3,030,040 |
| | | Add for Work in Municipal Corporation Area @ 5% on the above sub total A | | | | 151,502.02 |
| | | Sub total 2 | | | | 3,181,542.33 |
| | | Add for Contengency @ 3% | | | | 95,446.27 |
| | | Total | | | | 3,276,988.60 |

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT FOR PUMPING STATION AT CIDCO

| Sr no | Description | Amount (Rs) |
|--------------|------------------------|--------------------|
| | | |
| 1 | Civil Works | 3,414,695 |
| | | |
| 2 | Mechanical Works | 9,835,758 |
| | | |
| 3 | Electrical Works | 5,888,569 |
| | | |
| | Total Cost (Rs) | 19,139,022 |

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT FOR PUMPING STATION AT CIDCO- CIVIL

| Sr. No | Ref no | Item Description | Qty. | Rate (Rs) | Unit | Amount (Rs) |
|--------|-----------------|--|------|-----------|------|-------------|
| 1 | (DSR-I-1/P-112) | Designing (aesthetically), and constructing RCC ground service reservoirs / RCC sump in M-250 mix. Of required capacity including excavation in all types of strata, foundation concrete, container walls, bottom slab top RCC roof slab / or dome, 20 mm thick cement plaster with water proofing compound in CM 1:3 proportion. To inside face of the container, including epoxy paint from inside including refilling and disposing of surplus stuff within lead of 50 M, all labour and material charges, for laying and jointing of pipe assembly for inlet, outlet washout, over flow and bye-pass arrangement consisting of C.I./M.S. D/F. pipes, specials and valves of given diameters. providing and fixing accessories such as M.S. ladder inside and outside, C.I. Manhole frame and cover, at top slab, B.B. masonry chamber for all valves, ventilating shafts, including giving satisfactory hydraulic test and water tightness test as per IS code and providing three coat of cement paints to all expose surface of structure including roof surface etc. Complete as per design data, criteria, obligatory requirements and detailed specifications. Anti-termite treatment | | | | |
| | | Note : | | | | |
| 1) | | The design shall be in accordance with various relevant I.S. specification (I.S.456/2000, I.S. 875- 1987, I.S. 3370 1965 or revised | | | | |
| 2) | | Only M.S bars grade I confirming to I.S. 432 Part_] or high yield strength deformed bars confirming to I.S. 1786 or I.S. 1139 shall be used grade II M.S. bars shall not be used | | | | |
| 3) | | Entier struture shall be in M-250 only. | | | | |
| 4) | | The scope of pipe assembly work shall be upto 5 Meter beyond outside face of the wall, cost of pipes valves and specialsis not included in the rate but labour cost for laying and jointingis included | | | | |
| | | | | | | |

| Sr. No | Ref no | Item Description | Qty. | Rate (Rs) | Unit | Amount (Rs) |
|--------|--------|--|------|-----------|------|-------------|
| 5) | | The G.S.R./ Sump above 15 lakh liter capacity shall be in two compartment | | | | |
| 6) | | The job includes designing the struttre for uplift preseure and dewatering if require duing entire execution and disposal of surplus excavated stuff with in lead of 50 Meter as directed by Engineer-in-charge. If up lifts considered in design then these rate shall be increased by 7.5% | | | | |
| 7) | | G.S.R. outlets shall be with bell mouth of approved pattern in bottom slab and cost of designing bell mouth is included in the rate Sump well includes cost of suction pit required at bottom. | | | | |
| 8) | | For pipes diameters upto 300mm only CI specials shall be used. For pipe diameters above 300mm M.S. pipes and specials of thickness minimum 10mm shall be used with proper anticorrosive epoxy treatment from inside and outside | | | | |
| 9) | | Cost of pump house is not included in these rates. | | | | |
| 10) | | Above rstes are applicable for seismic zones- 2,3, and 4 | | | | |
| 11) | | 75% part rate shall be payable for reinforcement, concrete and plastering item of all types of G.S.R's and sump till satisfactory hydraulic testing for water tightness test is given ; and till that work shall be treated as incomplete. | | | | |
| = | | Note:- Condition from Sr. No.1 to 11 shall from a part and parcel of tender and must be included in the Draft tender papers for work of RCC GSRs and sump. | | | | |
| 11) | | Staging shall have to be designed with stresses of M -150 concrete but actual construction shall be done in M-200 concrete with sections worked out with M-150 Design. | | | | |
| 12) | | These rates are including cost of uplift pressure if any and entire dewatering during execution. | | | | |
| | | | | | | |

| Sr. No | Ref no | Item Description | Qty. | Rate (Rs) | Unit | Amount (Rs) |
|--------|--------|--|--------|-----------------|----------|------------------|
| 13) | | All conditions given in the member secretary's circular No. MJP/TS-1/350/1668 dated 2/8/97 shall be strictly followed and additional cost if ay due to these conditions is included in the rates mensioned below. | | | | |
| 14) | | 75% part rate shall be payable for reinforcement concrete and plastering items of containers of ESRs till satisfactory hydraulic testing for water tightness is given and till that work shall be treated as incomplete. | | | | |
| 15) | | The rates are applicable for staging height of 12 m 2% of these rates shall be increased or decreased or per meter variation in this staging height, VIZ : difference between G.L. and L.W.L. in the container. | | | | |
| | | Note : Conditions from Sr. No. 1 to 15 shall form a part and partial of tender and must be included in the draft tranfer papers for work of R.C.C. E.S.R.s. | | | | |
| a. | | Sewage Pumping Station at CIDCO Airport | 86.59 | 8.36 | 723892 | |
| | | | | Say (Litres) | 7,50,000 | |
| | | Cost of 5,00,000 Litres | | | | 2,525,985 |
| | | Add cost for 250000 Litres | 250000 | 2.97 | | 779,625 |
| | | Total Cost | | | | 3,305,610 |
| | | Add 10% for Pump House | | | | 330,561 |
| | | Add For Contigency @3% | | | | 109,085 |
| | | Total Cost | | | | 3,414,695 |

