## **ESTIMATE**

## NAME OF WORK: CONSTRUCTION OF BOOSTER TERTIARY PUMP HOUSE, BUS SHED &CIVIL WORKS FOR BURRIED PIPING IN ACADEMIC AREA

| SL      | ITEM & DESCRIPTION   | UNIT | QTY         | RATE    | AMOUNT    |
|---------|--|------|-------------|---------|-----------|
| NO<br>1 | Earthwark in avanuation by machanical manne (Hydraulia   |      | •           |         |           |
| 1       | Earthwork in excavation by mechanical means (Hydraulic excavator)/manual means in foundation,trenchs or drains |      |             |         |           |
|         | (Exceeding 30Cm in depth 1.5m in width as well as 10 Sq.M on   |      |             |         |           |
|         | Plan) including dressing of sides and ramming of bottoms   |      |             |         |           |
|         | including getting out the excavated soil and disposal of surplus   |      |             |         |           |
|         | excavated soil as directed, within a lead of 50Mtr. (All kinds of  |      |             |         |           |
|         | Soil)  |      |             |         |           |
|         |  | Cum  | 3401.00     | 116.41  | 395910.41 |
| 2       | Filling available excavated earth (excluding rock) in trenches,  |      |             |         |           |
|         | plinth, sides of foundation etc. in layers not exceeding 20Cm in   |      |             |         |           |
|         | depth, consolidating each deposited layer by ramming and   |      |             |         |           |
|         | watering, lead upto 50M and lift upto 1.5M   |      |             |         |           |
|         |  | Cum  | 2580.00     | 50.77   | 130986.6  |
| 3       | Supplying and filling in plinth/trench with river sand under   |      |             |         |           |
|         | floors including watering ramming consolidating and dressing   |      |             |         |           |
|         | complete.  | Cum  | 757.00      | 273.14  | 206766.98 |
| 4       | Providing and laying in position cement concrete of specified  |      |             |         |           |
|         | grade excluding the cost of centering and shuttering. Cement   |      |             |         |           |
|         | concrete in 1:4:8 (1 Cement : 4 sand:8 Coarse Aggregate 40mm Down)   |      |             |         |           |
|         | Down)  | Cum  | 42.00       | 3077.31 | 129247.02 |
| 5       | Providing and laying in position cement concrete of specified  |      |             |         |           |
|         | grade excluding the cost of centering and shuttering. Cement   |      |             |         |           |
|         | concrete in 1:2:4 (1 Cement : 2 sand:4 Coarse Aggregate 20mm Down) upto plinth level                           |      |             |         |           |
|         | Down) upto pinitii levei   |      |             |         |           |
|         |  |      |             |         |           |
|         |  | 0    | <b>5</b> 00 | 4065 20 | 20225 45  |
|         | Providing and laying in position Reinforced cement concrete of   | Cum  | 5.00        | 4065.29 | 20326.45  |
| 0       | specified grade excluding the cost of centering and shuttering.  |      |             |         |           |
|         | Cement concrete in 1:1½:3 (1 Cement : 1½ sand:3 Coarse   |      |             |         |           |
|         | Aggregate 20mm Down) upto plinth level   |      |             |         |           |
|         |  |      |             |         |           |
|         |  |      |             |         |           |
|         |  |      |             |         |           |
|         |  | Cum  | 18.00       | 4622.35 | 83202.30  |

| 7  | Providing and laying in position Reinforced cement concrete of specified grade excluding the cost of centering and shuttering. Cement concrete in 1:2:4 (1 Cement : 2 sand:4 Coarse Aggregate 20mm Down) upto plinth level   |      |        |         |            |
|----|--|------|--------|---------|------------|
|    |  | Cum  | 60.00  | 4181.09 | 250865.4   |
| 8  | Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3sand:6 Coarse aggregate) over 75mmm thick bed of dry brick ballast 40mm nominal size well rammed and consolidated and grouted with fine sand including finishing the top smooth above plinth level   |      |        |         |            |
|    |  | Sqm  | 112.50 | 267.13  | 30052.125  |
| 9  | Providing and laying Reinforced cement concrete in retaining walls return walls (any thickness) including attached pilasters Columns Piers Abutment Pilllars Post Buttress string or lacing courses Parapets Coping, slab beam, staircase, bed block anchor blocks plain window sills fillets etc upto floor Five Level excluding the cost of centering and shuttering and finishing |      |        |         |            |
