



NAYA RAIPUR DEVELOPMENT AUTHORITY

**Tender Document for the
Construction of 10 nos. of Staff Quarter at Intake Well at
Village Tila Raipur and 24 nos. of Staff Quarter at Water
Treatment Plant at Pacheda, Naya Raipur**

(Following Three-Envelope Tender Procedure)

**Schedule – A
Price Tender
To be submitted in ENVELOPE-3**

NIT No.: 62/SQ/EE-PHE/ CE (E) / NRDA /2016-17 Raipur

Dated: 01. 04.2016

Issued by: Chief Executive Officer,
Naya Raipur Development Authority (NRDA)
Utility block, Capitol Complex, Sector- 19,
Naya Raipur- 492 002, Chhattisgarh
Tel No: + 91 771 2511500; Fax No.: +91 771 2511400.
Website: www.nayaraipur.gov.in

Tender Document Contains

- (a) Only schedule "A" and Section-I of schedule "D" are to be filled & signed by the tenderer
- (b) All the certificates as per pre qualification criteria shall be appended with relevant forms of schedule "D"

1. PART ONE (NRDA F-1)-(Attached herewith, to be submit along the tender)

Part (A)

- a) Press Notice
- b) Detailed NIT

Part (B)

a) Schedule-A

- (i) Cost Abstract
- (ii) Bill of Quantities

- b) Schedule-B –NIL
- c) Schedule-C –NIL
- d) Schedule-D

Section-I..... Technical tender forms

- (i) Letter of Technical Tender
- (ii) Tenderer's Information Sheet
- (iii) Annual Turnover
- (iv) Specific Construction Experience
- (v) Declaration
- (vi) Check list for Technical tender evaluation

Section –IIScope of work

Section –III..... Technical specifications of work

Section –IV..... Special Conditions of Contract

Section –V..... List of approved makes

Section –VI..... Drawings

- e) Schedule-E
- f) Schedule-F

2. PART TWO (NRDA F-2/3)-Standard form (Not Attached herewith, and not to be submitted along the tender) Important note: - Link site [http:// nayaraipur.com/documents/gcc.pdf](http://nayaraipur.com/documents/gcc.pdf)

1. General Guidelines
2. Tender
3. General rules and directions
4. Conditions of contract
5. Clauses of contract
6. Model rules relating to labour, water supply and sanitation in labour camps safety code
7. Contract forms
 - (a) Draft Format for Performance Security
 - (b) Earnest Money Deposit Form (Bank Guarantee)
 - (c) Format of Contract Agreement
 - (d) Draft Format for Performance Guarantee for Water Proofing and Anti-termite Works
 - (e) Indemnity Bond
 - (f) Indenture Bond
 - (g) Notice for Appointment of Arbitrator
8. Proforma of schedules (Schedule 'A' to Schedule 'F')

Naya Raipur Development Authority (NRDA) Raipur, Chhattisgarh

Document details

Name of work : “Construction of 10 nos of Staff Quarter at Intake Well at Village Tila Raipur and 24 nos. of Staff Quarter at Water Treatment Plant at Pacheda,Naya Raipur ”.

Name of Tenderer:

Details

- a) Cost of Tender Document : Rs
- b) EMD : Rs

Signature of Tenderer

Date: _____

Signature of Contractor.....

Signature of NRDA.....

COST ABSTRACT**Construction of 10 nos of Staff Quarter at Intake Well at Village Tila Raipur and 24 nos. of Staff Quarter at Water Treatment Plant at Pacheda, Naya Raipur .**

| Sr. No | Component of Work | Amount in INR | Amount in Words (In INR) |
|---------------|-----------------------------------|----------------------|----------------------------------|
| A | Civil Works | Rs. - | |
| | | | |
| B | Plumbing Works | Rs. - | |
| | | | |
| C | External Development | Rs. - | |
| | | | |
| D | Electrification Works | Rs. - | |
| | | | |
| | Total Project Cost (INR) | Rs. - | |

| Bill of Quantities | | | | | | |
|--|---|------|----------|-------------|------------------------|---------------|
| Construction of 10 nos of Staff Quarter at Intake Well at Village Tila Raipur and 24 nos. of Staff Quarter at Water Treatment Plant at Pacheda,Naya Raipur . | | | | | | |
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| A | CIVIL WORKS | | | | | |
| 1 | Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the excavated area), including dressing and leveling of pits.(work is Inclusive of All Lead ,Lift and Dewatering complete) | | | | | |
| a | In all types of soil | cum | 2759.93 | | | Rs. - |
| 2 | Surface dressing of the ground including removing vegetation and making up undulations and in-equalities not exceeding 15 cms in depth/ height including disposal of rubbish upto 1.5 m lift and lead upto 50m (at least 5m away from the dressed area). | sqm | 1204.08 | | | Rs. - |
| 3 | Providing and filling in plinth with sand/ Crusher dust under floor in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering, including dressing etc. complete. | cum | 722.45 | | | Rs. - |
| 4 | Backfilling: Filling from available excavated stuff (Excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering with a lead upto 50 M. and lift upto 1.5 M. | cum | 1839.95 | | | Rs. - |
| 5 | Providing and laying nominal mix cement concrete with crushed stone aggregate using concrete mixer in foundation, plinth and at ground level excluding cost of form work | | | | | |
| a | 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size). | cum | 145.00 | | | Rs. - |

| A CIVIL WORKS | | | | | | |
|---------------|---|-------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| 6 | Providing and laying design mix reinforcement cement concrete with crushed graded stone aggregate 20mm nominal size using batching plant, transit mixer and concrete pump, in all works upto floor five level excluding cost of reinforcement and form work. | | | | | |
| a | M-25 Grade | cum | 1376.09 | | | Rs. - |
| 7 | Water proofing material: Providing and mixing water proofing material in PCC/ RCC work in the proportion recommended by the manufacturer. | kg | 3996.46 | | | Rs. - |
| 8 | DPC: Providing and laying damp proof course (upto 50mm thick) with plain cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded crushed stone aggregate 20mm nominal size) including formwork. | cum | 13.44 | | | Rs. - |
| 9 | Applying a coat of hot bitumen VG-10 using @ 1.7kg/ sqm on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil. | sqm | 217.84 | | | Rs. - |
| 10 | Anti termite treatment | | | | | |
| a | Supplying chlorpyrifos/ Lindane emulsifiable concentrate of 20% in sealed containers including delivery as specified. | Litre | 1876.75 | | | Rs. - |
| b | Diluting chemical emulsion (chlorpyrifos/ lindane) in water as per manufacturers recommendation and injecting for pre-constructional curative cum preventive anti-termite treatment:(Five year service guarantee bond to be signed by contractor) | | | | | |
| i | Surface treatment by spreading emulsion under floor, over the plinth area before laying base concrete @ 5 litres / sqm | sqm | 1244.46 | | | Rs. - |

