



NAYA RAIPUR DEVELOPMENT AUTHORITY

**Tender Document for the
Infrastructure development for Village Kotrabhata at
Sector-17, Naya Raipur**

(Following Three-Envelope Tender Procedure)

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

NIT No. 109/Infra Sec. 17/EEC-III/CE (E)/NRDA/2014-15, Raipur

Dated: 05.11.2014

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.
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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>

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 : "Infrastructure development for Village Kotrabhata at Sector-17, Naya Raipur".

Name of Tenderer:

Details

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

Signature of Tenderer

Date:_____

Cost Abstract

Infrastructure development for Village Kotrabhata at Sector 17, Naya Raipur

Sl. No.	Description of Items	Amount in INR in Figures	Amount in INR in Words
A	Civil and plumbing works	-	
B	Electrical Works	-	
	Total	-	

Bill of Quantities

Infrastructure development for Village Kotrabhata at Sector 17, Naya Raipur

Sl. Nos.	Description of Items	Unit	Quantity	Rate in INR	Amount in INR
A	CIVIL & PLUMBING WORKS				
1	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				
	in all types of soil	Cum	1686.7		-
2	Surface dressing of the ground including removing vegetation and making up undulations and in-equalities Nost 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).	Cum	27120		-
3	Filling from available excavated stuff (Excluding rock) in trenches, plinth, sides of foundation etc. in layers Nost 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	603.60		-
4	Providing and filling in plinth with sand/ crusher dust and hard moorum under floor in layers Nost exceeding 20 cm in depth consolidating Each deposited layer by ramming and watering including dressing etc. complete	Cum	2589.90		-
5	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	209.00		-
b	Columns, Pillars, Piers and likes- rectangular or square in shape	Sqm	42.00		-
c	Suspended floors, roofs, access platform, balconies (plain surfaces) and shelves (cast in situ)	Sqm	368.00		-
d	Beams, lintels, cantilevers & walls	Sqm	11.40		-

6	Providing and laying Nosminal 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 Nosminal size).	Cum	12.90			-
b	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 40mm Nosminal size).	Cum	50.00			-
7	Providing and laying Nosminal 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 Nosminal size).	Cum	121.30			-
b	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm Nosminal size).	Cum	49.50			-
c	1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20mm Nosminal size).	Cum	14.30			-
8	Providing and laying Nosminal mix reinforcement cement concrete with crushed stone aggregate using concrete mixer in all works upto floor five level excluding cost of reinforcement and form work.					
a	1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20mm Nosminal size).	Cum	28.80			-
9	Providing and laying precast and prestressed cement concrete of M-35 grade in superstructure including form work but excluding reinforcement complete as per drawing and specifications.	Cum	10.80			-
10	Providing, laying and placing of precast cement concrete cover of drain M-35 grade in superstructure including form work but excluding reinforcement complete .	Cum	83.00			-
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					
	Thermo-Mechanically treated Bars	Kg	163749.00			-

12	Providing and fixing one side polished 30 mm thick RAJIM SAND STONE shelves fixed in Drain wall top complete as per drawing.	Sqm	5395.00			-
13	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 Nosomal size) at plinth level.	Cum	220.00			-
14	Random rubble masonry with hard stone in superstructure above plinth level and upto floor five level in cement mortar (1 cement : 6 coarse sand) including leveling up with cement concrete 1:6:12 (1 Cement : 6 Coarse Sand : 12 stone aggregate 20mm Nosomal size) at window sills, ceiling level and like.	Cum	151.50			-
15	Coursed rubble masonry (Second sort) with hard stone in foundation and plinth in Cement mortar 1:6 (1 cement : 6 coarse sand).	Cum	205.20			-
16	Half brick thick : Brick work with modular fly-ash lime bricks (FALG Bricks) confirming to IS:12894-2002 of class designation 40 in					
a	Cement Mortar 1:3 (1 cement : 3 coarse sand)	Sqm	8.00			-
17	Brick work with modular fly-ash lime bricks (FALG Bricks) confirming to IS:12894-2002 of class designation 40 in foundation and plinth in:					
a	Cement Mortar 1:4 (1 cement : 4 coarse sand)	Cum	22.00			-
b	Cement Mortar 1:6 (1 cement : 6 coarse sand)	Cum	272.00			-
18	Providing and fixing flush door shutters, interior grade, commercial type, core of block board construction with frame of first class hard wood and well matched commercial ply veneering with vertical grains, cross bands and face veneers on both faces of shutters excluding hinges.					
a	30 mm. thick (single leaf)	Sqm	240.00			-
19	MS Railings: 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.					
a	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works.	Kg	1409.40			-
20	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 of red oxide zinc chromate primer..	Kg	2136.00			-

21	Providing and fixing M.S. frames of doors, windows and ventilators joints mitred and welded with 15x3 mm lugs 10cm long embedded in cement concrete blocks 15x10x10cm of grade M-10 or with wooden plugs and screws or with dash fastener or rawl plugs and screws or with fixing clips or with bolts and nuts as required including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.					
	Angle-iron frames	Kg	2240.00			-
22	6mm thick cement plaster of mix:					
a	In Cement mortar 1:3 (1 cement : 3 fine sand)	Sqm	200.00			-
23	12mm thick cement plaster of mix:					
a	In cement Mortar 1:3 (1 cement : 3 fine sand)	Sqm	1360.00			-
b	In Cement Mortar 1:4 (1 cement : 4 fine sand)	Sqm	14.80			-
24	15mm thick cement plaster on the rough side of single or half brick wall of mix:					
a	In cement Mortar 1:3 (1 cement : 3 fine sand)	Sqm	2000.00			-
b	In Cement Mortar 1:4 (1 cement : 4 fine sand)	Sqm	70.60			-
25	Pointing on stone work with cement Mortar 1:3 (1 cement : 3 fine sand)					
a	Ruled pointing	Sqm	451.70			-