|    | CC 1:1½:3 (1 Cement:1½ Coarse Sand:3 Coarse Aggregate 20mm Down)   |      |        |         |            |
|    |  | Cum  | 49.50  | 5019.81 | 248480.595 |
| 10 | Centering and shuttering including struting propping etc and removal of forms for:   |      |        |         |            |
|    | Foundations footing bases of column etc for mass concrete  |      |        |         |            |
|    |  | Sq.M | 92.50  | 110.23  | 10196.28   |
| 11 | Centering and shuttering including struting propping etc and removal of forms for:   |      |        |         |            |
|    | walls (Any thickness) including attached pillaster buttresses plinth and string  |      |        |         |            |
|    |  | Sqm  | 250.00 | 155.62  | 38905.00   |
| 12 | Centering and shuttering including struting propping etc and removal of forms for:   |      |        |         |            |
|    | Lintels beams plinth beams girders bressumers and cantilevers.   |      | 60.55  | 145.75  | 0=.5       |
| 12 | Centering and shuttering including struting propping etc and   | Sqm  | 60.00  | 145.75  | 8745.00    |
| 12 | removal of forms for:  |      |        |         |            |
|    | Columns Pillars piers Abutment Posts and strutts   | Sq.M | 124.00 | 213.01  | 26413.24   |

|    | centering and shuttering including strutting proping etc and removal of form work for:  |      |          |         |           |
|----|---|------|----------|---------|-----------|
|    | suspended floors, roofs, landing balconies and access platform with water proof ply of 12mm thick   |      |          |         |           |
|    |   | Sq.M | 500.00   | 325.89  | 162945    |
|    | Providing and placing reinforcement for R.C.C. work including straightining cutting bending placing in position and binding all complete.   |      |          |         |           |
|    | Thermo Mechanically Treated Bars  |      |          |         |           |
|    | ·   | Kg   | 13820.00 | 64.01   | 884618.20 |
|    | Brick work with F.P.S bricks of class designation 75 in foundation and plinth in cement mortar 1:6 (1cement: 6 Sand)  |      |          |         |           |
|    |   | Cum  | 37.50    | 2963.50 | 111131.25 |
|    | Brick work with F.P.S bricks of class designation 75 in Super structure above plinth levell upto V floor level in all shapes and size in Cement mortar 1:6 (1cement: 6 sand)  |      |          |         |           |
|    |   | Cum  | 50.00    | 3318.10 | 165905.00 |
|    | Supplying and fixing of roliing shutters of approved make and made of required M.S laths interlocked together through their entire length and jointed together at the end by end locks mounted on specially designed pipe shaft with brackets side guides and arrangements for inside and outside locking with push and pull operation complete including the cost of providing and fixing necessary 27.5CM long wire spring s grade No-2 and M.S top cover of required thickness for rolling shutters including primer coat. |      |          |         |           |
|    | 80x1.25 M.S lathe with 1.25mm thick top cover   |      |          |         |           |
|    |   | Sqm  | 10.50    | 3338.43 | 35053.52  |
|    | Providing and fixing of Ball bearing for rolling shutter  | Each | 2.00     | 205.48  | 410.96    |
| 19 | Steel work in built up tubular trusses including cutting, hoisting  |      |          |         |           |
|    | fixing in position and applying a priming coat of approved steel  |      |          |         |           |
|    | primer welded and bolted including special shaped washers etc   |      |          |         |           |
|    | complete  |      |          |         |           |
|    | Hot finished Seam less type tubes   | Kg   | 2600.00  | 98.46   | 255996.00 |
| 20 | White washing with KATNI lime to give an even shade   |      |          |         |           |
|    | New work (Three or more coat)   |      |          |         |           |
|    |   | Sqm  | 250.00   | 10.01   | 2502.50   |

| Providing and fixing ISI marked steel glazed doors, windows and ventilators of standard rolled steel sections, (as per IS 1038 with Z or L section) joints mitred and welsed with 15x3 mm ugs, 10cm long, embedded in cement concrete blocks 15x10x10 cm of 1:3:6 (1 cement: 3 Sand: 6 graded stone aggregate 20mm nominal size) or with wooden plugs and screw or rawl plugs and crews or with fixing clipsor with bolts and nuts as required, including providing and fixing of 4mm glass panes with glazing clips and special metal sash putty of approved make complete including applying a priming coat of approved steel primer, excluding the cost of metal beading and including other fitting stay, handle), necessary hinges or Pivots as required including primer coat. |   |  |   |  |