| A CIVIL WORKS | | | | | | |
|---------------|--|-------|-----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| ii | Treatment of inside of plinth masonry wall on using diluted chemical emulsion @ 1.5 litre per hole, including drilling 12 mm diameter holes in plinth wall below plinth protection at the interval of 300 mm and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand). | Metre | 3512.70 | | | Rs. - |
| iii | Treatment of outer side of plinth masonrywall using diluted chemical emulsion @ 1.5 litre per hole, including drilling 12 mm diameter holes in plinth wall at the junction of floor at the interval of 300 mm and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand). | Metre | 3512.70 | | | Rs. - |
| 11 | Providing and placing in position reinforcement for R.C.C. work including straightening, cutting, bending, binding etc. complete as per drawings including cost of binding wire all complete: | | | | | |
| a | Thermo-Mechanically treated Bars FE 500D | kg | 140806.10 | | | Rs. - |
| 12 | Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: | | | | | |
| a | Foundations, footings, base of columns and plinth beam in any shape and size. | sqm | 1683.00 | | | Rs. - |
| b | Columns, beams & walls- circular or any other geometrical shape other than square and rectangular in all sizes | sqm | 2138.00 | | | Rs. - |
| c | Window sills, anchor blocks, string course, bends, copings, bed plates and like. | sqm | 215.84 | | | Rs. - |

| A CIVIL WORKS | | | | | | |
|---------------|--|------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| d | Suspended floors, roofs, access platform, balconies (plain surfaces) and shelves (cast in situ) | sqm | 2238.21 | | | Rs. - |
| e | Beams, lintels, cantilevers & walls | sqm | 1499.20 | | | Rs. - |
| f | Vertical and horizontal fins individually or forming box, louvers bands, almirah shelves and likes. | sqm | 1844.00 | | | Rs. - |
| g | Weather shade, chhajja, Cornices and mouldings | sqm | 142.00 | | | Rs. - |
| h | Stair cases of all types excluding spiral and folded plate type, including risers and landings | sqm | 441.00 | | | Rs. - |
| 13 | Providing and laying AAC Autoclaved aerated concrete block confirming to IS: 2185 (Part-3)-1984) in block masonry with AAC blocks of width 100/200mm height 200/250/300mm,length 400/500/600 mm (approved sizes)with cement mortar 1:6 (1Cement :6 coarse sand) in superstructure. AAC blocks should have specific gravity 0.6 to 0.65 and crushing strength should not be less than 3 N/ sqmm (testing as per IS: 6441 - 1972). | cum | 1198.14 | | | Rs. - |

| A CIVIL WORKS | | | | | | |
|---------------------------|---|------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| 14 | Half brick thick brick masonry: Providing and laying AAC Autoclaved aerated concrete block conforming to IS: 2185 (Part-3)-1984) in block masonry with AAC blocks of width of 100mm thick (approved sizes) with cement mortar 1 :6 (1 Cement :6 coarse sand) in Superstructure. AAC blocks should have specific gravity 0.6 to 0.65 and crushing strength should not be less than 3N/ sqmm (testing as per IS: 6441 - 1972). (in superstructure above plinth level upto plinth level) | cum | 201.20 | | | Rs. - |
| 15 | Extra for providing and placing in position hopping 25x1.60 mm or 2 Nos 6mm dia MS bars reinforcement at every third course of half brick masonry. | sqm | 744.00 | | | Rs. - |
| Door Shutters | | | | | | |
| 16 | Providing and fixing flush door shutters, conforming to IS : 2202(Part-I),decorative type core of block board construction with frame of first class hard wood and well matched teak ply veneering with vertical grains or cross bands and face veneers on both faces of shutters excluding hinges. | | | | | |
| a | 35 mm. thick (single leaf) | Sqm | 455.90 | | | Rs. - |
| 17 | 25 mm. thick (double leaf for cupboard shutters with piano type hinges) | Sqm | 18.70 | | | Rs. - |
| 18 | Providing and fixing frosted glass panes with steel glazing clips and special metal sash putty of approved make in steel doors, windows,ventilators: | | | | | |
| a | 5 mm thick | Sqm | 98.87 | | | Rs. - |
| S.S. Door Fixtures | | | | | | |

| A CIVIL WORKS | | | | | | |
|---------------|--|------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| 19 | Providing and fixing antique/ SS finished brass butt hinges with antique/SS polished MS screw complete: | | | | | |
| a | 125x85x5.50 mm (Heavy Type) | each | 475.00 | | | Rs. - |
| 20 | Providing and fixing antique/ SS finished brass parliamentary hinges with antique/ SS polished MS screw complete: | | | | | |
| a | 150x125x27x5mm | each | 384.00 | | | Rs. - |
| 21 | Providing and fixing antique/ SS finished brass sliding door bolt with necessary bolts, nuts and antique/ SS polished MS screw complete: | | | | | |
| a | 300x16 mm | each | 384.00 | | | Rs. - |
| 22 | Providing and fixing antique/ SS finished brass door latch with antique/ SS polished MS screw complete: | | | | | |
| a | 300x16x5mm | each | 470.00 | | | Rs. - |
| 23 | MS Grill: Providing and fixing M.S. grill of approved pattern made of M.S. flats or square or round bars welded to steel frame of windows etc. including applying a priming coat welded to frame with all necessary fitting complete including applying a priming of red oxide zinc chromate primer. Wt: @30kg/sqm | kg | 16506.15 | | | Rs. - |

| A CIVIL WORKS | | | | | | |
|---------------|--|------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| 24 | Providing and fixing M.S. fan clamp/ hook for ceiling fan made out of 16 mm dia M.S. bar bent to shape with hooked ends in R.C.C. slabs, beams during laying including painting the exposed portion of loop. | Each | 210.00 | | | Rs. - |
| 25 | Providing and laying vitrified floor tiles with soluble salt printing, of size 600x600mm with water absorption less than 0.5% and conforming to IS : 15622 of approved make, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting the joints with white cement and matching pigments etc. complete: (Floor tiles & Skirting) | Sqm | 1075.67 | | | Rs. - |
| 26 | Providing and laying ceramic glazed floor tiles conforming to IS : 15622 of approved size, make, colour, shade laid on 20 mm thick Cement Mortar 1:4 (1 cement : 4 coarse sand) including pointing the joints with white cement mixed with matching pigment etc., complete. | | | | | |
| a | Size 300x300mm | Sqm | 164.55 | | | Rs. - |
| 27 | 8mm thick Granite tile work (machine cut, table rubbed & mirror polished) for wall lining (veneer work) in cement mortar 1:3 (1 cement : 3 coarse sand) including pointing with cement mortar 1:2 (1 white cement : 2 marble dust) mixed with matching pigment. | | | | | |
| a | Granite stone grey/pink | Sqm | 121.08 | | | Rs. - |
| 28 | KOTA stone slab 25mm thick in risers and treads of steps, skirting dado and pillar laid in 12mm (Average) thick cement mortar 1:3 (1cement : 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete. (single stone is to be used for riser and treads of steps and the width of stone for skirting and dado shall be equal to the height of skirting/ dado up to length of 1.0 M.) | Sqm | 1825.69 | | | Rs. - |