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT FOR PUMPING STATION AT CIDCO - MECHANICAL

| Sr. No | Ref no | Item Description | Qty. | Unit | Rate (Rs) | Amount (Rs) |
|--------|--|--|------|------|------------|-------------|
| | | MECHANICAL | | | | |
| 1 | Quotation | Providing, Installing, Testing, Commissioning of non clog Submersible Sewage Pumps , as specified below. Capacity - 825.00 m3/Hrs. Pump Head in mWC- 20 mtr. Efficiency of the pumps 75% Required Motor rating HP-100 Solid Handling size – 100mm Sp Gravity – 1.05 MOC Casing – CI IS 210 Gr. FG 220 Impeller – CF8M Shaft and Sleeve – SS 316 Motor Parts – CI IS 210 Gr. FG 220 Fastners – BHT Steel Guide Pipe – Carban Steel Lifting Chain – Carban Steel Mech. Seal – Motor Side – Carban / Crome Steel | 3 | No | 844031 | 2532094 |
| 2 | MJP DSR11-12,pg no.155,item no 3b vii | Butterfly Valve Providing,double flanged short body pattern type manually operated Butterfly Valve PN 1.6 rating with bypass arrangement having body,disc and end cover in graded cast iron to IS 210 Gr.CF 200 generally confirming in IS-13095-1991,Synthetic rubber faced ring secured on disc by retaining ring with stainless steel screw stub shaft of stainless steel screw stub shaft of stainless steel riding in teflon bearing excluding C.C. foundation/Structural steel support. Size : 600 mm Common Header | 1 | No | 123755 | 123755 |
| 3 | MJP DSR11-12,pg no.148,item no 1© viii | NRV Providing & supplying ISI mark CI D/F Reflux valve(non return valve) PN 1.6 rating without bypass arrangement,as per IS 5312 Part I (1984), including all taxes,inspection charges,transportation etc. complete. Size :600 mm Common Header | 1 | No | 332869 | 332869 |
| 4 | MJP DSR11-12,pg no.155,item no 4 x | Lowering,laying & jointing in position following C.I.D/F Reflex valves,Butterfly valves & Sluice valves including cost of all labour jointing material,including nut bolts & giving satisfactory hydraulic testing etc. complete Size :600 mm common header | 2 | No | 4409 | 8818 |
| 5 | MJP DSR11-12,pg no.152,item no 2©,viii | SLUICE VALVE Providing double flange Sluice Valve PN 1.6 rating without bypass arrangement,confirming for IS-2906/14846 including worn gear arrangements as per test pressure stainless steel spindle,caps including all taxes transportation etc. complete. Size :400 mm Pump Header | 3 | No | 106417.79 | 319253.37 |
| 6 | MJP DSR11-12,pg no.155,item no 3b vii | Butterfly Valve Providing,double flanged short body pattern type manually operated Butterfly Valve PN 1.6 rating with bypass arrangement having body,disc and end cover in graded cast iron to IS 210 Gr.CF 200 generally confirming in IS-13095-1991,Synthetic rubber faced ring secured on disc by retaining ring with stainless steel screw stub shaft of stainless steel screw stub shaft of stainless steel riding in teflon bearing excluding C.C. foundation/Structural steel support. Size : 400 mm Pump Header | 3 | No | 78998.84 | 236996.52 |
| 7 | MJP DSR11-12,pg no.148,item no 1© viii | NRV Providing & supplying ISI mark CI D/F Reflux valve(non return valve) PN 1.6 rating without bypass arrangement,as per IS 5312 Part I (1984), including all taxes,inspection charges,transportation etc. complete. Size :400 mm | 3 | No | 1181824.87 | 3545474.61 |
| 8 | MJP DSR11-12, pg no.155,item no 4 vii | Lowering,laying & jointing in position following C.I.D/F Reflex valves,Butterfly valves & Sluice valves including cost of all labour jointing material,including nut bolts & giving satisfactory hydraulic testing etc. complete Size : 400 mm Pump Header | 9 | No | 3383.16 | 30448.44 |
| 9 | Electro Mechanical MJP DSR11-12,pg no.16 | Providing , Erecting Tripple Spur Gear Chain Pulley Block with Travelling Trolley suitable for 3T Capacity with 6 m lift complete With load chain and hand chain suitable for above lift, Tested to 50% overload as per IS 3832 Carving ISI Mark | 1 | No | 69130 | 69130.00 |

| Sr. No | Ref no | Item Description | Qty. | Unit | Rate (Rs) | Amount (Rs) |
|--------|--|---|------|------|-----------|-------------|
| 10 | MIDC DSR 2009-10, Pg. No-147 | Providing and erecting Cast Iron Sluice Gates manufactured & tested as per IS3042-1965. Gates to be provided with brass seats and spindle of MS bright bar of required height to enable to operate the gate from operating slab of intake structure including GM nut bolts SS304 hardware, necessary wedges to be provided to achieve leak tightness, including operational wheel headstock, foundation material, labour etc. complete including taxes & duties, as per detailed specification & as directed by Engineer in charge. Size -1000*1000 mm | 1 | No | 268565.00 | 268565.00 |
| 11 | Market Rate | Providing, installing a SS Screens alongwith the channel guide, & railing accessories as per detailed specifications & as directed by Engineer. | 300 | kg. | 500.00 | 150000.00 |
| 12 | MJP DSR 11-12, Item no-11, Pg. No- | Providing and supplying ISI standard welded DIDF pipe including all taxes (central & local) railway freight, insurance, unloading from railway wagon, loading into truck transport to store / site, unloading, stacking etc. complete as directed by Engineer in-charge. (for 2.75 m bare pipe) | 120 | mtrs | 4337.11 | 520453.20 |
| | | 400 mm Dia for Delivery lines 600 mm Dia for Rising Main | 10 | mtrs | 11430.83 | 114308.30 |
| 13 | MJP DSR 11-12, Item no-2, Pg. No- | Lowering, Laying, and Jointing with SBR rubber gasket of DI pipes of following diameters in proper position, grade and alignment as directed by engineer incharge including conveyance of materials from stores to site of work, including cost of jointing materials and rubber rings labour, giving hydraulic testing etc Complete. | 50 | mtrs | 185.90 | 9295.00 |
| | | 250 mm Dia for Delivery lines 600 mm Dia for Rising Main | 10 | mtrs | 316.80 | 3168.00 |
| 14 | MJP DSR Electromechanical 11-12, pg no.9, Item No. PM11-2 | Providing, installing, testing & commissioning of 150 mm dia bourden type Pressure Gauges complete with siphon U tube, isolating cock, C-class heavy duty 15 mm GI Pipe & brought out on wall for observation at place directed by engineer. Range 0 to 15 kg/Cm ² . as per detailed specifications & as directed by Engineer. | 5 | No. | 747.00 | 3735.00 |
| 15 | MJP Electro-mech DSR 11-12, Section-17, Item No-4, Pg No-91-97 | Ultrasonic Flowmeter Providing, Installing & giving satisfactory test and trial of ultrasonic Insertion fixed type flowmeter working on conditions and specifications, calibration, inspection, testing, training, guarantees, and manufacturers test certificate along with mandatory accessories given below complete with detailed specifications and as directed by engineer incharge 600 mm Dia. For Rising Main | 1 | No | 325000.00 | 325000.00 |
| | | Providing, laying and jointing with test & trial of SENSOR/TRANSMITTER CABLE: - Providing, Laying and jointing with test and trial of sensor / transmitter cable 4 x 0.38 mm PVC cable common, braided copper shield etc. as per detailed specification | 100 | Mtrs | 230.00 | 23000.00 |
| | | Conduit Pipe: - Providing conduit pipe (PVC/HDPE Plumbing) 32 mm dia. With suitable rating.- Suitable conduit duct for routing of cable with suitable digging, laying & concealing the duct | 100 | Mtrs | 18.00 | 1800.00 |
| | | PANEL CABINET :- Fixing of flow meter transmitter to internal walls of binding /inside suitable designed panel cabinet with proper locking arrangement with glass window on front door for seeing reading of flow transmitter and data logger without opening of panel cabinet | 2 | No | 26500.00 | 53000.00 |
| 16 | MJP DSR 11-12, item no- XIII, Sec-E-2, Pg No- | Excavation for foundation in earth, soils of all types sand, gravel & soft murum including removing the excavated material upto a distance of 50m and lift 1.5m. stacking & spreading as directed, dewatering, preparing die bed for the foundation and necessary back filling, ramming, watering (including shoring and strutting), etc complete | 6 | Cum | 146.00 | 876.00 |
| 17 | MJP DSR 11-12, item no- XXI, F, Pg No- | Providing and constructing B.B. masonry Valve Chamber with 15 cm. thick 1:3:6 proportion PCC bedding, excluding B.B. masonry in CM. 1:5 proportion precast RCC frame and cover, etc. complete As Above of 1.2 x 1.2 M Internal Size and depth upto 1.5 M with precast RCC Slab Cover. | 2 | No | 11825.00 | 23650.00 |
| 18 | MJP Pune DSR 11-12, Section. F, Item no-5, Pg. No- | Providing Structural steel work in rolled sections like joints, channels, angles, tees ect. As per detailed design and drawing including fix in position without connecting plates, braces ect. And one coat of anticorrosive paint and over it two coats of oil painting, of approved quality and shade, complete. | 1.5 | MT | 59633.28 | 89449.92 |
| 19 | MJP Pune DSR 11-12, Item no- 10, Pg. No- | DI Specials- Providing and supplying ISI standard DI specials and fitting with sealing rubber gasket of SBR complete with cast iron follower gland MS nut bolts coated or otherwise protected from rusting and suitable for DI pipes including cost of labour, materials and transportation to store/ site loading and unloading including all taxes etc. complete as per IS 9523. | | | | |