|--|---|--|---|--|
|  | Sq.M  | 20.00  | 1927.21   | 38544.20   |
| rement concrete flooring 1:2:4 (1 cement : 2 sand: 4 coarse aggregate) finished with a floating coat of neat cement including tement slurry, but excluding the cost of nosing of steps etc. complete   | •   |  |   |  |
| 0mm thick with 20mmm nominal size stone aggregate  | Sqm   | 209.00   | 237.98  | 49737.82   |
| ement plaster skirting (Upto 30CM height) with cement mortar :3( 1 cement : 3 Sand) finished with floating coat of neat tement.  |   |  |   |  |
| 8mm thick  | Sgm   | 100.00   | 189.16  | 18916.00   |
|  | and ventilators of standard rolled steel sections, (as per IS 1038 with Z or L section) joints mitred and welsed with 15x3 mm to 15x10x10 mgs, 10cm long, embedded in cement concrete blocks 15x10x10 mgs, 10cm long, embedded in cement concrete blocks 15x10x10 mgs, 10cm long, embedded in cement concrete blocks 15x10x10 mgs, 10cm long, embedded in cement concrete blocks 15x10x10 mgs, 10cm long, embedded in cement concrete blocks 15x10x10 mgs, 10cm long, embedded in cement size or rawl plugs and screws or with fixing clipsor with bolts and nuts as required, accluding providing and fixing of 4mm glass panes with glazing ips and special metal sash putty of approved make complete cluding applying a priming coat of approved steel primer, accluding the cost of metal beading and including other fitting tay, handle), necessary hinges or Pivots as required including rimer coat.  The ement concrete flooring 1:2:4 (1 cement : 2 sand: 4 coarse aggregate) finished with a floating coat of neat cement including ement slurry, but excluding the cost of nosing of steps etc. complete  The ement plaster skirting (Upto 30CM height) with cement mortar comments and finished with floating coat of neat ement. | in th Z or L section ) joints mitred and welsed with 15x3 mm ags, 10cm long, embedded in cement concrete blocks 15x10x10 m of 1:3:6 (1 cement: 3 Sand: 6 graded stone aggregate 20mm ominal size) or with wooden plugs and screw or rawl plugs and crews or with fixing clipsor with bolts and nuts as required, acluding providing and fixing of 4mm glass panes with glazing ips and special metal sash putty of approved make complete acluding applying a priming coat of approved steel primer, acluding the cost of metal beading and including other fitting tay, handle), necessary hinges or Pivots as required including rimer coat.  Sq.M  Sq.M | and ventilators of standard rolled steel sections, (as per IS 1038 rith Z or L section )joints mitred and welsed with 15x3 mm ags, 10cm long, embedded in cement concrete blocks 15x10x10 rith Z or L section )joints mitred and welsed with 15x3 mm ags, 10cm long, embedded in cement concrete blocks 15x10x10 rith of 1:3:6 (1 cement: 3 Sand: 6 graded stone aggregate 20mm ominal size) or with wooden plugs and screw or rawl plugs and crews or with fixing clipsor with bolts and nuts as required, reduding providing and fixing of 4mm glass panes with glazing ips and special metal sash putty of approved make complete reduding applying a priming coat of approved steel primer, scluding the cost of metal beading and including other fitting tay, handle),necessary hinges or Pivots as required including rimer coat.  Sq.M 20.00  Sq.M 20.00  Sq.M 20.00  The providing and including other fitting tay in the providing ement slurry, but excluding the cost of nosing of steps etc. omplete  Sq.M 20.00  The providing and fixing of steps etc. omplete starting (Upto 30CM height) with cement mortar and concrete flooring 1:2:4 (1 cement: 3 Sand) finished with floating coat of neat tement.  Sq.M 20.00 | nd ventilators of standard rolled steel sections, (as per IS 1038 rith Z or L section )joints mitred and welsed with 15x3 mm 1gs, 10cm long, embedded in cement concrete blocks 15x10x10 rement 3 Sand: 6 graded stone aggregate 20mm ominal size) or with wooden plugs and screw or rawl plugs and crews or with fixing clipsor with bolts and nuts as required, acluding providing and fixing of 4mm glass panes with glazing ips and special metal sash putty of approved make complete acluding applying a priming coat of approved steel primer, accluding the cost of metal beading and including other fitting tay, handle), necessary hinges or Pivots as required including rimer coat.  Sq.M 20.00 1927.21  Tement concrete flooring 1:2:4 (1 cement : 2 sand: 4 coarse aggregate) finished with a floating coat of neat cement including ement slurry, but excluding the cost of nosing of steps etc.  Tomplete  The methic with 20mmm nominal size stone aggregate  The size of size o |

|    |   |     | _     |        |          |
|----|---|-----|-------|--------|----------|