| A CIVIL WORKS | | | | | | |
|---------------|--|-------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| 29 | Extra for nosing in steps and treads of kota stone slab. | metre | 620.00 | | | Rs. - |
| 30 | Providing and making 15mm thick cement plaster on the rough side of single or half brick wall of mix: | | | | | |
| a | In Cement Mortar 1:4 (1 cement : 4 fine sand) | Sqm | 6034.90 | | | Rs. - |
| 31 | Providing and making 12mm thick cement plaster of mix: | | | | | |
| a | In Cement Mortar 1:4 (1 cement : 4 fine sand) | Sqm | 4254.13 | | | Rs. - |
| 32 | 6mm thick cement plaster of mix: (ceiling) | | | | | |
| | In Cement mortar 1:3 (1 cement : 3 fine sand) | Sqm | 2366.70 | | | Rs. - |
| 33 | Preparation of wall surface by applying a coat of putty comprising of chalk mitti, varnish and white lead in ratio 2½:1:1 (2½ kg chalk mitti : 1 litre varnish : 1 kg white lead) respectively, sand papering and making the surface smooth to proper shape and presentable conditions. | Sqm | 6399.54 | | | Rs. - |

| A CIVIL WORKS | | | | | | |
|---------------|---|------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| 34 | Painting exterior surface with PREMIUM ACRYLIC SMOOTH exterior paint of required shade as per manufacturer's specifications to give protective and decorative finish including cleaning washing of surface etc.complete with: | | | | | |
| a | On new work (Two or more coats applied @ 1.43 ltr/ 10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm) | Sqm | 4964.50 | | | Rs. - |
| 35 | Plinth protection: Making 50mm thick plinth protection of plain cement concrete 1:3:6 (1cement : 3 coarse sand : 6 graded crushed stone aggregate 20mmnominal size) over 75mm bed of dry brick ballast 40mm nominal size well rammed and consolidated and grouted with sand including finishing the top smooth. PCC | Sqm | 2587.70 | | | Rs. - |
| 36 | Painting on new work (two or more coats) to give an even shade with: | | | | | |
| a | Premium synthetic enamel paint | sqm | 1859.09 | | | Rs. - |
| 37 | Providing and fixing chicken mesh weighting not less than 250 gms/sqm as per IS : specification in the required width with 40mm long steel nails on vertical and horizontal surface near R.C.C. and brick wallsjunctions including scaffolding and all lead and lifts etc. complete before plastering upto 10mts in height. | | | | | |
| | | Sqm | 2238.06 | | | Rs. - |
| 38 | Providing and laying water proofing treatment in sunken portion of WCs,bathroom, kitchen etc., by applying cement slurry mixed with water proofing cement compound consisting of following applications includingsurface preparation:i) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. This layer will be allowed toair cure for 4 hours.ii) Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound@ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry. | sqm | 126.34 | | | Rs. - |

| A CIVIL WORKS | | | | | | |
|---------------|--|-------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| 39 | Making groove in cement plaster while plastering upto 10 mm deep and 10 mm wide. | metre | 20011.26 | | | Rs. - |
| 40 | Distempering with acrylic wash able distemper to give an even shade | | | | | |
| a | on new work (Two or more coats) | sqm | 5308.59 | | | Rs. - |
| 41 | Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1mx1mx650 micron thick (0.65mm), finished with 12mm cement plaster 1:3 (1 cement : 3coarse sand) and a coat of neat cement rounding the edge sand making and finishing the outlet complete. | each | 74.00 | | | Rs. - |
| 42 | Cement Concrete Jali 50 mm thick | sqm | 187.49 | | | Rs. - |
| 43 | Providing and fixing ceramic glazed wall tiles conforming to IS : 15622 of approved make, colours, shades and size on wall and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with matching pigment complete. | | | | | |
| a | Size above 200x300mm | sqm | 756.75 | | | Rs. - |

| A CIVIL WORKS | | | | | | |
|---------------------------------|---|------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| 44 | Providing and fixing aluminium work for doors, windows, ventilators and partitions made out of extruded aluminium standard sections (main section with minimum 1.5mm thickness) conforming to IS: 733, IS: 1285 mitred and jointed mechanically including aluminium cleats, neoprene weather stripping gasket beveled edge beading, screws duly fixed in wall/floor with fixing clips or hold fasteners or bolts and nuts as required aluminium sections shall be anodized transparent or dyed to approved shade according to IS: 1868, minimum anodic coating shall be of grade AC-15. (Glazing to be paid for separately: | | | | | |
| a | For shutter of doors, windows & ventilators including providing and making provision for fixing of fitting wherever required including the cost of PVC/neoprene gasket required (Fittings shall be paid for separately). ISA 35X35X4 @2.10kg/m | Kg | 536.76 | | | Rs. - |
| 45 | Designing, providing and fixing aluminium frame work made of special aluminium section on building face with M.S. angle iron brackets fixed on RCC structure with S.S. hold fasteners, including providing and fixing two sided structural adhesive tape of appropriate grade (NORTON or equivalent), on aluminium sections for fixing aluminium/ glass panel,sealing on periphery of frame work, by providing EPDM gasket, silicon weather sealant between aluminium frame and building structure including hire charges of double scaffolding complete. | Sqm | 718.35 | | | Rs. - |
| Sub total of CIVIL Works | | | | | | Rs. - |

| Bill of Quantities | | | | | | |
|--|--|-------|----------|-------------|------------------------|---------------|
| Construction of 10 nos of Staff Quarter at Intake Well at Village Tila Raipur and 24 nos. of Staff Quarter at Water Treatment Plant at Pacheda,Naya Raipur . | | | | | | |
| B Internal Plumbing Works | | | | | | |
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| 1 | Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes on wall surface, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. | | | | | |
| a | 20 mm nominal dia .Pipes. | metre | 315 | | | Rs. - |
| b | 32mm nominal dia .Pipes. (for distribution water pipe) | metre | 80 | | | Rs. - |
| 2 | Providing and fixing on wall face UV stabilized Unplasticised Rigid PVC pipes (single socketed) having 3.2 mm wall thickness conforming to IS : 13592 (4 kg/sqcm) including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion | | | | | |
| a | 110 mm dia pipe. (for Sewerage down pipe) | metre | 68 | | | Rs. - |
| b | 75 mm dia pipe. (for Sewerage collection pipe) | metre | 1340 | | | Rs. - |

| B Internal Plumbing Works | | | | | | |
|---------------------------|---|------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| 3 | Providing and fixing on wall face UV stabilized Unplasticised - PVC moulded fittings/ accessories having 3.2mm wall thickness for Rigid PVC pipes conforming to IS : 13592 (heavy) jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion. | | | | | |
| a | "P" trap 110mmx110mm long | Nos. | 26 | | | Rs. - |
| b | Vent cover; 110 mm | Nos. | 20 | | | Rs. - |
| c | Multi floor trap 110 | Nos. | 54 | | | Rs. - |
| d | Nahani trap 110x75mm | Nos. | 41 | | | Rs. - |
| e | Plain bend; 110 mm | Nos. | 50 | | | Rs. - |
| f | Tee/ Tee with door/ Bend 45°/ Bend 90,110 mm | Nos. | 50 | | | Rs. - |

| B Internal Plumbing Works | | | | | | |
|---------------------------|---|------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| 4 | Providing and fixing vitreous china water closet squatting pan (Indian type) including cutting and making good the walls and floors wherever required: | | | | | |
| a | White Orissa pattern W.C. pan of size 580x440 mm | each | 15 | | | Rs. - |
| 5 | Providing and fixing white vitreous china pedestal type (European type/ wash down type) water closet pan including cutting and making good the walls and floors wherever required: | | | | | |
| a | White pedestal type | Each | 15 | | | Rs. - |
| b | White wall hung type | each | 19 | | | Rs. - |
| 6 | Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fittings : | | | | | |
| c | White Size 550x400 mm | each | 19 | | | Rs. - |
| 7 | Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink without drain board as per IS 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required | | | | | |