26	25mm thick cement concrete flooring with 1:2:4 cement concrete (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm Nominal size) finished with floating coat of neat cement.	Sqm	200.00			-
27	Cement concrete flooring with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm) finished with a floating coat of neat cement. (75 mm thick) Inside Room	Sqm	10.80			-
28	15 mm thick Table rubbed polished Granite stone slab flooring laid over 20mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with grey cement slurry including rubbing and polishing etc. complete. (Area of slab should be 0.50 Sqm and above)					
a	Granite stone grey/pink	Sqm	12.00			-
29	Colour washing such as green, blue or buff with lime to give an even shade.					
a	On new work (two or more coats) including a base coat of white washing	Sqm	3560.00			-
30	Finishing walls with water proofing cement paint to give an even shade.					
a	On new work (Two or more coats)	Sqm	14.80			-
31	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	673.40			-
32	Providing and fixing vitreous china water closet squatting pan (Indian type) including cutting and making good the walls and floors wherever required:					
a	White Long pattern W.C. pan of size 580 mm	Each	200.00			-
33	Providing and fixing on wall face UV stabilized Unplasticised Rigid PVC pipes (single socketed) having 3.2mm wall thickness conforming to IS : 13592 (4kg/sqcm) including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion.					
	110 mm dia pipe.	Meter	1000.00			-
34	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes in trenches, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings. This included jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per drawing and direction of Engineer in Charge.					

a	15 mm Nominal outer dia pipes	RM	120.00			-
b	20 mm Nominal outer dia pipes	RM	1510.00			-
c	25 mm Nominal outer dia pipes	RM	740			-
35	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :					
a	15 mm Nominal bore	Each	20			-
36	Providing lead caulked joints to S.C.I or C.I. (spun) pipes and specials including testing of joints but excluding the cost of pig lead:					
	200 mm diameter pipe	Each	2			-
37	Supplying pig lead at site of work.	Quintal	0.1			-
38	Providing flanged joints to double flanged C.I./ D.I. pipes, valves and specials including rubber insertion 3mm thick, suitable bolts and nuts and testing of joints complete:					
a	100 mm diameter pipe	Each	16			-
b	150 mm diameter pipe	Each	12			-
c	200 mm diameter pipe	Each	23			-
39	Constructing masonry Chamber 30x30x50 cm, inside with 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 finished with a floating coat of neat cement complete as per standard design :	Each	200			-

40	Providing and constructing brick masonry chamber for underground C.I. inspection chamber and bends with Fly Ash bricks crushing strength Nost less than 35kg/cm ² in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be Nost less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) R.C.C. top slab with 1:2:4 mix (1 cement :2 coarse sand : 4 graded stone aggregate 20 mm Nosminal size) foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm Nosminal 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 :					
41	Inside dimensions 500x700 mm and 45 cm deep for pipe line with one or two inlets	Each	25			-
42	Inside dimensions 600x 850 mm and 45 cm deep for pipe line with three or more inlets :	Each	25			-
43	Clearing and grubbing road 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 Nost exceeding 150 mm in thickness if required and as per relevant clauses of section-200.	Ha	4.4			-
44	Dismantling of cement concrete pavement i/c breaking to pieces Nost exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials up to a lead upto 1000 meters, stacking serviceable and unserviceable materials separately and as per relevant clauses of section-200	Cum.	1618.4			-
45	Construction of embankment / sub-grade with Material Obtained from Borrow Pits (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.	21723.4			-
46	Construction of Embankment with Material Deposited from Roadway Cutting (Construction of embankment with approved materials having C.B.R. > 5 (unless specified otherwise in the contract) deposited at site from roadway cutting and excavation from drain and foundation of other structures graded and compacted to meet requirement of table 300-2)	Cum.	809.2			-
47	Compacting Original Ground					
	Compacting Original Ground supporting sub-grade Loosening of the ground upto a level of 500 mm below the subgrade level , watered, graded and compacted in layers to meet requirement of table 300-2 for sub grade construction	Cum.	4227.4			-

48	Excavation for drain (Earth work in excavation for drain/chamber as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material.)	Cum	10781.9			-
49	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 (with Mechanically crushed stone only)					
	for grading-III Material	Cum.	8568.3			-
50	Footpaths and Separators (Construction of footpath by providing a 150 mm compacted granular sub base as per clause 401 and 25 mm thick cement concrete grade M15, over laid with pre-polished cement concrete floor tiles conform to IS 1237:1980 (Reaffirmed in 1996) for heavy duty tiles (Exterior Grade) of 22-25mm thick in cement mortar 1:4 including provision of all drainage arrangements (200mm dia RCC hume pipe) but excluding kerb channel..) as per pattern, size and colour as approved by engineer	Sqm	8077.7			-
51	Dry Lean Cement Concrete Sub-base (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 Nost exceeding 25 mm, aggregate cement ratio Nost to exceed 15:1, aggregate gradation after blending to be as per table 600-1, cement content Nost to be less than 150 kg/cum, optimum moisture content to be determined during trial length construction, concrete strength Nost 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.)	Cum	3795.6			-
52	Cement Concrete Pavement (Grade M-40) (Construction of un-reinforced, dowel jointed, plain cement concrete pavement over a prepared sub base with minimum cement @ 400 kg per cum, coarse and fine aggregate conforming to IS:383, maximum size of coarse aggregate Nost exceeding 25 mm, 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)	Cum	7130.4			-

