



NAYA RAIPUR DEVELOPMENT AUTHORITY

Tender document

**for the Infrastructure Development of Nawagaon
Khapri Village at Sector-28 of Naya Raipur
(2nd Call)**

(Following Three-Envelope Tender Procedure)

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

NIT No.: 26/ NK VDP/ EE C-IV / CE(E) / NRDA / 2012-13, Raipur,

Dated: 06.04.2013

Issued by: Chief Executive Officer,
Naya Raipur Development Authority (NRDA)
Near DKS Bhawan, Old Mantralaya
Raipur 492 001, Chhattisgarh
Tel: (0771) 4066011, Fax: (0771) 4066188,
E-mail: ceo@nayarapur.com

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')

Signature of Contractor.....

Signature of NRDA.....

Naya Raipur Development Authority (NRDA)
Raipur, Chhattisgarh

Document details

Name of work : Infrastructure Development of Nawagaon Khapri Village at Sector-28 of Naya Raipur
(2nd Call)

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 for "Infrastructure Development of Nawagaon Khapri Village at Sector-28 of Naya Raipur"		
Sl. No.	Description of Items	Amount in INR
A	ROAD WORKS	Rs. -
B	WATER SUPPLY, SEWERAGE COLLECTION SYSTEM , DRAINAGE AND UTILITY CROSSINGS	Rs. -
C	ELECTRICAL WORKS	Rs. -
	Grand Total (In INR)	Rs. -
	Grand Total (In Words)	

Infrastructure Development of Nawagaon Khapri Village at Sector-28 of Naya Raipur						
BILL OF QUANTITY						
Sl. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words	Amount in INR
A	ROAD WORKS					
1	Field survey of land to capture coordinates and ground levels, topographical, natural and existing physical features of land with reference to permanent bench mark with total Station Survey instrument of one second accuracy, integration with survey data of adjoining areas, preparation of L-Section , Cross section and survey report and AutoCAD drawings showing physical features and contour at 0.25 m interval, as directed by the Engineer etc.	Ha.	33			Rs.
	Site clearance					
2	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 not exceeding 150 mm in thickness if required and as per relevant clauses of section-200.					
a	In area of light jungle	Ha.	4.37			Rs.
	Dimantling of Cement Concrete Pavment					
3	Dismantling of cement concrete pavement i/c breaking to pieces not 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	8250			Rs.
	Earth filling					
4	Excavation for roadway in soil using including loading in truck for carrying of cut earth to embankment site with all lifts and lead upto1000 meters as per relevant clauses of section 300.	cum	16883			Rs.
5	Construction of Embankment with Material Deposited from Roadway Cutting (Construction of embankment with approved materials 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	11818			Rs.

Sl. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words	Amount in INR
6	Construction of embankment 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	20751			Rs.
	For filling median Portion in cross roads and below Foot Path					
7	Transportation of material for excavated/ compacted ordinary & other soil measured as per clause 301.8, 304.4 and 305.8					
a	for a lead upto 1km	cum	1320			Rs.
	CEMENT CONCRETE ROAD					
8	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					
	By Plant mix method					
a	For grading -III material	cum	8751			Rs.
9	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 not exceeding 25 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.)	cum	880			Rs.

Sl. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words	Amount in INR
10	Cement Concrete Pavement (Construction of un-reinforced, dowel jointed, plain cement concrete pavement over a prepared sub base with 43 grade cement @ 400 kg per cum, coarse and fine aggregate conforming to IS 383, maximum size of coarse aggregate not 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	1936			Rs.
	B.T ROAD					
11	Wet Mix Macadam (Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density.	cum	5863			Rs.
12	Prime coat (Providing and applying primer coat with bitumen emulsion on prepared surface of granular Base including clearing of road surface and spraying primer at the rate of 0.85 kg/sqm using mechanical means)	sqm	15368			Rs.
13	Tack coat Providing and applying tack coat with bitumen using pressure distributor on the prepared bituminous/granular surface cleaned with mechanical broom.					
a	Granular surfaces treated with primes @ 0.45 kg / Sqm	sqm	15368			Rs.
14	Open - Graded Premix Surfacing (Providing, laying and rolling of open - graded premix surfacing of 20 mm thickness composed of 13.2 mm to 5.6 mm aggregates either using penetration grade bitumen or cut-back or emulsion to required line, grade and level to serve as wearing course on a previously prepared base, including mixing in a suitable plant, laying and rolling with a smooth wheeled roller 8-10 tonne capacity, finished to required level and grades.)					