| B Internal Plumbing Works | | | | | | |
|---------------------------|--|------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| a | 560x410 mm bowl depth 215 mm. | each | 12 | | | Rs. - |
| 8 | Providing and fixing flexible P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete. | | | | | |
| a | 32 mm dia | each | 26 | | | Rs. - |
| 9 | Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete : | | | | | |
| a | 20 mm nominal bore | each | 32 | | | Rs. - |
| 10 | Providing and fixing 15 mm nominal bore Brass bib/stop cock of approved quality and weighting not less than 400 grams): | | | | | |
| a | Bib cock | each | 61 | | | Rs. - |
| b | Stop cock | each | 43 | | | Rs. - |
| 11 | Providing and fixing 15 mm nominal bore C.P. brass fittings of approved make and conforming to IS:8931 including C.P. brass extension if required: (Make: Jaguar) | | | | | |

| B Internal Plumbing Works | | | | | | |
|---------------------------|---|------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| a | Long nose bib cock (500gms) | each | 30 | | | Rs. - |
| b | Bottle trap set with extension pipes | each | 28 | | | Rs. - |
| c | Shower Rose revolving type (150mm) | each | 28 | | | Rs. - |
| d | Toilet Paper holder | each | 28 | | | Rs. - |
| e | Towel Rail (600mm long x 20 mm dia) | each | 28 | | | Rs. - |
| f | Soap Dish Plate | each | 28 | | | Rs. - |
| g | Wall mixer (tele-phonic type) with crutch arrangement for hand shower (1400gms) | each | 28 | | | Rs. - |

| B Internal Plumbing Works | | | | | | |
|---------------------------|--|------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| 12 | Providing and fixing stainless steel drain jali of approved make/quality. | each | 40 | | | Rs. - |
| 13 | Providing and fixing 600x450 mm beveled edge 4mm mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete. | Each | 30 | | | Rs. - |
| | | | 8 | | | |
| 14 | Providing and fixing 600x120x5mm glass shelf with edges rounded off supported on anodised aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs etc., complete | each | 30 | | | Rs. - |
| 15 | Providing and fixing M.S. holder-bat clamps of approved design to Sand Cast iron/cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) including cost of cutting holes and making good the walls etc. : | | | | | |

| B Internal Plumbing Works | | | | | | |
|------------------------------------|--|-------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| a | For 100 mm dia pipe | each | 90 | | | Rs. - |
| 16 | Providing and placing on terrace (at all levels) polyethylene water storage tank ISI marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank | litre | 15000 | | | Rs. - |
| 17 | Constructing masonry Chamber 30x30x50 cm, inside with modular Fly Ash bricks of 35 kg/ cm ² in cement mortar 1:4 (1 cement : 4 coarse sand) for stop cock, necessary excavation foundation concrete 1:5:10 (1 cement : 5 fine sand:10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12mm thick | each | 7 | | | Rs. - |
| 18 | Constructing brick masonry manhole with well burnt modular Fly ash bricks crushing strength not less than 35kg/ cm ² in cement mortar 1:4 (1 cement : 4 coarse sand), R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation in cement concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size) inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design : | | | | | |
| a | Inside size 90x80 cm and 45 cm deep total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) : | each | 7 | | | Rs. - |
| 19 | Extra for depth for manholes | | | | | |
| a | Size 90x80 cm | metre | 7 | | | Rs. - |
| Sub total of Plumbing Works | | | | | | Rs. - |

| Bill of Quantities | | | | | | |
|--|--|------|----------|-------------|------------------------|---------------|
| Construction of 10 nos of Staff Quarter at Intake Well at Village Tila Raipur and 24 nos. of Staff Quarter at Water Treatment Plant at Pacheda,Naya Raipur . | | | | | | |
| C EXTERNAL WORK | | | | | | |
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| 1 | Clearing and grubbing row land including uprooting rank vegetation, grass, bushes, shrubs, saplings and trees girth up to 300 mm, removal of stumps of trees cut earlier and disposal of unserviceable materials and stacking of serviceable material to be used or auctioned up to a lead of 1000 meters including removal and disposal of top organic soil not exceeding 150 mm in thickness if required and as per relevant clauses of section-200. | | | | | |
| | In area of light jungle | Ha | 0.11 | | | Rs. - |
| 2 | Construction of embankment with Material Obtained from Borrow Pits/Borrow Area (Construction of embankment with approved material/selected soil having C.B.R.>5 (unless specified otherwise in the contract) obtained from borrow pits with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement of table 300-2) | cum | 525.00 | | | Rs. - |
| 3 | Granular Sub-base as per Table:- 400-1 | | | | | |
| | Construction of granular sub-base by providing close graded Material, , carriage of mixed Material to work site, spreading in uniform layers with motor grader on prepared surface watering, rolling and compacting with vibratory power roller at OMC to achieve the desired density, complete as per clause 401 | | | | | |
| | Plant Mix Method | | | | | |
| a | Grading -VI Material | cum | 210.00 | | | Rs. - |

| C EXTERNAL WORK | | | | | | |
|-----------------|---|------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| 4 | Dry Lean Cement Concrete Sub-base as per IRC:SP-49 (Construction of dry lean cement concrete Sub-base over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 26.5 mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per table 600-1, cement content not to be less than 150 kg/cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller,finishing and curing as per clause 601.) | cum | 81.73 | | | Rs. - |
| 5 | Cement Concrete Pavement (Construction of un-reinforced, dowel jointed, plain cement concrete pavement as per IRC:58 over a prepared sub-base, coarse and fine aggregate conforming to IS:383 and graded as per table 600-3 mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver, spread, compacted and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, dowel bar, tie rod, admixtures as approved, curing compound, finishing to lines and grades as per drawing as per clause 602.) | | | | | |
| a | With Cement concrete grade M-40 and minimum cement content @ 400 kg/cum.(6m wide) | cum | 140.66 | | | Rs. - |
| 6 | Planting of Trees and their maintenance for one year (Planting of trees by the row side(Avenue trees) in 0.60m dia.holes, 1m. Deep dug in the ground, mixing the soil with decayed farm yard/sludge manure,planting the saplings, backfilling the trench, watering, fixing the tree guard and maintaining the plants for one year | Each | 39.00 | | | Rs. - |

| C EXTERNAL WORK | | | | | | |
|-----------------|--|-------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| 7 | Cast in Situ Cement Concrete M20 kerb (Construction of cement concrete kerb with top and bottom width 115 and 165 mm respectively, 250 mm high in PCC M20 grade on PCC M10 grade foundation 150 mm thick, foundation having 50 mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete as per clause 409) | Meter | 372.39 | | | Rs. - |
| 8 | Footpaths and Separators (Construction of footpath/separator by providing a 150 mm compacted granular sub base as per clause 401 and 75 mm thick cement concrete base with PCC grade M-15, overlaid with precast cement concrete tiles 25mm thick fixed in 20mm) | sqm | 140.04 | | | Rs. - |
| 9 | Painting on Concrete Surfaces | | | | | |
| | Two coats on new surfaces (Painting two coats after filling the surface with synthetic enamel paint in all shades on new plastered concrete surfaces) | Sqm | 372.39 | | | Rs. - |
| 10 | Excavation for all types and sizes of Foundations, trenches and drains or for any other purposes including disposal of excavated stuff upto 1.5 lift and lead upto 50 m(at least away from the excavated area), including dressing and levelling of pits | | | | | |
| a | in all types of soil | cum | 753.37 | | | Rs. - |
| 11 | Surface dressing of the ground including removing vegetation and making up undulations and in-equalities not exceeding 15 cms in depth/ height including disposal of rubbish upto 1.5 m lift and lead upto 50m (at least 5m away from the dressed area). | Sqm | 35.24 | | | Rs. - |