53	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 M20 grade PCC on 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 408)	Meter	5765.1			-
54	Retro- reflectorized Traffic signs (Providing and fixing of retro- reflectorized cautionary, mandatory and informatory sign as per IRC:67-2012 made of encapsulated lens type reflective sheeting vide clause 801.3, fixed over aluminum sheeting, 1.5 mm thick supported on a mild steel frame of size 40 x 40 x 5 mm and mild steel angle iron post 75 mm x75 mm x 6mm firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 cm x 45cm x 60cm, 60 cm below ground level as per approved drawing)					
a	60 cm x 45 cm rectangular	Each	12			-
b	60 cm equilateral triangle	Each	12			-
c	90 cm high octagon	Each	12			-
55	Painting on Concrete Surfaces					
a	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	879.7			-
56	Road Marking with Hot Applied Thermoplastic Compound with Reflectoring Glass Beads on Bituminous Surface (Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectoring glass beads @ 250 gms per Sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35-1997. The finished surface to be level, uniform and free from streaks and holes.)	Sqm	2439.2			-
57	Excavation for Structures (Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material.)	Cum	9			-
58	PCC 1:3:6 in Foundation (Plain cement concrete 1:3:6 mix with crushed stone aggregate 40 mm Nominal size mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days.)	Cum	1.9			-

59	Providing and laying Reinforced Cement Concrete pipe NP 3 / prestressed concrete pipe on first class bedding. (Laying Reinforced cement concrete pipe NP3 /prestressed concrete pipe for culverts on first class bedding of granular material including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets .	Meter	20			-
60	Providing and laying Reinforced Cement Concrete pipe NP 3 / prestressed concrete pipe. (Laying Reinforced cement concrete pipe NP3 /prestressed concrete pipe for culverts including fixing collar with cement mortar 1:2 but excluding bedding below pipes, excavation, protection works, backfilling, concrete and masonry works in head walls and parapets .)					
a	300 mm dia	RM	150			-
b	450 mm dia	RM	50			-
61	Granular filling:-Providing 1 st class bedding below pipes with graded sand or other granular materials passing through 5.6 mm sieve as per clause 2904.	cum	792			-
62	Providing and laying Pitching on slopes laid over prepared filter media including boulder apron laid dry in front of toe of embankment complete as per drawing and Technical specifications.	Cum	21			-
63	Providing and laying boulders apron on river bed for protection against scour with stone boulders weighing Nost less than 40 kg Each complete as per drawing and Technical specification.	Cum	8			-
64	Detailed survey of existing road including chaining, leveling, with cross section at 25.0 m intervals and closing survey Each day's work, fixing bench marks, painting, taking trial pits and submission of road cross sections, L-sections, quantity statements in computerized prints in five copies in proper files and all type of compliance required by the Engineer-in-charge.	Km.	6.1			-
65	Planting of Trees and their Maintenance for one Year (Planting of trees by the road side (Avenue trees) in 0.60 m dia. holes, 1 m. 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	620.2			-
66	Tree Guard with MS Angle Iron and Steel Wire(Providing and Fixing tree gurad 0.60 meter square,2.00 meter high fabricated with MS angle iron 30X30X3mm, MS iron 25X3 mm and steel wire 3mm dia.Welded and fabricated as per design in two halves bolted together.	Each	90			-

67	25 mm thick KOTA stone slab flooring over 20mm (average) thick base of cement mortar 1:4 laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including grinding rubbing and polishing etc. complete (Area of slab to be over 0.20 sq.m and upto 0.50 sq.m)	Sqm	12			-
68	Half Brick Circular Tree Guard, in 2nd class Brick, internal diameter 1.25 meters, and height 1.2 meters, above ground and 0.20 meter below ground (Half brick circular tree guard, in 2nd class brick, internal diameter 1.25 meters, and height 1.2 meters, above ground and 0.20 meter below ground, bottom two courses laid dry, and top three courses in cement mortar 1:6 (1 cement 6 sand) and the intermediate courses being in dry honey comb masonry, as per design complete)	Each	10			-
69	Precast interlocking concrete paver blocks: Providing & laying factory made confirm technical specification of Bureau of Indian Standards 15658 of 2006 of heavy duty pavers resulting in consistent and uniform quality, rubber moulded, white cement based, pigmented block lacquer coating and cured through drying process mechanically vibrated and compacted precast interlocking premium concrete paver blocks in M40 grade, 60mm thickness of approved size, design and colour with providing and laying in position over 40 mm thick average complete coarse sand bed with joints of 3mm thick filled by fine sand including leveling with surface vibrator, temping and sweeping etc. complete. Coloured pigment precast interlock concrete blocks. as per direction of engineer in charge.	Sqm	5423			-
70	Field survey of villages to capture topographical natural and existing features including built up areas of different typology, adjoining semi open areas, open areas, areas enclosed by compound walls, septic tanks ownership of Each built up area existing land use, existing roads, street lights, trees, tube wells, dug wells, water bodies, existing drainage pattern, shops etc, required by the Engineer-in-charge.	Ha	34			-
71	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.					
a	upto 1.5 m deep	Cum	18241.40			-
b	>1.5m and upto3.0m deep	Cum	1762.00			-
c	>3.0m and upto 4.5m deep	Cum	73.00			-