Sl. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words	Amount in INR
a	Case - I: Mechanical method using Penetration grade Bitumen and HMP of appropriate capacity not less than 60 tonnes/hour .	sqm	15368			Rs.
15	Seal Coat (Providing and laying seal coat sealing the voids in a bituminous surface laid to the specified levels, grade and cross fall using Type A and B seal coats)					
a	Case - I : Type A	sqm	15368			Rs.
	Foot Path					
16	Footpaths and Separators (Construction of footpath/ separator 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 confirm 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 but excluding kerb channel..) as per pattern, size and colour as approved by engineer .	sqm	6713			Rs.
17	Road Marking with Hot Applied Thermoplastic Compound with Reflectorizing Glass Beads on Bituminous Surface (Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorizing glass beads @ 250 gms per sqmt area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes.)	Sqmt	1087			Rs.
18	Boundary pillar (Reinforced cement concrete M15 grade boundary pillars of standard design as per IRC:25-1967, fixed in position including finishing and lettering but excluding painting)	each	180			Rs.
	Landscaping					
19	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	812			Rs.

Sl. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words	Amount in INR
20	Tree Guard with MS Angle Iron and Steel Wire (Providing and fixing tree guard 0.60 meter square, 2.00 meter high fabricated with MS angle iron 30 x 30 x 3 mm, MS iron 25 x 3 mm and steel wire 3 mm dia welded and fabricated as per design in two halves bolted together)	each tree guard	812			Rs.
Sub Total of A						Rs. -
B	Storm water drain, Utility service pipe & chambers, Water supply and Sewerage system					
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 complete as per specifications and as directed by the Engineer etc.					
a	In all types of soil	Cum	41890			Rs.
b	In ordinary rock	Cum	1520			Rs.
2	Extra for every additional lift of 1.5 m or part thereof. complete as per specifications and as directed by the Engineer etc.					
a	All types of soil	Cum	12724			Rs.
b	Ordinary or hard rock	Cum	250			Rs.
3	Extra rate for lead for every 50m average lead upto 500 m beyond 50 m free lead and 1.5 m free lift: complete as per specifications and as directed by the Engineer etc.					
a	For Soil	Cum	5152			Rs.
4	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. complete as per specifications and as directed by the Engineer etc.	cum	13860			Rs.

Sl. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words	Amount in INR
5	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 complete as per specifications and as directed by the Engineer etc.					
a	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size).	Cum	399			Rs.
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 complete as per specifications and as directed by the Engineer etc.					
a	M-20 (using minimum cement 390 kg/cum concrete)	Cum	1717			Rs.
7	Providing, laying and placing of precast cement concrete cover of drain M-35 grade in superstructure including form work but excluding reinforcement complete as per specifications and as directed by the Engineer etc.					
a	RCC M35 grade	Cum	385			Rs.
8	Reinforcement: 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 as per specifications and as directed by the Engineer etc.					
a	Thermo-Mechanically treated bars	kg	164972			Rs.
9	Formwork: 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	13609			Rs.
b	Wall of any thickness including attached pilasters, buttresses etc.	sqm	8316			Rs.

Sl. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words	Amount in INR
10	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 complete as per specifications and as directed by the Engineer etc.					
a	450 mm dia	meter	2200			Rs.
b	600 mm dia	meter	1540			Rs.
c	1000 mm dia	meter	100			Rs.
11	Providing 1 st class bedding below pipes with graded sand or other granular materials passing through 5.6 mm sieve as per clause 2904. complete as per specifications and as directed by the Engineer etc.	cum	541			Rs.
12	Providing and laying boulders apron on river bed for protection against scour with stone boulders weighing not less than 40 kg each complete as per drawing and Technical specification.	Cum	7			Rs.
13	Providing, laying and jointing following socket & spigot centrifugal cast (spun) ductile iron pressure pipes with inside cement mortar lining (class K-9) conforming to IS-8329/with suitable rubber gasket (push on) joints as per IS:5382/85 including, complete as per specifications and as directed by the Engineer etc.					
a	200 mm diameter pipe	meter	204			Rs.
14	Providing, lowering, laying, aligning, fixing in position at and jointing at all level/ depths ISI marked HDPE pipes of PE-100 grade for potable water as per IS 4984 (amended upto date) in trenches in complete all accessories/ fittings including all material, labour, testing and commissioning as per Technical Specifications and as per direction of Engineer.					
a	160 mm diameter pipe	meter	2080			Rs.