| Sr. No | Ref no | Item Description | Qty. | Unit | Rate (Rs) | Amount (Rs) |
|--------|-------------------------------------|--|---------|------|---------------|-------------------|
| | | 80 to 300 mm Dia | 0 | kg | 98.94 | 0 |
| | | 350mm to above Dia | 4949.87 | kg | 120.36 | 595766.3532 |
| 20 | MJP DSR 11-12, Item No-2, Pg 45 | RCC | 5 | cum | 5447.40 | 27237 |
| 21 | MJP DSR11-12,pg no.160,item no 9b i | Providing & supplying Kinetic Double Orifice type air valves PN1.6 rating combined with screw down isolating sluice valve etc complete Size :100mm | 6 | No. | 23522.72 | 141136.32 |
| | | Sub Total | | | TOTAL: | 9549279.15 |
| | | Contengencis @ 3% | | | | 286478.37 |
| | | Grant Total | | | | 9835757.53 |

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT FOR PUMPING STATION AT CIDCO - ELECTRICAL

| Sr. No. | Reference | Description | Qty | Unit | Rates | Amount |
|---------|--------------------------------------|---|-----|------|------------|---------|
| | | L.T. Control Panel Board | | | | |
| | | Designing, Providing , Erecting, Testing & Commissioning with Satisfactory Test & Trial of Various Panel Boards as per Detailed specifications. | | | | |
| 1 | | A) L.T.Main Control Panel Board | | | | |
| | As per PANEL RA enclosed | Designing, Providing , Erecting,Main L. T. Control Panel Board comprises of 630 Amp. MCCB for Incoming & 200 Amp. MCCB for outgoing as per Detailed specification enclosed. | 1 | each | 532,043.92 | 532044 |
| | | B) Soft starter | | | | |
| | MJP EM CSR 2012-13, PG 53, LG-6-4 | Supply erecting, commissioning electrical soft star starter of three wire system to operate on 380/440 Volts 3 phase 50 Hz consisting of, 1) Main contactor AC- 3 Duty and 1.5 times of full load current rating; 2) Suitable Thyresters, 3) Ammeter with selector switch & CTs, 4) Motor Protection relay with protection CTs for Protection against a) SinglePhasing (Current Sensing) b) under voltage and over voltage c) Over current relay haviing IDMT characteristic. of rating suitable for 100 HP pumps | 3 | each | 175736.9 | 527211 |
| | | Transformer | | | | |
| 2 | MJP E/M DSR 2012-13, pg 29 TR 1-6 | Suppling & erecting approved make of 315 kVA 50 c/s oil immersed and naturally cooled indoor /outdoor type , copper wound transfoemer with delta conn. on HV side & star conn. on LV side with additional neutral brought out in load side , voltage rating 11/0.433 vV with tapping of +/- 2.5 % -5 % ,continuosly rated for full load with standered accessories complete with test certificate with losses below 580 watts at no load , 4200 watts at full load asp er IS 2026. and approved by engineering incharge. | 1 | each | 426822.1 | 426822 |
| 3 | PWD DSR 12-13 Pg 79, 6-4-1 | H T Metering Kiosk: Supplying ,erecting testing (By Licencee) , commissioning cubical comprising 11kV HT metering resin cast CTs, PTs, as per lincencees requiredment. DO fuse set, AB Switch 200-400 A capacity duly interconnected with use of suitable insulators by mainteninig adequate clearances as per IS, complete housed in the encloser made up of MS structure ans fibre glass 3 mm thick with gearbox & handle brought out for operating GOD, suitable door openings, locking arrangement as per approved design by Engineering incharge. | 1 | Each | 171328.689 | 171329 |
| 4 | As per RA enclosed | H.T. sub station Providing, supplying and erecting 11 Kv/ 0.433 Kv H T Substation as per Detailed specification. | 1 | Each | 1723603.38 | 1723603 |
| 5 | | ICables | | | | |
| | | 1. 1 kv Aluminum PVC armoured cable from MSEB Supply to AMF panel & DG to AMF Panel to L.T.panel | | | | |
| | MJP E/M DSR 12-13 Pg. 61 Item CB 5-9 | 3.5 Core 240 Sq. MM Aluminium Armoured Cable | 120 | Rmt | 1934 | 232080 |