| 24 | Providing & fixing of precoated galvanised profile sheet  |     |       |        |          |
|    | (size,shape and pitch of corrugation as 5% total thickness (TCT)  |     |       | 875.00 |          |
|    | Zinc coating 120gms as per IS277 in approved by engineer in   |     |       |        |          |
|    | charge 0.05mm 240 Mpa mm steel grade and polyster top coat  |     |       |        |          |
|    | 15-18 micron to avoid scractches white transportation and   |     | 60.00 |        |          |
|    | should be supplied in single length upto 12.0 mtr or as should be   |     |       |        |          |
|    | supplied in single length upto 12.0 mtr as desirable by engineer  |     |       |        | 52500.00 |
|    | in charge. The sheet shall be fixed using self drilling/self tapping  | Sqm |       |        | 52500.00 |
|    | screw of size (5.5x5.5mm)with EPDM seal or with polymer   |     |       |        |          |
|    | coated J or L hooks,Bolts & Nuts 8mm dia with bitumen and   |     |       |        |          |
|    | G.I limpet washer filled with white lead complete upto any pitch  |     |       |        |          |
|    | in Horizontal/Vertical or curved surface excluding the cost of  |     |       |        |          |
|    | purlins rafters and trusses and including cutting to size and   |     |       |        |          |
|    | shape whenever required.  |     |       |        |          |
| 25 | Painting with aluminium enamel paint of approved brand and  |     |       |        |          |
|    | manufacture to give an even shade:  |     |       |        |          |
|    | One or more coat over new Work  | Sqm | 80.00 | 31.89  | 2551.20  |
| 26 | Conveyance of Materials such as stone metal refuse, garbage,  |     |       |        |          |
|    | rubbish etc including labour for loading and unloading. Beyond  |     |       |        |          |
|    | initial lead.   |     |       |        |          |
|    | truck load Upto 1km   | Cum | 61.00 | 41.00  | 2501.00  |
| 27 | Extra for Providing and fixing wind tie of 40x6 mm flat iron  |     |       |        |          |
|    | Section   | RM  | 70.00 | 94.49  | 6614.30  |
| 28 | Providing & fixing precoated galvanised steel sheet roofing   |     |       |        |          |
|    | accessories 0.5 +/- 5% total coated thickness (TCT),zinc coating  |     |       |        |          |
|    | 120gms as per IS 277 in 240mpa steel grade,5-7 micrones epoxy   |     |       |        |          |
|    | primer on both side of the sheet and polyster top coat 15-18  |     |       |        |          |
| 1  |   |     | I     | 1      |          |
|    | micrones using self drilling/self tapping screws with polymer   |     |       |        |          |
|    | micrones using self drilling/self tapping screws with polymer coated J or L hooks, bolts and nuts or G.I seam bolts & nuts, G.I |     |       |        |          |

|    | Ridges(600 mm overall all width)  | RM    | 11.00  | 635.00 | 6985.00    |
|----|---|-------|--------|--------|------------|
| 29 | 15mm cement plaster of mix 1:6 (1 cement: 6 Sand)over rough   |       |        |        |            |
|    | side of half brickwork  | 0     |        | 04.60  |            |
| 20 | 20mm cement plaster of mix 1:6 (1 cement: 6 Sand)   | Sqm   | 350.00 | 84.69  | 29641.50   |
| 30 | 20mm cement plaster of mix 1.0 (1 cement. 6 Sand)   | Sqm   | 212.50 | 102.34 | 21747.25   |
| 31 | Finishing wall with acrylic smooth exterior paint of required shade:  | -     |        |        |            |
|    | New work (two or more coat applied @1.67kg/10 Sq.M) over and including base coats of water proofing cement paint applied @ 2.2 Kg/10 Sq.M |       |        |        |            |
|    |   |       |        | (4.00  |            |
|    | Wall printing with plating and after a land   | Sqm   | 262.50 | 64.09  | 16823.63   |
| 32 | Wall painting with plastic emulsion paint of approved brand   |       |        |        |            |
|    | manufactura to give an even shade   |       |        |        |            |
|    | manufacture to give an even shade  One or more coat over old Work   |       |        |        |            |
|    |   | Sqm   | 108.00 | 39.35  | 4249.80    |
| 33 | Distempering with 1st quality acrylic distemper (readymade) of  |       |        |        |            |
|    |   |       |        |        |            |
|    | approved manufacture and of required shade and colour   |       |        |        |            |
|    |   |       |        |        |            |
|    | complete, as per manufacturer's specification.  New Work( Two or more coats )   |       |        |        |            |
|    | ivew work (1 wo of more coats)  | Sqm   | 20.00  | 19.25  | 385.00     |