Sl. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words	Amount in INR
b	110 mm diameter pipe	meter	2400			Rs.
15	Providing, lowering, laying, aligning, fixing in position at and jointing at all level/ depth ISI marked DWC HDPE pipe pressure class SN8 (amended upto date) structured wall polyethelene piping systems with non-smooth external annular corrugated and smooth internal surface (double wall) for non-pressure underground sewerage & Drainage application as per ISO 21138-3 & EN:13476-3 of following outer dia with all accessories and specials complete including all material, labour, hydraulic testing and commissioning as per Technical Specifications and as per direction of Engineer.					
a	120 mm dia.	meter	3948			Rs.
b	200 mm dia.	meter	2000			Rs.
c	295 mm dia	meter	2322			Rs.
d	480 mm dia	meter	3000			Rs.
16	Supplying and laying double wall HDPE pipe standard as per IS: 1490 part-I & II 2001 (amended upto date) having corrugation on the outer wall and plan surface on inner wall in ground below road, path etc at a depth not less than 130 cm including excavation, dismantling of road if required and refilling the trench etc. complete as per specifications and as directed by the Engineer etc.					
a	200 mm dia.	meter	2500			Rs.
b	295 mm dia.	meter	1900			Rs.
17	Providing and laying D.I. specials of class K-12 suitable for push-on jointing as per IS : 9523 complete as per specifications and as directed by the Engineer etc.					

Sl. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words	Amount in INR
a	Upto 300 mm dia	quintal	2			Rs.
18	Providing and laying flanged C.I. standard specials such as tees, bends, collars, tapers, caps etc., suitable for flanged jointing as per IS : 1538 complete as per specifications and as directed by the Engineer etc.					
a	Upto 300 mm dia.	quintal	2			Rs.
19	Providing and placing in position C.I. sluice valves category "B" (with cap) as per IS: 14846 latest revision complete as per specifications and as directed by the Engineer etc.					
	Sluice Valve					
a	100 mm dia.	Nos	14			Rs.
b	150 mm dia.	Nos	2			Rs.
c	200 mm dia.	Nos	1			Rs.
	Scour Valve					
d	100 mm dia.	Nos	1			Rs.
20	Providing and placing in position C.I. double acting air valve of approved make, complete as per specifications and as directed by the Engineer etc.					
a	100 mm dia.	Each	5			Rs.
21	Providing, lowering, laying, aligning, fixing in position and jointing CI dismantling joint (suitable for sluice valves, scourvalve and air valve etc.) as per IS specifications complete of the following sizes in complete all accessories/ fittings including all jointing material, cost of all labour, testing and commissioning as per Technical Specifications and as per direction of Engineer.					
a	100 mm dia PN-1.0	Each	14			Rs.

Sl. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words	Amount in INR
b	150 mm dia PN-1.0	Each	2			Rs.
c	200 mm dia PN-1.0	Each	1			Rs.
22	Construction of RCC valve chamber internal size 1.2m x 1.2m x 1.65m, 100mm thick PCC and RCC M25 grade 150mm thick wall, top cover 100mm thick precast cover M-35 grade 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.	No	24			Rs.
	Construction of prefabricated HDPE manhole:					
	Supplying , Installation testing and commissioning 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.					