72	Earth work in Excavation for pipe trench in Hard Soil areas including dressing, watering and ramming and disposal of Excavated earth lead up to 50 meter sand lift up to 1.5m, disposal earth to be leveled, neatly dressed.				
a	upto 1.5 m deep	Cum	2595.00		-
b	>1.5m and upto 3.0m deep	Cum	208.00		-
c	>3.0m and upto4.5m deep	Cum	10.00		-
73	Earth work in excavation for pipe trench in all kinds of rocks in areas including dressing, stacking of useful material and disposal of unserviceable one up to 50 m lead and lift up to 1.5 m.				
	Hard rock requiring chiselling / where blasting is prohibited				
a	upto 1.5 m deep	Cum	624.00		-
b	>1.5m and upto 3.0m deep	Cum	104.00		-
c	>3.0m and upto4.5m deep	Cum	5.00		-
74	Extra for every additional lead upto 50m or part here of over item 2.1 to 2.5.	Cum	7237.90		-
75	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	19268.90		-
76	Filling with murum/ river sand for pipe bedding or over the pipe including supply .	Cum	695.00		-
77	Providing and laying mechanically mixed cement concrete with crushed stone aggregate excluding centering and shuttering (with 40mm Nominal size graded stone aggregate)	Cum	863.00		-
	M-10 Grade				

78	Providing and laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete work including concrete laying, cost of centering, shuttering, finishing and including Admixtures in recommended proportions as per IS9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge. M-20 grade design mix reinforced cement concrete by using 405 kg. of cement per cum of concrete. All work upto plinth level excluding the cost of reinforcement.					
	M-20	Cum	3362.50			-
79	Providing and fixing formwork i/c centering shuttering, strutting, staging, propping, bracing etc. complete and i/c removal of formwork.					
80	Foundation /footing /column base/ plinth beam of any shape and size up to plinth level	Sqm	29383.00			-
81	Wall of any thickness including attached pilasters, buttresses etc	Sqm	274.00			-
82	Providing & Supplying D.I. Specials & Fittings For all types of specials, bends, tees.. etc.					
a	80mm to 300 mm dia	Kg	100.00			-
83	Providing & fixing of Cast iron double flanged sluice valves as per I.S.:14846-2000 fitted with cast iron cap including jointing & testing with cost of jointing material such as bolts, nuts, rubber insertions etc. all complete. (Steel Spindle)					
	Sluice Valve/Scour valve					
a	100 mm dia. PN-1.0	Noss	16.00			-
b	150 mm dia. PN-1.0	Noss	12.00			-
c	200 mm dia. PN-1.0	Noss	20.00			-
d	300 mm dia. PN-1.0	Noss	3.00			-

84	Providing & fixing cast iron double air valves, flanged without in-built isolating valve as per IS:14845-2000 including jointing & testing with cost of jointing material and rubber insertion all complete as per IS :13095-1991					
a	100 mm dia PN-1.6	Each	12.00			-
85	Providing and fixing GM or brass ferrules Conforming to IS-2692/1984 (Reaffirmed2005), tested to 21.00kg/sq.cm. i/c boring and tapping the main					
	Screwed					
a	15 mm dia.	Each	20.00			-
b	20 mm dia.	Each	230.00			-
c	25 mm dia.	Each	90.00			-
86	Providing, laying, Jointing & field testing of High Density Polyethylene pipes, (HDPE) Conforming to IS4984/ 14151/ 12786/ 13488 with necessary jointing material like mechanical connector or jointing pipes by heating to the ends of pipes with the help of Teflon coated electric mirror/ heater to the required temperature and then pressing the ends together against Each other, to form a monolithic & leak proof joint by thermo setting process. It may be required to be done with Jacks/ Hydraulic Jacks /But fusion machine. (50mm & above fusion jointed & below 50 mm mechanical jointed)					
a	110 mm dia.(PE-100) 6 Kg/sq.cm	RM	2035.00			-
b	160 mm dia.(PE-100) 6 Kg/sq.cm	RM	1950.00			-
c	200 mm dia.(PE-100) 6 Kg/sq.cm	RM	3865.00			-
87	Providing, lowering, laying, aligning, fixing in position at and jointing at all level/ depths HDPE pipe accessories/ fittings of PE-100 grade for potable water as per IS 8360 for fabricated (amended upto date) within pipe line in trenches complete including all material, labour, testing and commissioning as per Technical Specifications and as per direction of Engineer.					
i	Providing and laying Bend 90° Conforming to IS specifications.					

a	110 mm dia. (6 Kg/sq.cm)	Each	20.00			-
b	160 mm dia. (6 Kg/sq.cm)	Each	10.00			-
c	200 mm dia. (6 Kg/sq.cm)	Each	10.00			-
ii	Providing and laying Equal Tee Conforming to IS specifications.					
a	110 mm dia. (6 Kg/sq.cm)	Each	20.00			-
b	160 mm dia. (6 Kg/sq.cm)	Each	10.00			-
c	200 mm dia. (6 Kg/sq.cm)	Each	10.00			-
iii	Providing and laying Reducer 6kg/sq.cm: Conforming to IS specifications.					
a	110 mm dia. (STEP I)	Each	20.00			-
b	160 mm dia. (STEP I)	Each	10.00			-
c	200 mm dia. (STEP I)	Each	10.00			-
iv	Providing and laying End Cap Conforming to IS specifications.					
a	110mm dia (6 Kg/sq.cm)	Each	4.00			-