| Sr. No. | Reference | Description | Qty | Unit | Rates | Amount |
|---------|--|--|-----|------|---------|--------|
| | MJP E/M DSR 12-13 Pg. 61 Item CB 5-3 | 3.5 core x 50 sqmm | 50 | Rmt | 478.2 | 23910 |
| | MJP E/M DSR 12-13 Pg. 61 Item CB 5-2 | 3.5 core x 35 sqmm | 50 | Rmt | 379 | 18950 |
| | MJP E/M DSR 12-13 Pg. 62 Item CB 6-3 | 4 Core 10 Sq. MM Aluminium Armoured Cable | 50 | Rmt | 222 | 11100 |
| | MJP E/M DSR 12-13 Pg. 63 Item CB7-2-2 | 3 Core 2.5 Sq. MM CU UnArmoured Cable | 50 | Rmt | 217.2 | 10860 |
| | | HT CABLE | | | | |
| | MJP E/M DSR 12-13 Pg. 65 Item CB 11-4 | 11 kv XLPE cable 3 core x 95 sqmm | 100 | Rmt | 1565.7 | 156570 |
| | MJP E/M DSR 12-13 Pg. 71 Item CB 25-2 | Indoor termination kit 11 kv | 2 | Each | 8552.9 | 17106 |
| | MJP E/M DSR 12-13 Pg. 71 Item CB 26-2 | Out door termination kit 11 kv | 2 | Each | 12702.9 | 25406 |
| 6 | PWD DSR 2012-13, Item no- CW-16-1-2, Pg. No-148 | Cable Trench - Making the trench in hard murum/ tar road of suitable width and depth for laying provided L.T. Cable of 10 sq mm complete as per detailed specifications. | 100 | m | 80 | 8000 |
| 7 | PWD DSR 2012-13, Item no- CW-16-1-3, Pg. No-148 | Making the trench in hard murum/ tar road of suitable width and depth for laying provided L.T. Cable of 25 sq mm & above covered with half round hume pipe complete as per detailed specifications. | 100 | m | 240 | 24000 |
| 8 | MJP E/M DSR 2010-11, Item no- CB 34-2 Pg No- 74 | Cable Tray - Providing, fabricating and fixing G.I. perforated cable tray for cables as per requirement and specifications - 200 x 20 mm | 100 | Mtr | 170 | 17000 |
| 9 | | Capacitor Providing Erecting Individual Mixed dia electric type Capacitor of required capacity for each Submersible Pumpset | | | | |
| 10 | PWD DSR 12-13 Pg. 56, 4-4-7 | supply & erecting 100 kVAR 440 V three phase 50 cycles thyrester switched Micro APFC passive filter panel consisting of (25 x 2 +15x1 +10x2) steps of APP type capacitor units confirming to IS: 13585 (part -1) with harmonic filter reactors suitable for 150 KW load as per specifications. | 1 | | 257283 | 257283 |
| | | Earthing Strip GI | | | | |
| 11 | PWD DSR 12-13 Page No 106 Item No.9-1-1 | GI Earthing - Supplying & erecting GI earth plate size 60x 60x6 cms complete with all materials, testing & recording results as per specifications . As per IS 3043-1987 & as directed by engineering incharge. | 10 | each | 1955 | 19550 |
| 12 | PWD DSR 12-13 Page No 106 Item No.9-1-2 | Copper Earthing - Supplying & erecting copper earth plate size 30 x 30 x 0.6 cms complete with all materials, testing & recording results as per specifications . As per IS 3043-1987 & as directed by engineering incharge. | 10 | Each | 3144 | 31440 |
| | | Earthing Strip | | | | |
| 13 | PWD DSR 10-11 Page No 85 Item No.9-2-3 | Providing erectimng GI earth strip | 200 | Kg | 99 | 19800 |
| 14 | | Providing, erecting CU earth strip | 100 | Kg | 617 | 61700 |

| Sr. No. | Reference | Description | Qty | Unit | Rates | Amount |
|---------|--|--|-----|------|----------|---------------------|
| | | Pipe type earthing | | | | |
| 15 | PWD DSR 10-11 Page No 85 Item No.9-1-1 | Providing erecting pipe type earthing with double earthing to the all equipments as per Detailed specifications. | 6 | Each | 788 | 4728 |
| 16 | As per RA enclosed | Tools Providing Tools as per Detailed specification enclosed. | 1 | Lot | 63641.00 | 63641 |
| | | In door lighting | | | | |
| 17 | As per RA enclosed | The lighting shall comprise fleuorescent - 4 nos Bulkhead fitting - 3 nos D.B. - 2 nos Suitable size conductors with fuses,switches including H.G.conduit etc. | 1 | Job | 12680.00 | 12680 |
| 18 | | Area lighting | | | | |
| | As per RA enclosed | The area lighting shall comprise 2 250 w mercury vapour lamps with and mounted on tubular swivelled pole 7 m high including ballast, condensor,fuse reflector,cable and control switch etc out of the two lams.one shall be in the substation yard and the second lamp shall be erected for area lighting. | 1 | Job | 38736.16 | 38736 |
| 19 | PWD DSR Pg-121 Item No. 11-1-6 | Diesel Generating Set Supplying Errecting diesel generating set 250 KVA capacity with AMF Panel as per Detailed specification with water cooled engine set including inspection charges .21% | 1 | Each | 1009268 | 1009268 |
| | | Sub Total (Rs) | | | | 5,444,817 |
| | | Total Net Cost (Rs) | | | | 5,444,817 |
| | | Add for Work in Municipal Corporation Area @ 5% on the above sub total | | | | 272,240.83 |
| | | Sub total | | | | 5,717,057.38 |
| | | Add for Contengencies @ 3% | | | | 171,511.72 |
| | | Total Gross Cost (Rs) | | | | 5,888,569.11 |

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT OF SEWAGE TREATMENT PLANTS

| Sr.No | Location | STP Capacity for 2030 (MLD) | Total Cost (Rs.) |
|--------------|-----------------|--|-------------------------|
| 1 | Nakshatrawadi | 136.5 | 568,378,818.24 |
| 2 | Banewadi | 30 | 151,141,522.13 |
| 3 | Siddarth Garden | 4.5 | 26,807,078.50 |
| 4 | Zalta | 22.5 | 120,016,546.96 |
| 5 | Padegaon | 10.5 | 61,613,281.22 |
| 6 | CIDCO (Airport) | 18.5 | 101,525,817.01 |
| Total | | 222.5 | 1,029,483,064.06 |