| 34 | Supplying and fixing and fittins of PVC pipes of approved brand   |       |        |        |            |
|    | (Finolex/Supreme) complete with fittings including cutting and  |       |        |        |            |
|    | making good the walls etc. as per direction of Engineerin   |       |        |        |            |
|    | Charge.   |       |        |        |            |
|    | 110mm dia Pipes   | RM    | 112.50 | 302.61 | 34043.63   |
| 35 | Supplying and fixing and fittins of PVC door bend of approved   |       | 112.50 |        | 3 10 13.03 |
|    | brand (Finolex/Supreme) complete with fittings including  |       |        |        |            |
|    | cutting and making good the walls etc. as per direction of  |       |        |        |            |
|    | Engineerin Charge.  |       |        |        |            |
|    | 110mm dia Pipes   | Each  | 12.00  | 222.66 | 2671.92    |
| 36 | Providing and laying screed concrete on the top of the roof in  |       |        |        |            |
|    | 1:2:4 (1 cement :2 sand : 4 stone chips 10mm down gauge) with   |       |        |        |            |
|    | water proofing admixture Conforming to IS:2645, and crack   |       |        |        |            |
|    | resistance fibre like RECRON 3S or equivalent with slope of 1 in 100 and necessary hollering as per direction of Engineer- in-            |       |        |        |            |
|    | charge. (minimum thickness of 75mm)   |       |        |        |            |
|    |   | Sqm   | 187.50 | 315.88 | 59227.50   |
|    |   | oqiii | 107.50 | 515.00 | 33227.30   |

|    | Making khurras 45x45 cm with average minimum thickness of   |      |         |         |            |
|----|---|------|---------|---------|------------|
|    | 5cm cement concrete 1:2:4 (1 cement:2 coarse sand: 4 graded stone aggregate of 20mm nominal size) over P.V.C. sheet |      |         |         |            |
|    | 1mx1mx400 micron, finished with 12mm cement rounding the  |      |         |         |            |
|    | edge sand making and finishing the outlet complete.   |      |         |         |            |
|    |   | Each | 8.00    | 166.32  | 1330.56    |
|    | Painting with synthetic enamel paint of approved brand and  |      |         |         |            |
|    | manufacture to give an even shade:  |      |         |         |            |
|    | Two or more coats on new work   | _    |         |         |            |
|    | DIGM A NUM INC  | Sqm  | 60.00   | 48.96   | 2937.60    |
|    | DISMANTLING   |      |         |         |            |
| 39 | Demolishing cement concrete manually/ by mechanical means   |      |         |         |            |
|    | including disposal of materials with in 50mtr lead as per   |      |         |         |            |
|    | direction of Engineer inCharge.   |      |         |         |            |
|    | Cement concrete 1:4:8 or leanear Mix  |      |         |         |            |
|    |   | Cum  | 59.00   | 249.75  | 14735.25   |
| 40 | Demolishing brickwork manually/ by mechanical means   |      |         |         |            |
|    | including stacking of servicable materials and disposal of  |      |         |         |            |
|    | unservicable materials with in 50mtr lead as per direction of   |      |         |         |            |
|    | Engineer in Charge  | Cum  | 54.00   | 342.07  | 18471.78   |
| 41 | Extra for dismantling trusses rafters purlins etc of steel work for   |      |         |         |            |
|    |   |      |         |         |            |
|    | every additional height of one mtr or part there of beyond 5 mtrs   |      |         |         |            |
|    | Of cross sectional area 40 Square CM and above  | 17 - | 065.00  | 0.14    | 121.10     |
| 42 | Dismantling roofing including ridges hips valleys and gutters etc   | Kg   | 865.00  | 0.14    | 121.10     |
| 42 | Dismanting rooming mercoming rages inpo vaneyo and gatters etc  |      |         |         |            |
|    | and stacking the materials within 50mtr leadof  |      |         |         |            |
|    | G.S.Sheets  |      |         |         |            |
|    |   | Sqm  | 76.00   | 30.35   | 2306.60    |
| 43 | Making hole manually/by mechanical means for A.C ductingas  | - 1  | 7 0 0 0 |         |            |
|    | per requirement of drawing in academic & other buildings  |      |         |         |            |
|    | including making finish with 1:6 plaster and disposal of material   |      |         |         |            |
|    | with in 50m lead as per direction of engineer in charge.  | Cum  | 15.00   | 426.76  | 6401.40    |
|    |   |      |         | TOTAL=  | 3592103.85 |
|    |   |      |         | SAY Rs. | 3592110.00 |