88	Providing & Supply of Clamp Saddle (DI Strap Saddle) for House Service connections from metal pipe Water Distribution mains shall be of fastened strap type with threaded outlet for service connection. Clamp Saddle shall be suitable for Nominal size of distribution mains pipe line. The strap shall be elastomeric coated (insulated) type for firm grip on pipe as well as to protect the coating on the pipe and to insulate the unidentical metals. The saddle shall be single strap type up to pipe sizes of NB600 and service outlet 15mm, 20mm & 25mm. Fasteners shall be of threaded nut-bolt-washer type. The sealing between the saddle and mains shall be obtained by using a profiled elastomeric seal matching to the curvature of the pipe. The seal shall be of elastomeric type, suitable for all potable water application. The material of construction of the body, straps, fasteners etc, shall be of Non corrosive material such as engineering plastic (PE/PP) or stainless steel or a combination of both.					
	80 NB x 15mm, 20mm, 25mm	Each	10.00			-
89	Providing & Supply of Electro Fusion Fittings in accordance with BSEN12201:Part-3 suitable for drinking water within black /blue colour manufactured from compounded PE80/PE100 virgin polymer and compatible with PE80/PE100 pipes, in pressure rated SDR11 with in PN1.25 rated for water application and shall be inclusive of all cost such as testing, all taxes related to central, state & municipal, inspection charges, transportation upto site, transit insurance, loading, unloading, stacking etc. complete.					
	Electro Fusion End Cap					
a	110 mm dia.	Each	205.00			-
90	Providing, laying and 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 all respect. [Conform to IS 15328:2003; solvent cement shall conform to IS 14182]. SN-8					
a	110 mm dia.	RM	1200.00			-
b	160 mm dia.	RM	800.00			-
c	200 mm dia.	RM	1215.00			-
d	250 mm dia.	RM	1740.00			-
e	315 mm dia.	RM	2225.00			-

91	Providing, Laying and jointing Non-pressure (NP2) RCC socket & spigot pipes with rubber gasket joint including testing of joints.[Conforming to IS ; 458-1988, ISI marked laying as per IS 783:1985)					
a	150 mm dia	RM	80.00			-
92	Providing and Laying Non-pressure (NP3) RCC socket & spigot pipes with rubber gasket joint including testing of joints.[Conforming to IS ; 458-1988, ISI marked laying as per IS 783:1985)					
a	250 mm dia	RM	100.00			-
b	450 mm dia	RM	100.00			-
93	Constructing Brick masonry manhole in cement mortar 1:4 (1 cement:4 finesand) RCC top slab Cement Concrete grade M-15 (Nominal Mix) with stone aggregate 20 mm Nominal size, foundation in cement concrete grade M-7.5 (Nominal Mix) with stone aggregate 40mm Nominal size, inside plastering 12mm thick with cement mortar 1:3 (1 cement:3 coarse sand) finished with a floating coat of neat cement and making channel in Cement Concrete grade M-15 (Nominal Mix) with stone aggregate 20mm Nominal size including finishing the channel to shape, curing etc. with FRP Cover and frame, as per drawing, direction of Engineer in charge etc.complete.					
	Manhole with above specifications having inside size 1200x900 mm and 900mm deep including FRP cover with frame (10T) 600mm internal diameter as per IS:1726:1991 etc. Complete.	Each	125.00			-
94	Extra for depth of man holes given at above item					
	120x90cm size manhole over item.	RM	88.00			-
95	Providing MS/ CI foot rests and fixing in manhole with CC blocks of Cement Concrete grade M-10 (Nominal Mix) with stone aggregate 20 mm Nominal size of size 20x20x10cm.					
	With 20mm round bar foot rest (average weight of 1 foot rest 1.85kg)	Each	313.00			-
96	Providing SCI drop connection with SCI drop pipe and bend encased all-round with Cement concrete grade M-5 (Nominal Mix) with stone aggregate 40 mm Nominal size including cutting holes and making good with brick work in cement mortar 1:5 (1 cement:5 finesand) plastered with cement mortar 1:3 (1 cement:3 coarse sand) on inside walls including lead caulked joint sand jointing SW pipes & SCI pipes with stiff cement mortar 1:1 (1 cement:1 sand) including making required channel etc.complete.					

a	For 150mm dia drop connection	Each	10.00			-
b	Extraratefordepthsofdropmorethan60 cm					
	150mm dia Sand cast iron drop connection	Each	10.00			-
97	Supply and Installation of MultiJet, drydial, inferential type, horizontal, Magnetically coupled, class " B" water meters ConformingtoIS-779:1994 and ISO4064:1993 standard with EEC/ MID certification mark, with IP 68 protection class copper can register with 5mm tempered mineral glass cover, successful Life Cycle Test Certificate from FCRI and AMR compatibility with 5years warranty complete with brass nuts and nipples					
a	15 mm size	Noss	20.00			-
b	20 mm size	Noss	130.00			-
c	25 mm size	Noss	50.00			-
98	Construction of RCC valve chamber internal size 1.0m x 1.0m x 1.3m, 100mm thick PCC and RCC M25 grade 150mm thick wall, top cover 100mm thick slab on top for protection of valve coming under traffic & extended MS valve operating spindle rod as reqd etc. as per drawing and as per direction of Engineer complete etc. including all .	Nos	65.00			-
99	Meter box and cover : Cost iron outer and inner lid shipping weight 8kg. Ease of opening and closing of top cover shall be ensured with locking arrangement and enclosure shall have eNosugh mechanical strength as per standered specifications.	Nos	205.00			-
100	Construction of prefabricated HDPE manhole: Providing, lowering, laying, aligning, fixing in position at all level/ depths High Density Poly Ethylene (HDPE) manhole conforming to EN 13598-2:2009, man entry type of 1000mm diameter for depth specified below, shall be of single wall construction OR modular construction conforming to EN 681-1 with triple safety seal (three side lip/element) made of 100% virgin PE material without recycling or foam content, including connecting the according to EN 681-1 and the manholes shall be safeguarded against uplift pressure with solid horizontal reinforcement ribs of appropriate thickness and with at regular intervals all along the outside of the manhole.					