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT OF SEWAGE TREATMENT PLANT AT NAKSHATRAWADI

| Sr.No | Ref no | Description | Quantity | Unit | Rate | Amount (Rs.) |
|-------|--|--|----------|------|-----------|-----------------------|
| a | As per MJP DSR 2012 - 13 section1 (XVIII, Treatment plant, WTP) Pg no. 231 to 239 | Designing (aesthetically), providing, constructing and giving satisfactory trials of modernised Sewage Treatment Plant consisting of receiving chamber, screen chamber, grit chamber, measuring flume, distribution chamber with primary and secondary treatment, etc.as detailed below, administration block of suitable size including allied units for waste disposal with all civil and mechanical works involved, etc. complete (turnkeyjob). or / Designing (aesthetically), providing, constructing and giving satisfactory hydraulic testing, commissioning and giving satisfactory trials of modernised Sewage Treatment Plant consisting of inlet chamber, screen chamber, detritus tanks, parshall flume, primary settling tanks, aeration tanks, secondary settling tanks, sludge sump and pump house, sludge thickener, primary digester, secondary digester, SST sump and pump house, chlorine contact tank, chlorinators, chlorinator room, sump cum blending tank, PST sludge sump cum blending tank, pump house, sludge centrifuge, gas holder, necessary piping work with required valves, gates, drains, pathways, administrative building cum laboratory. laboratory | | | | |
| | | Cost of 136.50 MLD Plant | 100 | Job | 3789720 | 378,972,000.00 |
| | | Add for Additional 36.5 MLD | 36.5 | MLD | 3789720 | 138,324,780.00 |
| | | Sub - Total (A) | | | | 517,296,780.00 |
| | | HT Sub Station | | | | |
| b | MJP DSR 11-12 Pg 31, tr4-5 | Suppling & erecting approved make of 2000 kVA 50 c/s oil immersed and naturally cooled indoor /outdoor type , copper wound transfoemer with delta conn. on HV side & star conn. on LV side with additional neutral brought out in load side , voltage rating 11/0.433 vV with tapping of +/- 2.5 % -5 % ,continuosly rated for full load with standered accessories complete with test certificate with losses below 580 watts at no load , 4200 watts at full load asp er IS 2026. and approved by engineering incharge. | 2 | No | 2037878.1 | 4,075,756.20 |
| c | PWD DSR 12-13 Pg 79, 6-4-1 | Item No- 3 ;- H T Metering Kiosk: Supplying ,erecting testing (By Licencee) , commissioning cubical comprising 11kV HT metering resin cast CTs, PTs, as per lincencees requirement. DO fuse set, AB Switch 200- 400 A capacity duly interconnected with use of suitable insulators by mainteninig adequate clearences as per IS, complete housed in the encloser made up of MS structure ans fibre glass 3 mm thick with gearbox & handle brought out for operating GOD, suitable door openings, locking arrangement as per approved design by Engineering incharge. | 1 | Each | 171329 | 171329 |
| d | Rate Analysis | Substation accessories | 1.00 | No | 4002893 | 4,002,893 |
| | | Sub total 1 | | | | 525,546,758 |
| | | Add for Work in Municipal Corporation Area @ 5% on the above sub total A | | | | 26,277,337.88 |
| | | Sub total 2 | | | | 551,824,095.38 |
| | | Add for Contengency @ 3% | | | | 16,554,722.86 |
| | | Total Estimation | | | | 568,378,818.24 |

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT OF SEWAGE TREATMENT PLANT AT BANEWADI

| Sr.No | Ref no | Description | Quantity | Unit | Rate | Amount (Rs.) |
|-------|--|---|----------|------|----------|-----------------------|
| a | As per MJP DSR 2012 - 13 section1 (XVIII, Treatment plant, WTP) Pg no. 231 to 239 | Designing (aesthetically), providing, constructing and giving satisfactory trials of modernised Sewage Treatment Plant consisting of receiving chamber, screen chamber, grit chamber, measuring flume, distribution chamber with primary and secondary treatment, etc.as detailed below, administration block of suitable size including allied units for waste disposal with all civil and mechanical works involved, etc. complete (turnkeyjob). or / Designing (aesthetically), providing, constructing and giving satisfactory hydraulic testing, commissioning and giving satisfactory trials of modernised Sewage Treatment Plant consisting of inlet chamber, screen chamber, detritus tanks, parshall flume, primary settling tanks, aeration tanks, secondary settling tanks, sludge sump and pump house, sludge thickener, primary digester, secondary digester, SST sump and pump house, chlorine contact tank, chlorinators, chlorinator room, sump cum blending tank, PST sludge sump cum blending tank, pump house, sludge centrifuge, gas holder, necessary piping work with | | | | |
| | | Total Capacity of 30 MLD Plant | | | | |
| | | Cost of 20 MLD Plant | 20 | JOB | 98010000 | 98010000 |
| | | Add for additional 10 MLD | 10 | JOB | 3942000 | 39420000 |
| | | Sub - Total (A) | | | | 137,430,000.00 |
| | | HT Sub Station | | | | |
| b | MJP DSR 11-12 Pg 29, tr1-6 | Suppling & erecting approved make of 315 kVA 50 c/s oil immersed and naturally cooled indoor /outdoor type , copper wound transfoemer with delta conn. on HV side & star conn. on LV side with additional neutral brought out in load side , voltage rating 11/0.433 vV with tapping of +/- 2.5 % -5 % ,continuosly rated for full load with standered accessories complete with test certificate with losses below 580 watts at no load , 4200 watts at full load asp er IS 2026. and approved by engineering incharge. | 1 | No | 426822.1 | 426,822.10 |
| c | PWD DSR 12-13 Pg 79, 6-4-1 | Item No- 3 :- H T Metering Kiosk: Supplying ,erecting testing (By Licencee) , commissioning cubical comprising 11kV HT metering resin cast CTs, PTs, as per lincencees requirement. DO fuse set, AB Switch 200- 400 A capacity duly interconnected with use of suitable insulators by mainteninig adequate clearances as per IS, complete housed in the encloser made up of MS structure ans fibre glass 3 mm thick with gearbox & handle brought out for operating GOD, suitable door openings, locking arrangement as per approved design by Engineering incharge. | 1 | Each | 171329 | 171329 |
| d | Rate Analysis | Substation accessories | 1.00 | No | 1723603 | 1,723,603 |
| | | Sub total 1 | | | | 139,751,754 |
| | | Add for Work in Municipal Corporation Area @ 5% on the above sub total A | | | | 6,987,587.71 |
| | | Sub total 2 | | | | 146,739,341.88 |
| | | Add for Contengency @ 3% | | | | 4,402,180.26 |
| | | Total Estimation | | | | 151,141,522.13 |

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT OF SEWAGE TREATMENT PLANT AT SIDDARTH GARDEN

| Sr.No | Ref no | Description | Quantity | Unit | Rate | Amount (Rs.) |
|-------|--|--|----------|------|----------|----------------------|
| a | As per MJP DSR 2012 - 13 section1 (XVIII, Treatment plant, WTP) Pg no. 231 to 239 | Cyclic Activated Sludge Process: Designing, providing, constructing, hydraulic testing, commissioning and giving satisfactory trials of STP based on SBR technology consisting of Inlet Chamber, Screen Chamber, Detritus tanks, Distribution chamber and Biological CASP basins, sludge sump, chlorine contact tank, chlorinator room/shed, sludge centrifuge necessary piping work with required valves, gates, drains, pathways administration block cum laboratory, laboratory equipments, tools and plant, spare parts etc. complete as turnkey job with all involved civil, electrical and mechanical works inclusive of following items, units as per detailed specification for civil, electrical and mechanical components with all duties and taxes etc. complete to achieve BOD <5ppm, COD<100ppm, TSS<10ppm, to get recyclable quality of water for industrial/agricultural purpose. (In case cyclic activated sludge plant is designed for N,P outlet parameters shall also include TN<10ppm, Nh3N<2ppm and TP<1 ppm) | | | | |
| | | Cost of 4.5 MLD Plant | 4.5 | Job | 5238000 | 23571000 |
| | | Sub - Total (A) | | | | 23,571,000.00 |
| | | HT Sub Station | | | | |
| b | MJP DSR 11-12 Pg 29, tr1-1 | Suppling & erecting approved make of 63 kVA 50 c/s oil immersed and naturally cooled indoor /outdoor type , copper wound transfoemer with delta conn. on HV side & star conn. on LV side with additional neutral brought out in load side , voltage rating 11/0.433 vV with tapping of +/- 2.5 % -5 % ,continuosly rated for full load with standered accessories complete with test certificate with losses below 180 watts at no load , 1235watts at full load asp er IS 2026. and approved by engineering incharge. | 1 | No | 175820.1 | 175,820.10 |
| d | Rate Analysis | Substation accessories | 1.00 | No | 1040123 | 1,040,123 |
| | | Sub total 1 | | | | 24,786,943 |
| | | Add for Work in Municipal Corporation Area @ 5% on the above sub total A | | | | 1,239,347.13 |
| | | Sub total 2 | | | | 26,026,289.81 |
| | | Add for Contengency @ 3% | | | | 780,788.69 |
| | | Total Estimation | | | | 26,807,078.50 |