| C EXTERNAL WORK | | | | | | |
|-----------------|--|------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| 12 | Filling from available excavated stuff (Excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20 cm in depth consolidating each deposited layer by ramming and watering with a lead upto 50 M and lift upto 1.5 M. | cum | 353.52 | | | Rs. - |
| 13 | Providing and filling in plinth with sand/ Crusher dust under floor in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering, including dressing etc. complete. | cum | 4707.19 | | | Rs. - |
| 14 | Centring and shuttering at all levels including strutting, propping etc. and removal of form for : | | | | | |
| a | Foundations, footings, base of columns and plinth beam in any shape and size. | Sqm | 96.39 | | | Rs. - |
| b | Beams, lintels, cantilevers & walls | Sqm | 178.64 | | | Rs. - |
| 15 | Providing and laying nominal mix cement concrete with crushed stone aggregate using concrete mixer in all works upto floor five level excluding cost of form work. | | | | | |
| a | 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size). | cum | 40.25 | | | Rs. - |
| b | 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size). | cum | 21.40 | | | Rs. - |

| C EXTERNAL WORK | | | | | | |
|-----------------|--|------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| 16 | Providing and laying design mix reinforced cement concrete with crushed graded stone aggregate 20mm nominal size using batching plant, transit mixer and concrete pump, in all works upto plinth level excluding cost of form work. | | | | | |
| a | M-25 (using minimum cement 410 kg/cum concrete) | cum | 47.46 | | | Rs. - |
| 17 | Providing and placing in position reinforcement for R.C.C. work including straightening, cutting, bending, binding etc. complete as per drawings including cost of binding wire in foundation and plinth all complete: | | | | | |
| a | Thermo-Mechanically treated bars FE 500D | kg | 2226.25 | | | Rs. - |
| 18 | Providing and mixing water proofing material in PCC/ RCC work in the proportion recommended by the manufacturer. | kg | 379.70 | | | Rs. - |
| 19 | Random rubble masonry with hard stone in foundation and plinth in Cement Mortar 1:6 (1 Cement : 6 Coarse Sand) including leveling up with cement concrete 1:6:12 (1 cement : 6 coarse sand: 12 stone aggregate 20mm nominal size) at plinth level. | cum | 379.81 | | | Rs. - |
| 20 | Brick work with modular fly-ash lime bricks (FaLG Bricks) conforming to IS:12894-2002 of class designation 4.0 in foundation and plinth in: | | | | | |
| a | Cement Mortar 1:6 (1 cement : 6 coarse sand) | cum | 14.00 | | | Rs. - |
| 21 | Steel work welded in built up sections/ framed work including cutting, hoisting, fixing in position and applying a priming coat of red oxide zinc chromate primer. | | | | | |

| C EXTERNAL WORK | | | | | | |
|-----------------|---|------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| a | In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works. | kg | 11895.24 | | | Rs. - |
| 22 | Providing and making 15mm thick cement plaster on the rough side of single or half brick wall of mix: | | | | | |
| a | In Cement Mortar 1:4 (1 cement : 4 fine sand) | Sqm | 105.40 | | | Rs. - |
| b | In Cement Mortar 1:6 (1 cement : 6 fine sand) | sqm | 210.07 | | | Rs. - |
| 23 | Pointing on stone work with cement Mortar 1:3 (1 cement : 3 fine sand) | | | | | |
| a | Ruled pointing | Sqm | 757.49 | | | Rs. - |
| 24 | Painting on new work (two or more coats) to give an even shade with: | | | | | |
| a | Satin synthetic enamel paint (top most approved branded quality) | sqm | 757.49 | | | Rs. - |
| 25 | Providing and fixing on wall face UV stabilized Unplasticised - PVC moulded fittings/ accessories having 3.2mm wall thickness for Rigid PVC pipes conforming to IS : 13592 (heavy) jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion. | | | | | |
| | Vent cover | | | | | |

| C EXTERNAL WORK | | | | | | |
|-----------------|--|-------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| a | 75 mm | Each | 3.00 | | | Rs. - |
| 26 | Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank | | | | | |
| a | 5 nos of tank @ 2000 Litre each | litre | 16000.00 | | | Rs. - |
| 27 | Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910 on 12mm dia steel bar conforming to IS : 1786 having minimum cross section as 23 mmx25mm and over all minimum length 263 mm and width as 165mm with minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design. | Each | 40.00 | | | Rs. - |
| 28 | Providing and fixing in position precast circular 560mm internal dia SFRC/R.C.C. manhole cover or cover and frame of approved quality: | | | | | |
| a | Cover and frame H D - 20 | Each | 3.00 | | | Rs. - |

| C EXTERNAL WORK | | | | | | |
|-----------------|---|-------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| 29 | Providing and constructing brick masonry chamber for underground pipe and bends with well burnt modular clay bricks crushing strength not less than 35kg/cm ² in cement mortar 1:4 (1 cement : 4 coarse sand) RCC cover of suitable size and 75mm thick with 1:1.5:3 mix (1 cement :1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size) including reinforcement 8mm dia bars at 150mm both ways and MS hooks for lifting, including foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished smooth with a floating coat of neat cement on walls and bed concrete etc.complete as per standard design : | | | | | |
| a | Inside dimensions 450x600 mm and 45 cm deep for single pipe line : | each | 49.00 | | | Rs. - |
| 30 | Providing and constructing soak pit 1.20x1.20x1.20m filled with brickbats including S.W. drain pipe 100 mm diameter and 1.20 m long complete as per standard design. | Each | 15.00 | | | Rs. - |
| 31 | Providing,layingand jointing following P.V.C.U pipes with solvent cement joint for Non pressure gravity drain and sewer applications including testing of joints,cost of jointing materials etc.complete in allrespect. | | | | | |
| a | 110 mm | metre | 489.00 | | | Rs. - |
| b | 160 mm | metre | 60.00 | | | Rs. - |
| 32 | Earth work in excavation for pipe trench in ordinary soil are as including dressing, watering and ramming and disposal of excavated earth lead up to 50meter sand lift up to 1.5m, disposal earth to be leveled, neatly dressed. | | | | | |
| | In all types of soils such as moorum, sand, sandy silt, clay, black cotton soil, kankar etc | | | | | |