	The manhole shall have corrosion resistant steps at a vertical distance of 25cm and reinforced concrete load distribution ring placed around the neck of the manhole 150mm thickness , 1050mm OD & 635ID and designed to handle heavy load as approved by Engineer, distribution ring below M20 grade concrete thick 200mm with 1.5 dia. manhole around, Manhole bottom PCC (1:3:6)150mm thick 1.5m dia. Around manhole, including supply installation in position and back filling around the manhole in complete all accessories/ fittings, all material, labour, testing and commissioning as per detailed specifications, drawings all complete as directed by Engineer in charge.				
a	Manhole of depth up to 1.5m as per drawing and direction of Engineer.	Nos	16.00		-
b	Manhole of depth up to 1.8m as per drawing and direction of Engineer.	Nos	21.00		-
c	Manhole of depth up to 2.1m as per drawing and direction of Engineer.	Nos	21.00		-
d	Manhole of depth up to 2.4m as per drawing and direction of Engineer.	Nos	16.00		-
e	Manhole of depth up to 2.7m as per drawing and direction of Engineer.	Nos	6.00		-
f	Manhole of depth up to 3.0m as per drawing and direction of Engineer.	Nos	6.00		-
101	22cm thick grouted stone picthing (without quarry - spalls) with individual stones of 22 cm depth and minimum size 0.014 cum in cement mortar 1:6	Cum	660.00		-
102	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.				
	Made of G.I. wire of dia 4 mm	Sqm	638.40		-
103	Planting Permanent Hedges including Digging of Trenches (Planting permanent hedges including digging of trenches, 60 cm wide and 45 cm deep, refilling the excavated earth mixed with farmyard manure, supplied at the rate of 4.65 cum per 100 meters and supplying and planting hedge plants at 30 cm apart), including maintenance of one year.				
a	Species: (mehnde lawsonia inermis / Clerodendron inerme)	Nos	500.00		-

104	Planting of Trees and their Maintenance for one Year (Planting of trees by the road side (Avenue trees) in 0.60 m dia holes, 1 m 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 Two year) AVENUE TREES - 1 yr. old. Ht.-3 to 6 ft.	Nos	80.00			-
105	Providing and planting following herbs in garden including preparation of soil, earth mixed with manure or sludge in the ratio of 2:1 by volume (2 parts of stacked volume of earth after reduction by 20% : 1 part of stacked volume of manure after reduction by 8%) watering ,dressing including removal of rubbish and surplus earth, prepration of base plantation, providing and spreading different fertilizers, soil and sand if any with all leads and lifts including cost of manure, sludge or extra good earth if needed and as per instruction of Engineer in charge including maintenance of one year.					
a	Dhoob grass	Nos	600.00			-
b	Carpet grass	Nos	300.00			-
106	Supplying, Installation, Testing and Commissioning of "Double Swing with Belt Asecceries" play equipment : leg support is made up of and top pipe is GI pipes & GI junction box with powder coating including all material, labour, accessories and commissioning all complete as per the direction of engineers in charge and Technical Specification (SS 08).	Each	2.00			-
107	Supplying, Installation, Testing and Commissioning of "Toddler Swing" play equipment : The toddler swing the center support is made up of GI pipes. Between the two horizontal bars there is a heavy-duty metal clamp attached to it including all material, labour, accessories and commissioning all complete as per the direction of engineers in charge and Technical Specification.	Each	2.00			-
108	Supplying, Installation, Testing and Commissioning of "MultiSeater See-Saw" play equipment : The MS See saw comprises four FRP seats. The lever is consisted of powder coated GI pipes and bearing is heavy duty nylon bush type including all material, labour, accessories and commissioning all complete as per the direction of engineers in charge and Technical Specification.	Each	3.00			-
109	Supplying, Installation, Testing and Commissioning of "Standered See-Saw" play equipment : The standard see saw is a good entertainer for the children. The lever of the see – from moulded plastic including all material, labour, accessories and commissioning all complete as per the direction of engineers in charge and Technical Specification.	Each	2.00			-

	Garden décor					
110	P/ Instalation of Dust Bin. Height = 0.6m. Dia. = 0.3m. Dustbin is especially designed for accommodating well as wet kind of trash. cylinder of the bin is fabricated out of Aluminium perforated sheet 300mm in diameter and 380mm long with a self-closing tilt able lid. The drum is mounted on nylon bearings to provide it with complete rotation of the drum to facilitate the garbage removal. The frame of dustbin is made up of 25NB powder coated GI pipes including all material, labour, accessories and commissioning all complete as per the direction of engineers in charge .	Each	12.00			-
	Subtotal for Civil and plumbing works					-
	B ELECTRICAL WORKS					
1	Supply,Installation,testing and commissioning of floor mounted RMU comprising of 2 Noss12 kv 630 Amp LBS and one Nos. 12 kv 630 Amp VCB for transformer with accessories, hardwares etc. required for completeness and as per attached specification, direction of Engineer, CSPDCL standards and Electrical Inspectorate standards. .	Set	2.00			-
2	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 for completeness as per attached specification/ drawing, CSPDCL standards and direction of EIC.					
a	3C X 120 Sqmm	RM	2800.00			-
3	Supplying and laying one number following sizes XLPE, steel armoured, aluminium conductor power cable of 11 KV grade direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required.					
a	3C x 70 sq. mm.	RM	50.00			-
4	Supplying and making indoor 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 :					
	3CX120 sq	Each	2.00			-
5	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 :					