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT OF SEWAGE TREATMENT PLANT AT ZALTA

| Sr.No | Ref no | Description | Quantity | Unit | Rate | Amount (Rs.) |
|-------|--|--|----------|------|------------|-----------------------|
| a | As per MJP DSR 2012 - 13 section1 (XVIII, Treatment plant, WTP) Pg no. 231 to 239 | Cyclic Activated Sludge Process: Designing, providing, constructing, hydraulic testing, commissioning and giving satisfactory trials of STP based on SBR technology consisting of Inlet Chamber, Screen Chamber, Detritus tanks, Distribution chamber and Biological CASP basins, sludge sump, chlorine contact tank, chlorinator room/shed, sludge centrifuge necessary piping work with required valves, gates, drains, pathways administration block cum laboratory, laboratory equipments, tools and plant, spare parts etc. complete as turnkey job with all involved civil, electrical and mechanical works inclusive of following items, units as per detailed specification for civil, electrical and mechanical components with all duties and taxes etc. complete to achieve BOD <5ppm, COD<100ppm, TSS<10ppm, to get recyclable quality of water for industrial/agricultural purpose. (In case cyclic activated sludge plant is designed for N,P outlet parameters shall also include TN<10ppm, Nh3N<2ppm and TP<1 ppm) | | | | |
| | | Cost of 22.5 MLD Plant | 22.5 | Job | | |
| | | Cost of 20 MLD Plant | 20 | Job | | 98010000 |
| | | Add cost for 2.5 | 2.5 | MLD | 3942000 | 9855000 |
| | | Sub - Total (A) | | | | 107,865,000.00 |
| | | HT Sub Station | | | | |
| b | MJP DSR 11-12 Pg 29, tr1-1 | Suppling & erecting approved make of 630 kVA 50 c/s oil immersed and naturally cooled indoor /outdoor type , copper wound transfoemer with delta conn. on HV side & star conn. on LV side with additional neutral brought out in load side , voltage rating 11/0.433 vV with tapping of +/- 2.5 % -5 % ,continuously rated for full load with standered accessories complete with test certificate with losses below 1000 watts at no load , 7000 watts at full load asp er IS 2026. and approved by engineering incharge. | 1 | No | 693072.1 | 693,072.10 |
| c | PWD DSR 12-13 Pg 79, 6-4-1 | Item No- 3 ; - H T Metering Kiosk: Supplying ,erecting testing (By Licencee) , commissioning cubical comprising 11kV HT metering resin cast CTs, PTs, as per lincencees requirement. DO fuse set, AB Switch 200- 400 A capacity duly interconnected with use of suitable insulators by mainteninig adequate clearances as per IS, complete housed in the enclosure made up of MS structure ans fibre glass 3 mm thick with gearbox & handle brought out for operating GOD, suitable door openings, locking arrangement as per approved design by Engineering incharge. | 1 | Each | 171328.689 | 171329 |
| d | Rate Analysis | Substation accessories | 1.00 | No | 2242903 | 2,242,903 |
| | | Sub total 1 | | | | 110,972,304 |
| | | Add for Work in Municipal Corporation Area @ 5% on the above sub total A | | | | 5,548,615.21 |
| | | Sub total 2 | | | | 116,520,919.38 |
| | | Add for Contengency @ 3% | | | | 3,495,627.58 |
| | | Total Estimation | | | | 120,016,546.96 |

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT OF SEWAGE TREATMENT PLANT AT PADEGAON

| Sr.No | Ref no | Description | Quantity | Unit | Rate | Amount (Rs.) |
|-------|--|--|----------|------|-----------|----------------------|
| a | As per MJP DSR 2012 - 13 section1 (XVIII, Treatment plant, WTP) Pg no. 231 to 239 | Cyclic Activated Sludge Process: Designing, providing, constructing, hydraulic testing, commissioning and giving satisfactory trials of STP based on SBR technology consisting of Inlet Chamber, Screen Chamber, Detritus tanks, Distribution chamber and Biological CASP basins, sludge sump, chlorine contact tank, chlorinator room/shed, sludge centrifuge necessary piping work with required valves, gates, drains, pathways administration block cum laboratory, laboratory equipments, tools and plant, spare parts etc. complete as turnkey job with all involved civil, electrical and mechanical works inclusive of following items, units as per detailed specification for civil, electrical and mechanical components with all duties and taxes etc. complete to achieve BOD <5ppm, COD<100ppm, TSS<10ppm, to get recyclable quality of water for industrial/agricultural purpose. (In case cyclic activated sludge plant is designed for N,P outlet parameters shall also include TN<10ppm, Nh3N<2ppm and TP<1 ppm) | | | | |
| | | Cost of 10.5 MLD Plant | 10.5 | Job | | |
| | | Cost of 10 MLD Plant | 10 | Job | | 52272000 |
| | | Add 0.5 MLD Plant | 0.5 | MLD | 4590000 | 2295000 |
| | | Sub - Total (A) | | | | 54,567,000.00 |
| | | HT Sub Station | | | | |
| b | MJP DSR 11-12 Pg 29, tr1-7 | Suppling & erecting approved make of 400 kVA 50 c/s oil immersed and naturally cooled indoor /outdoor type , copper wound transfoemer with delta conn. on HV side & star conn. on LV side with additional neutral brought out in load side , voltage rating 11/0.433 vV with tapping of +/- 2.5 % -5 % ,continuously rated for full load with standered accessories complete with test certificate with losses below 715 watts at no load , 5000 watts at full load asp er IS 2026. and approved by engineering incharge. | 1 | No | 508277.1 | 508,277.10 |
| c | PWD DSR 12-13 Pg 79, 6-4-1 | Item No- 3 ; - H T Metering Kiosk: Supplying ,erecting testing (By Licencee) , commissioning cubical comprising 11kV HT metering resin cast CTs, PTs, as per lincencees requirement. DO fuse set, AB Switch 200- 400 A capacity duly interconnected with use of suitable insulators by mainteninig adequate clearences as per IS, complete housed in the enclosure made up of MS structure ans fibre glass 3 mm thick with gearbox & handle brought out for operating GOD, suitable door openings, locking arremgement as per approved design by Engineering incharge. | 1 | Each | 171328.69 | 171328.69 |
| d | RA | Substation accessories | 1.00 | No | 1723603 | 1,723,603 |
| | | Sub total 1 | | | | 56,970,209 |
| | | Add for Work in Municipal Corporation Area @ 5% on the above sub total A | | | | 2,848,510.46 |
| | | Sub total 2 | | | | 59,818,719.63 |
| | | Add for Contengency @ 3% | | | | 1,794,561.59 |
| | | Total Estimation | | | | 61,613,281.22 |