| C EXTERNAL WORK | | | | | | |
|------------------------------------|---|-------------|-----------------|--------------------|-------------------------------|----------------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| a | Depth of excavation up to 1.5 m | | 58.35 | | | Rs. - |
| 33 | Filling available excavated earth in trenches, plinth sides of foundation in layers not exceeding 20cm. in depth including consolidation of each layer by ramming watering, lead upto 50m and lift up to 1.5m in all kinds of soils | cum | 23.68 | | | Rs. - |
| 34 | Providing and laying mechanically mixed cement concrete with crushed stone aggregate excluding centering and shuttering (with 40mm nominal size graded stone aggregate) | | | | | |
| a | M-10 Grade | cum | 14.00 | | | Rs. - |
| 35 | Providing and fixing G.I. chain link fabric fencing of required width in mesh size 50x50 mm including strengthening with 2 mm dia wire or nuts, bolts and washers as required complete as per the direction of Engineer-in-charge. | | | | | |
| a | Made of G.I. wire of dia 4 mm | sqm | 693.60 | | | Rs. - |
| 36 | Drain cover: Providing,laying and placing of precast cement concrete M-35 grade, including reinforcement,provision of HYSD reinforcement consisting 8mm dia horizontal bars @ 150 mm c/c and L-shaped 10 mm dia vertical bars @ 150 mm c/c (L= 1400 mm) including cutting , bending and binding wire, placing in position , providing shuttering and concreting by using concrete mixer, compaction by vibration etc complete as per drawings and technical specifications. form work etc. complete . | cum | 1.28 | | | Rs. - |
| Sub total of External Works | | | | | | Rs. 0.000 |

| Bill of Quantities | | | | | | |
|--|--|-------|----------|-------------|------------------------|---------------|
| Construction of 10 nos of Staff Quarter at Intake Well at Village Tila Raipur and 24 nos. of Staff Quarter at Water Treatment Plant at Pacheda,Naya Raipur . | | | | | | |
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| C ELECTRICAL WORKS | | | | | | |
| A | | | | | | |
| 1 | Supplying and laying following sizes one number XLPE, steel armoured, aluminium conductor power cable of 11 KV grade in existing RCC/ HUME/ STONEWARE/ METAL pipe as required | | | | | |
| a | 3 x 70 sq mm | meter | 600 | | | Rs. - |
| 2 | Supplying and making outdoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for following size of 3 core, XLPE aluminum conductor cable of 11 KV grade as required : | | | | | |
| b | 70 sq.mm | Each | 6 | | | Rs. - |
| 3 | Supplying and installation of outdoor type Transformer ONAN type with AL winding having following continuous KVA rating, 11 KV/415 Volts 3 Phase 50 Hz Vector group DY-11, tapings in steps of $\pm 2.5\%$, $\pm 5\%$, -7.5% with oil conservator, silica gel breather having connecting terminals on HV side suitable for bare conductor connection, cable end box on medium voltage side suitable for 1.1 KV 3 $\frac{1}{2}$ core UG cable, on double pole structure or Brick /CC/RCC platform with all fittings, accessories, filled with filtered transformer oil including testing and commissioning etc. complete as required | | | | | |
| a | 100 KVA | Each | 3 | | | Rs. - |

| C ELECTRICAL WORKS | | | | | | |
|--------------------|---|-------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| 4 | Construction of plinth for ,transformer , RMU in RCC construction for installation of RMU including excavation, laying of PCC, neatly dressed, plastered, supply of all materials as required for completeness, as per attached specification/ drawing, CSPDCL standards and direction of EIC. | cum | 5.4 | | | Rs. - |
| 5 | Supplying, making Earth Pits of GI pipe of 4.5m long, 40mm dia, providing masonry enclosure, cover plate having locking arrangement, watering pipe, including excavation, refilling with charcoal, salt, excavated soil, accessories, hardwares, making good the damages caused etc as required for completeness and as per attached specification, direction of engineer, CSPDCL standards and Electrical inspectorate standards. | set | 50 | | | Rs. - |
| 6 | Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe, with charcoal and salt as required | set | 9 | | | Rs. - |
| 7 | Supplying and fixing cable route marker with 10 cm X 10 cm X 5 mm thick G.I. plate with inscription there on, bolted/ welded to 35 mm X 35 mm X 6 mm angle iron, 60 cm long and fixing the same in ground as required. | Each | 60 | | | Rs. - |
| 8 | Supplying and laying double wall HDPE pipe having corrugation on the outer wall and plan surface on inner wall in ground below road, path etc at a depth not less than 40 cm including excavation, dismantling of road if required and refilling the trench etc. as required. | | | | | |
| a | 75 mm dia | meter | 600 | | | Rs. - |
| 9 | Supplying and laying following size RCC Hume pipe class NP-2 (in standard length of 2 metre) with collar in ground below road,path etc at a depth not less than 50 cm and upto 90 cm including excavation, dismantling of road if required and refilling the trench with excavated material, ramming and making the surface good etc. as required | | | | | |

| C ELECTRICAL WORKS | | | | | | |
|--------------------|--|-------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| a | 100 mm dia | meter | 600 | | | Rs. - |
| 9 | L.T.PANEL | | | | | |
| | Fabrication, supply, installation, testing and commissioning of cubicle type compartmentalized wall/ floor mounted power cum control panel board of specified size and depth above 300 mm and upto 450mm made out of not less than 2 mm thick CRCA MS sheet with suitable size compartments for bus bars, switchgears and necessary cutouts for voltmeters, ameters ets as per specifications including powder coating painting but without busbars, switchgears and other accessories etc complete as required. | | | | | Rs. - |
| | Incoming | | | | | |
| | 1 No. 200A FP MCCB, 35 KA service breaking capacity, trip setting as required | | | | | |
| | Indicating Panel | | | | | |
| | analog type 0-200 amp ammeter of size 100x100 (NS) | | | | | |
| | analog type 0-500 volt voltmeter of size 100x100 (NS) | | | | | |
| | selector switch for voltmeter | | | | | |
| | selector switch for ammeter | | | | | |
| | 230 volt LED type indicating lamp | | | | | |
| | 200/5 amps Current transformer | | | | | |
| | 1 No. 200 amp TPN Al Bus bar of suitable length with current density of 1.3 sq.mm/amp. | | | | | |
| | Outgoing | | | | | |
| | All MCB outgoing feeders shall be provided with ON indication lamp. | | | | | |
| | 4 No's 63 A FP MCCB,10 KA breaking capacity | | | | | |
| | 2 No's 32 A DP MCCB,10 KA breaking capacity | | | | | |
| | 1 no .2P 32A Power contactor ,Timers for 24 Hrs. setting | | | | | |
| | | | | | | |

| C ELECTRICAL WORKS | | | | | | |
|--------------------|---|-------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| 6 | Supplying and laying following sizes one number XLPE insulated, PVC sheathed, steel armoured, aluminium conductor power cable of 1.1 KV grade in existing RCC/ HUME/ STONEWARE/ METAL pipe as required. | | | | | |
| a | 3.5 x 95 sq. mm. | meter | 90 | | | Rs. - |
| 7 | Supplying and making end termination with brass compression gland and aluminum lugs for following size armoured aluminum conductor power cable of 1.1 KV grade as required. | | | | | |
| a | 3½ X 95 sq. mm | Each | 6 | | | Rs. - |
| 8 | Supplying and laying following sizes one number XLPE insulated, PVC sheathed, steel armoured, aluminium conductor power cable of 1.1 KV grade in existing RCC/ HUME/ STONEWARE/ METAL pipe as required. | | | | | |
| a | 3.5 x 25 sq. mm. | meter | 600 | | | Rs. - |
| b | 3.5 x 70 sq. mm. | meter | 100 | | | Rs. - |
| c | 3.5 x 35 sq. mm. | meter | 100 | | | Rs. - |
| d | 4x10 sq.mm | meter | 50 | | | Rs. - |
| 9 | Supplying and making end termination with brass compression gland and aluminum lugs for following size armoured aluminum conductor power cable of 1.1 KV grade as required. | | | | | |