a	120 Sqmm	Each	4.00			-
b	70 Sqmm	Each	4.00			-
6	Supplying and making straight through cable jointing with heat shrinkable jointing kit complete with all accessories including ferrules suitable for following size of 3 core, XLPE aluminum conductor cable of 11 KV grade as required :					
a	120 Sqmm	Each	5.00			-
7	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	3.5C x 240 sq. mm.	Meter	100.00			-
8	Supplying and making outdoor end termination with cast resin compound including aluminum lugs and other jointing materials for following size of PVC insulated and PVC sheathed / XLPE aluminum conductor power cable of 1.1 KV grade as required					
a	3.5X240 Sqmm	Each	8.00			-
9	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	40.00			-
10	Supplying and installation of outdoor type Transformer ONAN type with copper 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 11KV 3 core cable connection, cable end box on medium voltage side suitable for 1.1 KV 3½ 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	315KVA	Each	2.00			-

11	Excavation of 1500x1500x1500mm pit, filling with sand for 100mm depth, laying bed concrete with CC (1:4:8)using 40 mm HBG metal for 100mm deep, construction of transformer plinth with footing of 1500x 1500x1200 mm and 900x900x450 mm size, column of 225x225x 2600 mm, beam of 225x225x 2750 mm size ,slab of of 1500x1500x100 mm size ,with relief steel rod of 12 mm (76 kg), refilling the hollow portion with excavated soil, 20mm thick plastering of column and beam with CM of 1:5 etc. required for completeness and as per attached specification, direction of Engineer, CGPWD standards . .	per pillar					-
12	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	14.00				-
13	Supplying and laying of 50 mm x 6 mm GI earth strip along with the 33kV cable and making connection with steel supports enroute and connecting firmly with the earthing systems of end stations complete with ferrules, other accessories, hardwares etc as required for completeness and as per direction of engineer, attached specification, CDPDCL standards and Electrical inspectorate standards. (length same as cable length)	Meter	2500.00				-
14	Providing and fixing HT Danger Nostice Plate of 250 mm x 200 mm 2mm thick, made of mild steel and vitreous enamelled white on both sides and inscription in signal red colour on front side as per IS-2551 with accessories, hardwares etc as per direction of engineer, CSPDCL standards and Electrical inspectorate standards. (2 for Each RMU + 2 for Each transformer).	Each	10.00				-
15	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.						
	225 mm dia	cum	1575.00				-
16	Filling available excavated earth in trenches, plinth sides of foundation in layers Nost 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	1463.70				-
17	Providing and Laying Nosn-pressure (NP3) RCC socket & spigot pipes with rubber gasket joint including testing of joints. [Conforming to IS; 458-1988, ISI marked laying as per IS 783:1985)						
	225 mm dia	Meter	2800.00				-

18	Supplying and laying HDPE pipe of 4kg/sqcm in ground below road, path etc at a depth Nost less than 40 cm including excavation, dismantling of road if required and refilling the trench etc. as required.					
a	40 mm dia	Meter	9500.00			-
b	90 mm dia	Meter	1000.00			-
c	110 mm dia	Meter	2400.00			-
19	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 Nost 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 with busbars, switchgears and other accessories etc complete as required as following:. (1.2 Sqm Each)	Set	2.00			-
20	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	2400.00			-
21	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	12.00			-
22	Fabrication, supply, installation, testing and commissioning of cubicle type compartmentalized wall/ floor mounted power cum sub main distribution board of specified size and depth above 300 mm and upto 450mm made out of Nost 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 with busbars, switchgears and other accessories etc complete as required as following:. (1.2 Sqm Each)	Each	6.00			-

23	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.					
	3.5 x 70 sq. mm.	Meter	1000.00			-
24	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.					
	3½ X 70 sq. mm	Each	80.00			-
LT PANNAL (HOUSING CONNECTION)						
25	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 Nos 2 pole 63A MCB, isolator as Incomer ; 100A four pole Copper busbars, 6 Noss 16A SP MCB ,C series, 10kA as outgoing feeders:6 Noss lockable compartments for housing kWh meters Interconnection by Copper insulated leads	Each	80.00			-
26	Diamenteling of existing items like poles, conductors, transformer etc. as per direction of Engineer in charge NRDA.		1.00			-
27	Supply of swaged steel tubular pole as per IS 2713 with base plate of size 300x300x6mm welded at bottom, necessary hole for cable entry and earthing stud welded at specified height including painting with one coat of red oxide zinc chromate primer.					
a	Designation 410 SP-2 height 7.00 Metre	Each	180.00			-
28	Designing and providing suitable RCC foundation for 5 Metre GI octagonal pole including steel reinforcement (minimum 90kg per cum), form work, embedding 2 Noss 50mm dia PVC pipe for cable entry in Each foundation,	cum	6.00			-
29	Supply of hot dipped galvanized (in single dip to average 70 micron) octoganal pole made of 3mm thick steel plate having base plate 200 x 200 x 12mm, 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, including template and anchor plate 240 x 240 x 3mm with 4 Noss 450mm long, 16mm dia foundation bolts (EN8 grade).					