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT OF SEWAGE TREATMENT PLANT AT CIDCO (Airport)

| Sr.No | Ref no | Description | Quantity | Unit | Rate | Amount (Rs.) |
|-------|---|--|----------|------|-----------|-----------------------|
| a | As per MJP DSR 2012 -13 section1 (XVIII, Treatment plant, WTP) Pg no. 231 to 239 | Cyclic Activated Sludge Process: Designing, providing, constructing, hydraulic testing, commissioning and giving satisfactory trials of STP based on SBR technology consisting of Inlet Chamber, Screen Chamber, Detritus tanks, Distribution chamber and Biological CASP basins, sludge sump, chlorine contact tank, chlorinator room/shed, sludge centrifuge necessary piping work with required valves, gates, drains, pathways administration block cum laboratory, laboratory equipments, tools and plant, spare parts etc. complete as turnkey job with all involved civil, electrical and mechanical works inclusive of following items, units as per detailed specification for civil, electrical and mechanical components with all duties and taxes etc. complete to achieve BOD <5ppm, COD<100ppm, TSS<10ppm, to get recyclable quality of water for industrial/agricultural purpose. (In case cyclic activated sludge plant is designed for N,P outlet parameters shall also | | | | |
| | | Cost of 18.5 MLD Plant | | | | |
| | | Cost of 10 MLD Plant | 10 | Job | | 52272000 |
| | | Add 8.5 MLD Plant | 8.5 | MLD | 4590000 | 39015000 |
| | | Sub - Total (A) | | | | 91,287,000.00 |
| | | HT Sub Station | | | | |
| b | MJP DSR 11-12 Pg 29, tr1-1 | Suppling & erecting approved make of 630 kVA 50 c/s oil immersed and naturally cooled indoor /outdoor type , copper wound transfoemer with delta conn. on HV side & star conn. on LV side with additional neutral brought out in load side , voltage rating 11/0.433 vV with tapping of +/- 2.5 % -5 % ,continuosly rated for full load with standered accessories complete with test certificate with losses below 1000 watts at no load , 7000 watts at full load asp er IS 2026. and approved by engineering incharge. | 1 | No | 693072.1 | 693,072.10 |
| c | PWD DSR 12-13 Pg 79, 6-4-1 | Item No- 3 :- H T Metering Kiosk: Supplying ,erecting testing (By Licencee) , commissioning cubical comprising 11kV HT metering resin cast CTs, PTs, as per lincencees requirement. DO fuse set, AB Switch 200- 400 A capacity duly interconnected with use of suitable insulators by mainteninig adequate clearances as per IS, complete housed in the encloser made up of MS structure ans fibre glass 3 mm thick with gearbox & handle brought out for operating GOD, suitable door openings, locking arrangement as per approved design by Engineering incharge. | 1 | Each | 171328.69 | 171328.69 |
| d | RA | Substation accessories | 1.00 | No | 1723603 | 1,723,603 |
| | | Sub total 1 | | | | 93,875,004 |
| | | Add for Work in Municipal Corporation Area @ 5% on the above sub total A | | | | 4,693,750.21 |
| | | Sub total 2 | | | | 98,568,754.38 |
| | | Add for Contengency @ 3% | | | | 2,957,062.63 |
| | | Total Estimation | | | | 101,525,817.01 |

AURANGABAD MUNICIPAL CORPORATION

UNDERGROUND SEWERAGE SYSTEM FOR AURANGABAD

ABSTRACT FOR PUMPING MAINS FROM GOLWADI AND WARD NO 98 TO STP AT NAKSHATRAWADI

| Sr. No | Ref no | Item Description | Qty. | Rate (Rs) | Unit | Amount (Rs) |
|-----------|--|---|------|-----------|------|---------------|
| A. | | <u>MATERIAL</u> | | | | |
| 1 | MJP SOR 12-13 Pg no 186/ Item no 1z | Providing & supplying Glass fibre reinforced polyester pipes confirming to BIS 12709 / BIS 14402 with double bell REKA - GRP couplings EPDM rubber gaskets for sealing of follosing pressure diameter and stiffness class including cost of all material and labour required cost of all taxes (Central and local) insurance, transportation to site of work / store unloading and stacking etc. complete. | | | | |
| | | 1500mm dia. ,GRP Pipe | 1600 | 14366.56 | RM | 22,986,496.00 |
| 2 | MJP SOR Pg no 5/ Item no 3 (Viii) | Providing D.I.K-9 grade pipes with internal cement mortar lining including all taxes, insurance, railway freight, unloading from railway wagon, loading into truck, transport to departmental store/ site, unloading, stacking, etc. complete. | | | | |
| | | 450mm dia. , Ductile Iron K-9 | 1775 | 6539.52 | RM | 11,607,648.00 |
| 3 | | Providing and supplying ISI standard D.I. specials and fittings with sealing rubber gasket of S.B.R. complete with Cast Iron follower gland and M.S. nut and bolts coated or otherwise protected from rusting and subtable for D.I. pipes including cost of all labour and material and transportation transportation to stores/ site, loading, unloading including all taxes , etc. complete | | | | |
| | | 10% of cost of DI pipeline | | | | 1,160,764.80 |
| 4 | MJP SOR Pg no 153/ Item no 3 | Providing and supplying double flanged short body pattern type manually operated Butterfly Valve having body, disc and end cover in graded cast iron to IS210 Gr. FG 200 generally conforming in BS 5155, Synthetic rubber faced ring secured on disc by retaining ring with stainless steel screw stub shaft of stainless steel riding in teflon bearing excluding C.C. foundation / structural steel support confirming to IS 13095-1991. | | | | |
| | | 900 mm diameter PN1.0 Butterfly Valves | 1 | 313433.12 | Nos | 313,433.12 |