| C ELECTRICAL WORKS | | | | | | |
|---|---|------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| a | 3½ X 25 sq. mm | Each | 12 | | | Rs. - |
| b | 3.5 x 70 sq. mm. | Each | 10 | | | Rs. - |
| c | 3.5 x 35 sq. mm. | Each | 20 | | | Rs. - |
| d | 4x10 sq.mm | Each | 4 | | | Rs. - |
| 10 | Yard fencing (2x2 meter) with chain link mesh conform ISI 2721/1989 size (75 x75)mm & 8mm gauge of chain link wire with 4 mm thick GI Wire on top & bottom of mash, on main bracket of Angel (65 x65 x 5 mm) & bracing with Angel (50x50x6mm) of 2.5 m long 3.m with bracket gate & murrom, gravel filling all on A class civil work Construction with accessories, hardwares etc. as required for completeness, as per attached specification/ drawing, CSPDCL standards and direction of EIC. | Rmt | 24 | | | Rs. - |
| Total Amount of 11kV system work | | | | | | Rs. - |

| C ELECTRICAL WORKS | | | | | | |
|--------------------|--|-------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| B | | | | | | |
| | Meter Panel Box | | | | | |
| 1 | Design,Fabrication,supply,installation,testing and commissioning of pedestal mounted Block Main Power Board, made out of 2 mm thick CRCA sheet steel, cubicle type,FRLSee standing,dust/vermin/ weather proof with busbars, switchgears,earth bus etc including powder coated painting along with accessories,hardwares etc. required for completeness and as per attached specification, direction of Engineer, CGPWD standards and Electrical Inspectorate standards. The panel box shall house : 1 No 4 pole 63A isolator as Incomer ; 100A four pole Copper busbrs,6 no32 SP MCB C series, 10kA as outgoing feeders:6 Nos lockable compartments for housing kWh meters Interconnection by Copper insulated leads(DOUBLE DOOR TYPE) | Set | 9 | | | Rs. - |
| | 100amps 4pole copper bus bar | | | | | |
| | 63 A Isolator | | | | | |
| | 6 A to 32 amps MCB SP | | | | | |
| | LED indicating lamp | | | | | |
| 2 | Point Wiring for light/ fan/ exhaust fan/ call bell point with 1.5 sqmm FRLS PVC insulated stranded copper conductor single core cable in concealed PVC conduit, with 6 A modular switch ,modular base and cover plate with suitable size GI. box and earthing the point with same size cable along with accessories, hardwares etc required for completeness and as per direction of Engineer, CGPWD standards ,Electrical Inspectorate standards. | | | | | |
| a | Short Point | Point | 376 | | | Rs. - |
| b | Medium Point | Point | 264 | | | Rs. - |

| C ELECTRICAL WORKS | | | | | | |
|--------------------|---|-------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| c | Long Point | Point | 169 | | | Rs. - |
| 3 | Point wiring for light plug point with 2X2.5 sq mm FRLS PVC insulated stranded copper conductor single core cable cable in concealed PVC conduit along with 6 A modular switch and 5 pin 6 A modular socket outlet, modular base and cover plate with suitable size GI. box, earthing the switch box and socket outlet with same size cable along with accessories, hardwares etc. required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards. | | | | | |
| a | Short Point | Point | 119 | | | Rs. - |
| b | Medium Point | Point | 79 | | | Rs. - |
| c | Long Point | Point | 35 | | | Rs. - |
| 4 | Wiring for power plug point with 2x4 sq mm FR PVC insulated stranded copper conductor cable in concealed PVC conduit along with modular type 16 Amp switch and 6 pin 16 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size cable etc. as required | | | | | |
| a | Short Point | point | 60 | | | Rs. - |
| b | Medium Point | Point | 50 | | | Rs. - |

| C ELECTRICAL WORKS | | | | | | |
|--------------------|--|-------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| c | Long Point | Point | 30 | | | Rs. - |
| 5 | Circuit/ sub main wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in concealed PVC conduit along with accessories, hardwares etc. required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards. | | | | | |
| a | 3 X 1.5 sq. mm in 20mm conduit | meter | 1200 | | | Rs. - |
| b | 3 X 2.5 sq. mm in 20mm conduit | meter | 700 | | | Rs. - |
| c | 3 X 4 sq. mm in 25mm conduit | meter | 700 | | | Rs. - |
| d | 3X6 sq. mm in 25 mm conduit | meter | 550 | | | Rs. - |
| 6 | Supplying and fixing metal box of following sizes (nominal size) in recess with suitable size phenolic laminated sheet cover in front including painting etc. as required. | | | | | |
| a | 75mmX75mmX60mm deep | Each | 274 | | | Rs. - |
| b | 100mmX100mmX60mm deep | Each | 126 | | | Rs. - |
| c | 200mmX125mmX60mm deep | Each | 104 | | | Rs. - |

| C ELECTRICAL WORKS | | | | | | |
|--------------------|--|------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| 7 | Supplying and fixing following modular type switch, socket, other accessories on the existing modular plate & switch box including connections etc. as required. | | | | | |
| a | Bell push | Each | 34 | | | Rs. - |
| b | Fan regulator electronic, step type moving all round | Each | 99 | | | Rs. - |
| c | Supplying and fixing polycarbonate batten/ angle holder including connection etc. as required. | Each | 94 | | | Rs. - |
| d | 3pin 5/6 amp socket outlet | Each | 188 | | | Rs. - |
| e | 5/6 Amps one way switch | Each | 182 | | | Rs. - |
| f | 15/16amp switch | Each | 104 | | | Rs. - |
| g | 6 pin 15/16 amp socket out let | Each | 104 | | | Rs. - |
| h | Providing and fixing round/ hexagonal fan box (125mm dia) depth 75mm (max.) with 12mm dia steel bar hook, 1.6mm thick MS sheet cover, in RCC slab etc. as required. | Each | 117 | | | Rs. - |
| 8 | Supplying and fixing on surface/ recess following way, 240 volts SP&N, MCB distribution board consumer unit of sheet steel phosphatized and powder painted complete with tinned copper busbar, neutral busbar, earth bar, din bar, detachable gland plate, including interconnections, earthing etc. as required. (But without MCB/ RCCB/ Isolator) | | | | | |

| C ELECTRICAL WORKS | | | | | | |
|--------------------|--|-------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| a | 2 + 4 way | Each | 45 | | | Rs. - |
| 9 | Supplying and fixing SP MCB , 240 volts, ' B ' series, suitable for lighting and other loads in the existing MCB DB complete with connections, testing and commissioning etc. as required. | | | | | |
| a | 6 amps to 32 amps | Each | 242 | | | Rs. - |
| 10 | Supplying and fixing DP MCB , 240 volts, ' B ' series, suitable for lighting and other loads in the existing MCB DB complete with connections, testing and commissioning etc. as required. | | | | | |
| a | 32 amps | Each | 39 | | | Rs. - |
| 11 | Supplying and laying following sizes one number PVC insulated, PVC sheathed, steel armoured, aluminium conductor power cable of 1.1 KV grade direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. | | | | | |
| a | 2 x6 sq. mm (for domestic connection) | meter | 900 | | | Rs. - |