	5 Metre high, minimum dia 129mm at bottom and 75mm at top	Each	28.00			-
30	Erection of GI octogonal pole on existing cement concrete foundation having grouted bolts and nuts, aligning in true vertical position as required.					
a	5 Metre high	Each	196.00			-
31	Supplying and laying following sizes one number PVC 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 25sq. mm. (from Transformer to FP)	Meter	2000.00			-
b	4 x 16 sq. mm. (for area lighting)	Meter	6500.00			-
c	4 x 10 sq. mm (for domestic connection)	Meter	3500.00			-
d	2 x 6 sq. mm (for domestic connection)	Meter	4500.00			-
e	4 x 25 sq. mm. (for area lighting)	Meter	600.00			-
f	3.5 x 35 sq. mm.	Meter	200.00			-
32	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	3.5 x 25 sq. mm	Each	50.00			-
b	4 X 16 sq. mm	Each	460.00			-
c	4 X 10 sq. mm	Each	900.00			-

d	2 X 6 sq. mm	Each	1200.00			-
e	4 x 25 sq. mm.	Each	33.00			-
f	3.5 x 35 sq. mm.	Each	8.00			-
33	Supplying and fixing of following sizes PVC conduit along with accessories in surface complete as required.					
	32 mm	Meter	675.00			-
34	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 caNospay 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 caNospay, painting with one coat of approved steel primer etc. as required.					
	Single Over Hang 0.75 Metre Long	Each	28.00			-
35	Supplying, installation, testing and commissioning of following 230/250 volts LED street light fitting with gear box, igniter, with IP 65 protection on pole bracket complete .					
a	25 watt	Each	70.00			-
36	Supplying, installation, testing and commissioning of following 230/250 volts LED street light fitting with gear box, igniter, with IP 65 protection on pole bracket complete .					
a	45 watt (E)	Each	110.00			-
37	Supplying ,installation ,Testing & Commissioning of 25W IP65 LED streetlight Luminaire complete with pressure die cast aluminum housing. The fixture shall be designed so as to have lumen maintenance of at least 70% at the end of 50,000 hours.	Nos	28.00			-

38	Supply of IP 65 LED Bollard with extruded aluminium housing and polycarbonate diffuser. The Bollard height should be close to 500 mm. Total system wattage should be Not more than 08 Watts and Effective LED lumens should be 400 Lumens with CRI of more than 80 and colour temperature of 4000 K. The luminaire should be IP 65 and IK 10 protected with class I safety. The LED life should be 25,000 burning hours at L70 life LED should be compliant with CCC CE and RoHS The 11000 life. CCC, RoHS. vendor should produce authentic photometric data.	Nos	10.00			-
	Note: Errection includes making of civil foundation of M20 grade PCC, of square pedestal of 200x200x450mm.					
39	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.					
	SPMCB 10 A inside the box for cable connection	Nos	37.00			-
39	Supply and fixing of water tight prewired Terminal/ Junction box of 200 x 150 x 150 mm size, made of 1.6 mm thick MS sheet with detachable gland plate in bottom, hinged front openable cover, rubber gasket, having 2/4 Nos 4 way connector and 1 Nos 4A SP MCB inside for supply to fixtures, fixed to the poles with required accessories, hardwares etc for completeness and as per attached specification, direction of engineer, CGPWD standards and Electrical inspectorate standards.	Each	180.00			-
40	Earthing with G.I. earth pipe 4.5 Meter long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal and salt as required.	Each	180.00			-
41	Supply, drawing and terminating either ends 3 core FR PVC insulated 2.5 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	1400.00			-
42	Supply, drawing and terminating either ends 2 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.					
	3x1.5 sq.mm. (from Pole Junction box to Light fitting)	Meter	160.00			-

43	Design, Fabrication, Supply, Erection, Testing and commisioning of Powder coated, Weather Proof Double door type Feeder pillar fabricated out of 14 guage CRCA sheet steel in cubical, free standing, dust and vermin proof, with reinforcement of suitable size angle iron, channel, T -iron or flats as required. Feeder pillar shall be treated with all anti-corrosive process before painting as per specification. Feeder Pillar shall be suitable for 415V, 3-Phase, Four wire, 50 Hz supply complete with earth bus and lifting hooks as required in case of large panels.Approval shall be taken for Each panel before fabrication. (All hardwares like nuts and bolts used shall be Galvanized and Zinc passivated)	Set	5.00			-
44	Design, Fabrication, Supply, Erection, Testing and commisioning of Powder coated, Weather Proof Double door type Feeder pillar fabricated out of 14 guage CRCA sheet steel in cubical, free standing, dust and vermin proof, with reinforcement of suitable size angle iron, channel, T -iron or flats as required. Feeder pillar shall be treated with all anti-corrosive process before painting as per specification. Feeder Pillar shall be suitable for 415V, 3-Phase, Four wire, 50 Hz supply complete with earth bus and lifting hooks as required in case of large panels.Approval shall be taken for Each panel before fabrication. (All hardwares like nuts and bolts used shall be Galvanized and Zinc passivated)	Set	2.00			-
	INCOMER					
	1Nos. 80A FP MCCB(35 KA)					
	1Nos. 100A FP Contactor, AOM switch & Timers for 24 Hrs. setting					
	Metering & Indication					
	1 set of phase indicating lamps					
	BUS-BAR					
	1 Set of 100A TPN Aluminium Bus Bar with colour coded PVC Sleeves					
	OUTGOINGS					
	10 Nos 20A FP MCB					
	Subtotal for Electrical Works					-