| Sr. No | Ref no | Item Description | Qty. | Rate (Rs) | Unit | Amount (Rs) |
|-----------|--|---|----------|-----------|------|----------------------|
| 5 | MJP SOR Pg no 149/ Item no 2 | Providing and supplying double flanged non rising stem type sluice valve having body, disc and end cover in graded cast iron to IS 210 Gr. FG 200 generally conforming in BS 558, Synthetic rubber faced ring secured on disc by retaining ring with stainless steel screw stub shaft of stainless steel riding in teflon bearing excluding C.C. foundation / structural steel support confirming to IS 14846-2000 including all central and local taxes, octroi, third party inspection charges, railway freight, unloading from railway wagons loading into truck and transportation to departmental stores stacking etc. complete. | | | | |
| | | Sluice valves as per I.S.14846-2006 | | | | |
| | | 400 mm dia. Sluice valve PN1.0 | 1 | 75089.04 | No | 75,089.04 |
| | | 600 mm dia. Sluice valve PN 1.0 | 1 | 174310.24 | No | 174,310.24 |
| 6 | MJP SOR Pg no 159/ Item no 8 and Pg no 160/ Item no 9 | Providing and supplying Kinetic double Orifice type Antitemper Air Valves as per IS 14845 standard specifications having small orifice elastic ball resting on a gun metal orifice nipple, large orifice stainless steel float seating on moulded seat ring, with built-in Kinetic features, isolating sluice valve mounted in horizontal position and operated by wheel gearing, inlet face and drilled. | | | | |
| | | 80 mm dia. Air valve | 3 | 15916.16 | Nos. | 47,748.48 |
| | | 200 mm dia. Air valve | 3 | 58925.36 | Nos. | 176,776.08 |
| | | Total Material | | | | 36,553,639.76 |
| B. | | <u>LABOUR</u> | | | | |
| 8 | MJP SOR Pg no / Item no 1,2,3 (average) | Excavation for pipe trenches in earth soils of all types of sand gravel and soft murum and hard murum including removing the excavated material upto a distance of 50 meters and lift as below stacking and spreading as directed dewatering shoring and strutting preparing the bed for the foundation including refilling the trench etc. complete. | | | | |
| | | Lift 0 to 1.5 m | 4026.715 | 158.4991 | Cum | 638,230.70 |
| | | Lift 1.5 to 3.0 m | 2168.15 | 170.2691 | Cum | 369,168.95 |
| 9 | MJP SOR Pg no / Item no 4,5 (average) | Excavation for pipe trenches in soft rock and hard rock by blasting including trimming and leveling the bed by chiselling where necessary and removing the excavated material and stacking it in measurable heaps within a distance of 50 M from the area and lifts as below normal dewatering, including backfilling etc. complete. | | | | |
| | | Lift 0 to 1.5 m | 4026.715 | 576.73 | Cum | 2,322,327.34 |
| | | Lift 1.5 to 3.0 m | 2168.15 | 598.13 | Cum | 1,296,835.56 |
| | | Lift 2.0 to 3.0 m | 0 | 813.735 | Cum | 0.00 |

| Sr. No | Ref no | Item Description | Qty. | Rate (Rs) | Unit | Amount (Rs) |
|--------|---|---|-------|-----------|------|--------------|
| 10 | MJP SOR Pg no / Item no 14 | Dewatering the excavated trenches and pools of water in the building trenches/pipeline trenches, well works by using pumps and other devices including disposing off water to safe distance as directed by Engineer-in-charge (including cost of machinery, labour, fuel), etc. complete. | | | | |
| | | 2 Nos of 5 HP pumps @ 12 hrs working per day for 30 days | 21600 | 62.916 | Cum | 1,358,985.60 |
| 11 | MJP SOR Pg no 3 / Item no 2 | Lowering, laying and jointing with SBR rubber gaskets DI K-9 S/S pipes with DI specials of following diameters in proper position, grade and alignment as directed by Engineer-in-charge including conveyance of material from stores to site of work, including cost of jointing material from stores to site of work including cost of jointing materials and rubber rings, labour, giving hydraulic testing etc. complete. | | | | |
| | | 450mm dia. , Ductile Iron K-9 | 1775 | 221.55 | RM | 393,251.25 |
| 12 | MJP SOR Pg no 214/ Item no 5 | Lowering laying and jointing in proper grade and alignment Prestressed cement concrete pipe with rubber ring joint including cost of conveyance from store to site of work all labour involved giving hydraulic test etc complete but excluding cost of rubber ring (For all class of pipes) | | | | |
| | | 1500mm dia. ,GRP Pipe | 1600 | 519.225 | RM | 830,760.00 |
| 13 | MJP SOR Pg no 155/ Item no 4 | Lowering, laying and jointing in position following diameter C.I.D.F. sluice valves and butterfly valves including cost of all labour, hydraulic testing etc. complete. | | | | |
| | | 400 mm dia. Sluice valve PN1.0 | 1 | 6491.1 | No | 6,491.10 |
| | | 900 mm diameter PN1.0 Butterfly Valves | 1 | 12742.8 | No | 12,742.80 |
| 14 | MJP SOR 2012-13 Pg no 161/Item no 10 | Lowering, laying, and fixing in proper alignment and position all types of C.I. air valves as directed by Engineer-in-charge including cost of conveyance from stores to site of work, cost of all material and giving satisfactory hydraulic testing etc. complete (for all class of valves). | | | | |
| | | 80 mm dia. Air valve | 3 | 267.75 | Nos. | 803.25 |
| | | 200 mm dia. Air valve | 3 | 442.05 | Nos. | 1,326.15 |

| Sr. No | Ref no | Item Description | Qty. | Rate (Rs) | Unit | Amount (Rs) |
|---------------------------|--|---|---------|-----------|------|----------------------|
| 15 | | Providing and constructing B.B. masonry valve chamber with 15 cm thick 1:3:6 proportion PCC bedding, excluding excavation, B.B. masonry in C.M. 1:5 Proportion precast SFRC frame and cover, etc. complete as directed by Engineer-in-charge. | | | | |
| | | Butterfly Valve 2.5 x 2.5 m | 10 | 18768.87 | | 187,688.70 |
| 16 | MJP SOR Page No: 58 Item No:13 | Refilling the trenches with available stuff with soft material first over pipe line and then hard material in 15 cm layer with all leads and lifts involved consolidation surcharging etc. complete. | | | | |
| | | | 9190.41 | 62.916 | Cum | 578,223.84 |
| 17 | | Disposing of surplus excavated stuff at distance of 5 km or as directed by engineer in charge. | 3199.32 | 62 | Cum | 197,693.98 |
| 18 | MJP SOR 2012-13 Pg no 3/34 /Item no 2 | Pipe Encasing and thrust blocks for the pipeline by encasing the pipe with RCC 1:2:4 including all material, labour, mechanical mixing, compaction, curing etc. complete as directed by Engineer in-charge | 119.69 | 5,300 | Cum | 634,392.31 |
| 19 | MJP SOR 2012-13 Pg no /Item no 8 | Providing steel bar reinforcement for pipe encasing, thrust block, pile foundation, pile cap, and pedestal as per IS: 1786 High Yield Strength Deformed Bars etc. complete.as per specifications etc complete as directed by Engineer-In- Charge. | 3.68 | 61,496 | MT | 226,306.75 |
| 20 | | Providing and filling in sand boxing in pipeline or for foundation with sand of approved quality including watering compaction, etc. complete. | | | | |
| | | | 6321.60 | 912 | Cum | 5,767,081.07 |
| | | Total cost of Labour | | | | 14,822,309.35 |
| | | Total cost of Material | | | | 36,553,639.76 |
| | | Total cost of Material and Labour | | | | 51,375,949.11 |
| Total Net Cost | | | | | | 51,375,949.11 |
| Contengencies @ 3% | | | | | | 1541278.473 |
| Total Gross Cost | | | | | | 52,917,227.58 |