Sl. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words	Amount in INR
23	<p>The item is inclusive of Excavation,Dewatering,Layerwise backfilling and compaction of grannular material ,</p> <p>Provision of corrosion resistant steps at a vertical distance of 25cm</p> <p>Providing and fixing of FRP Manhole frame and cover with locking arrangement fitting to 600mm dia manhole openings.</p> <p>Providing and fixing of Precast RCC M35 grade load distribution ring 1050mm OD & 635mmID and designed to handle heavy load as approved by Engineer placed around the neck of the manhole of 150mm thickness including reinforcement.</p> <p>Providing RCC M20 grade concrete thick 200mm slab (Dia 1500mm outer dia and inner dia 635mm) around the manhole below the Precast RCC distribution Ring.</p> <p>Providing and laying Manhole bottom PCC (1:3:6) of 200mm thick and 1.5m dia.</p> <p>All the inlet, outlet connections to the manhole shall be complete with all accessories/ fittings, material, labour, jointing materials , testing and commissioning as per detailed specifications, drawings all complete as directed by Engineer in charge.</p>					
a	Manhole of depth up to 1.5m deep	No	20			Rs.
b	> 1.5m and up to 1.8m deep	No	20			Rs.
c	> 1.8m and up to 2.1m deep	No	15			Rs.
d	> 2.1m and up to 2.4m deep	No	15			Rs.
e	> 2.4m and up to 2.7m deep	No	15			Rs.
f	> 2.7m and up to 3.0m deep	No	15			Rs.
g	> 3.0m and up to 3.3m deep	No	15			Rs.

Sl. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words	Amount in INR
h	> 3.3m and up to 3.6m deep	No	10			Rs.
i	> 3.6m and up to 3.9m deep	No	5			Rs.
j	> 3.9m and up to 4.2m deep	No	5			Rs.
k	> 4.2m and up to 4.5m deep	No	5			Rs.
l	> 4.5m and up to 4.8m deep	No	5			Rs.
m	> 4.8m and up to 5.1m deep	No	5			Rs.
24	Providing sand cast iron drop connection externally for 60 cm drop from branch sewer line to main sewer manhole including inspection and cleaning eye with chain and lid, sand cast iron drop pipe and bend encased all-round with cement concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) with all centering and shuttering required, cutting holes in walls and making good with brick work in cement mortar 1:4 (1 cement : 4 coarse sand) plastered with cement mortar 1:3 (1 cement : 3 coarse sand) on inside of the manhole wall lead caulked joints between sand cast iron pipes and fittings, stiff cement mortar 1:1 (1 cement : 1 fine sand) joints between sand cast iron tee and S.W. pipe, making required channels complete as per standard design and specifications as directed by Engineer in charge.					
a	150 mm dia. sand cast iron drop connection	Each	2			Rs.
Sub Total of B						Rs. -
C	ELECTRICAL WORKS					

Sl. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words	Amount in INR
1	Supplying, Receiving, Storage, Installation, Testing and Commissioning of approved make extendible type Ring Main Unit for outdoor installation, rated for 12KV, 50Hz, 630A, STR of 18.4 kA for 1sec with SF6 as insulation having 2 sets of three position Load break Switch with earthing switch as Incomer and 1 set of three position Load break Switch -Fuse Combination with earthing switch for Tee-off. The units shall be complete with interconnections of both Power & Control, accessories, hardwares, civil works for foundation etc as required for completeness and as per direction of engineer, attached specification, CSPDCL standards and Electrical Inspectorate Standards. The accessories shall include: 3 Set of ON/ OFF and Phase indicating lamps 3 Nos end termination box for 3 core 120 sq mm XLPE cable 1 Set of 10 to 40A HRC fuse links	Set	3			Rs.
2	Supply, installation, testing & commissioning of 11 KV(E), XLPE Al Cable in readymade trenches with clamping materials, tags, accessories, hardwares etc as required for completeness as per attached specification/ drawing, CSPDCL standards and direction of EIC.					
a	3C X 120 sqmm	Rmt	550			Rs.
3	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	3C X 120 sqmm	Rmt	250			Rs.
b	3C x 95 sqmm	Rmt	1000			Rs.
4	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			Rs.
b	95 sqmm	Each	6			Rs.

Sl. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words	Amount in INR
5	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	2			Rs.
b	95 sqmm	Each	2			Rs.
6	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.
7	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	3			Rs.
8	Excavation of pit of size 5' x 5' x 5', filling with sand for 4"(10cm) depth, laying bed concrete with CC (1:4:8) using 40mm HBG metal for 4" depth, construction of distribution transformer plinth with footing size (5' x 5' x 4" and 3' x 3' x 1.5'), column size 9" x 9" x 8'8", beam size 9" x 9" x 9'3", slab 5' x 5' x 4", providing reif steel 12mm rod (76kgs) as per the direction of ADE/ Civil, refilling the hollow portion with excavated earth, and slabs, column and beam with CM (1:5) 20mm thick, including cost and transport of all materials and laobuor charges for all operation with an average lead of 5 KM and lifts etc., complete as directed by the Engineer in charge.	per pillar	3			Rs.