| C ELECTRICAL WORKS | | | | | | |
|--------------------|---|------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| 12 | supplying, installation, testing and commissioning of following surface/ concealed type LED Light. | | | | | |
| a | <u>18watt LED Tube Light Fixture</u> SITC of 1x18watt T8 LED tube 4 ' length made of full polycarbonate housing with integral driver suitable for retrofitting in an existing luminaire mounted on decorative batton. Rating of tube 18 W + 10% , 240 V , 50 Hz. Operating voltage : 140-280 V . Terminal should be suitable for wiring from one side only . Lumen output ≥1900 Lumens. Colour temperature 6500K + 200 , CRI ≥ 80 , System efficacy ≥ 100 lm/W. Driver efficiency ≥ 85 % , AthD < 15% , Pf ≥ 0.95. Driver protection : Open circuit, Short circuit, Reverse polarity, Surge protection : 2.5 kV, High Temperature. LED is LM 80 certified and LM79 report is Certified by NABL Accredited lab. LED tube is also RoHS & CE rated. | no | 210 | | | Rs. - |
| b | Baton type 10w Integral sleek extruded aluminium LED channel with white acrylic cover | no | 138 | | | Rs. - |
| 13 | Supply and fixing of 2 pole and earth, 240 V, industrial type socket outlet for AC units, enclosed metal top plug with SP MCB in sheet steel enclosure, on surface or in recess, with chained metal top metal cover for the socket and complete with connections, testing, commissioning etc required for completeness and as per direction of Engineer,CGPWD standards and Electrical Inspectorate standards. | | | | | |
| a | 32A with C series MCB | Each | 67 | | | Rs. - |
| 14 | Supply, installation, testing and commissioning of following sizes ceiling fan of approved make and type including down rods of 30 cm, wiring with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, earthing, connections along with accessories, hardwares etc required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards. | | | | | |
| a | 1200mm sweep | Each | 70 | | | Rs. - |
| 15 | Supply, installation, testing and commissioning of following sizes exhaust fan (heavy duty) of approved make and type in existing opening in wall including earthing, connections along with accessories,hardwares etc as required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards. | | | | | |

| C ELECTRICAL WORKS | | | | | | |
|--|--|-------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| a | 300 mm sweep | Each | 76 | | | Rs. - |
| 16 | Supplying and fixing of following sizes PVC conduit along with accessories in concealed complete as required. | | | | | |
| a | 20mm | meter | 1100 | | | Rs. - |
| b | 25mm | meter | 600 | | | Rs. - |
| c | 32mm | meter | 315 | | | Rs. - |
| 17 | Single Phase Energy Meter, Electricity Consumption KWH Meter Ratings: 5- 30 Amps for house connection and as per direction of Engineer, CGPWD standards . | nos | 34 | | | Rs. - |
| Total Amount of building electrification work | | | | | | Rs. - |
| C External Electrification work- | | | | | | |
| 1 | Designing and providing suitable RCC foundation in Cement Concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) for 3 mere to 12 metre high GI octagonal pole including steel reinforcement (minimum 90kg per cum), form work, embedding 2 nos 50mm dia PVC pipe for cable entry in each foundation, excavation disposal of surplus soil and curing etc. as required | Cum | 18.9 | | | Rs. - |

| C ELECTRICAL WORKS | | | | | | |
|--------------------|---|------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| 2 | Supply of hot dipped galvanized (in single dip to average 65 micron) octoganal pole made of 3mm thick steel sheet having window and flush cover with locking arrangement at suitable height from base for cable termination block, pole suitably reinforced with welded steel section at window cut section to make the strength of pole unaffected, with following minimum specifications including 3 mm thick anchor plate, 4 nos 16mm dia foundation bolts of EN8 grade. (designed for wind speed upto 150km/hr) | | | | | |
| a | 5 metre high, dia 130mm at bottom and 70mm at top, base plate size 200x200x12mm, foundation bolts 750mm long | no | 40 | | | Rs. - |
| 3 | Erection of GI octogonal/ tubular pole on existing cement concrete foundation having grouted bolts and nuts, aligning in true vertical position as required | | | | | |
| a | 5 metre high | Each | 40 | | | Rs. - |
| 4 | Supply and fixing following street light pole bracket on existing pole made out of 50 mm dia MS "B" class pipe welded to 300 mm long MS pole canopy of suitable dia at a angle of 102.50 including having MS triangular stiffner of size 150 X 50 X 5 mm thick, making arrangement for tightening the bracket with pole by providing suitable size heavy duty nuts and bolts in canopy, painting with one coat of approved steel primer etc. as required. | | | | | |
| a | Single Over Hang .75 metre Long | Each | 40 | | | Rs. - |

| C ELECTRICAL WORKS | | | | | | |
|--------------------|--|-------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| 6 | Supplying and laying double wall HDPE pipe having corrugation on the outer wall and plan surface on inner wall in ground below road, path etc at a depth not less than 40 cm including excavation, dismantling of road if required and refilling the trench etc. as required. | | | | | |
| | 40 mm dia | meter | 1220 | | | Rs. - |
| 9 | Supplying, installation, testing and commissioning of following 230/250 volts LED street light fitting with all accessories like driver, heat sink made of die cast aluminium with IP 66 protection and 5 KV surge protection on pole bracket complete as required and furnishing 5 Yrs Guarantee certificate from manufacturer. | | | | | |
| a | 45 watt | Each | 40 | | | Rs. - |
| 10 | Supplying and laying following sizes one number PVC insulated/XLPE insulated, PVC sheathed, steel armoured, aluminium conductor power cable of 1.1 KV grade in existing RCC/ HUME/ STONEWARE/ METAL/HDPE pipe as required. | | | | | |
| a | 4x10 Sq.mm | meter | 600 | | | Rs. - |
| b | 2x6 sq.mm | meter | 1200 | | | Rs. - |
| C | 2x10sq.mm | meter | 600 | | | Rs. - |

| C ELECTRICAL WORKS | | | | | | |
|--|--|-------|----------|-------------|------------------------|---------------|
| Sr. No. | Description of Items | Unit | Quantity | Rate in INR | Rate in words (in INR) | Amount in INR |
| 10 | Supplying, fixing and cramping suitable size and all type aluminium ferule/ lugs to following size 1.1 KV grade power cable core/ lead, pressed with high pressure cramping tool including connection to switch gear/ MCCB etc as required. | | | | | |
| a | 10 sq.mm | Each | 315 | | | Rs. - |
| b | 6 sq.mm | Each | 150 | | | Rs. - |
| 11 | Supply, drawing and terminating either ends 3 core FR PVC insulated 1.5 sqmm copper cable inside the pole from JB to fixtures with accessories, hardwares etc as required for completeness and as per attached specification, direction of engineer, CGPWD standards and Electrical inspectorate standards. | meter | 300 | | | Rs. - |
| Total Amount of External Electrification work | | | | | | Rs. - |
| Sub total of Electrical Works | | | | | | Rs. - |