Sl. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words	Amount in INR
9	Supply and fixing of 11 kV Danger notice plates of size 250mm x 200mm made of mild steel sheet of at least 2mm thick & vitreous enamelled white on both sides and with inscription in signal red colour on front side as required on the existing structure complete in all respect as per Discom specification.	Each	6			Rs.
10	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, CSDCL standards and Electrical inspectorate standards. (2 for each RMU + 3 for each transformer).	Set	13			Rs.
11	Supplying and laying of 50 mm x 6 mm GI earth strip along with the 11kV 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, CSDCL standards and Electrical inspectorate standards. (length same as cable length)	mtr	2000			Rs.
12	<p>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 etc as per specifications including powder coating painting with busbars, switchgears and other accessories etc complete as required as following:.</p> <p>4 pole MCCB, 400A, 35KA (as incomer) (1no.)</p> <p>4 strip copper bus bar of size 600 x 40 x 6mm and 400amps</p> <p>current transformer 400/5 amp (3nos.)</p> <p>230 volt LED type indicating lamp (3nos.)</p> <p>4 Nos 4 pole, 63A MCCB, 35kA as outgoing feeders:</p> <p>Interconnecting PVC insulated lead of 16 sqmm Cu. cable of four poles.</p>	Set	3			Rs.

Sl. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words	Amount in INR
13	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	6 amps to 32 amps	Each	25			Rs.
14	Supplying and fixing TP MCB , 440 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	15			Rs.
15	Supply, installation, testing and commissioning of LT distribution box , spring loaded, constant pressure, multiconnection type. The box shall have built in type hinges, no screws/rivets visible from outside. Neoprene Rubber gasket to be provided all around the cover. The busbar shall be made of EC grade copper and with a total cross section of 0.75sqmm approx and length 63mm approx. The boxes shall have special type lock & key system as well as provision for sealing for complete protection of the service connection contacts. The shall be complete with accessories, hard wares etc. as required for completeness as per attached specification and direction of EIC.	Each	30			Rs.
16	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	132			Rs.
17	Erection of steel tubular pole in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation including excavation and refilling etc. as required of length :					
a	7 metre high	Each	132			Rs.

Sl. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words	Amount in INR
18	Supply and fixing following street light pole bracket on existing pole made out of 50 mm dia GI "B" class pipe welded to 300 mm long GI pole canopy of suitable dia at a angle of 102.50 including having GI 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 1.00 metre Long	Each	132			Rs.
19	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 70 sq. mm.	mtr	2500			Rs.
b	4 x 25 sq. mm. (for area lighting)	mtr	5000			Rs.
c	2 x 6 sq. mm (for domestic connection)	mtr	3000			Rs.
d	4 x 10 sq. mm (for domestic connection)	mtr	1000			Rs.
20	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 70 sq. mm	Each	50			Rs.
b	4 x 25 sq. mm.	Each	200			Rs.
c	2 x 6 sq. mm	Each	40			Rs.
d	4 x 10 sq. mm	Each	20			Rs.

Sl. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words	Amount in INR
21	Supplying, installation, testing and commissioning of following 230/250 volts HPSV street light fitting with gear box, igniter, capacitor with IP 65 protection on pole bracket complete but without lamp as required.					
a	70 watt	Each	132			Rs.
22	Supplying, fixing, testing and commissioning of following 230/250 volts HPSV lamp tubular/elliptical in existing lighting luminaries on pole/ wall/ roof etc as required.					
a	70 watt(E)	Each	132			Rs.
23	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 no 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	132			Rs.
24	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.	mtr	1400			Rs.
25	Design, Fabrication, Supply, Erection, Testing and commissioning 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) INCOMER 1No. 80A FP MCCB(35 KA) 1No. 100A FP Contactor, AOM switch & Timers for 24 Hrs. setting	Set	7			Rs.

Sl. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words	Amount in INR
	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					
26	Dismantling of existing items like poles, conductors, transformer etc. as per direction of Engineer in charge NRDA.	Lupmsum	1			Rs. -
	Sub Total of C					Rs. -