



NAYA RAIPUR DEVELOPMENT AUTHORITY

**Tender Document for the
Construction Of Rajya Soochna Ayog Office Building At
North Block, Sector -19, Naya Raipur**

(Following Three-Envelope Tender Procedure)

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

NIT No.: 112/RSAB/EEC-IV / CE (E) / NRDA / 2014-15, Raipur,

Dated: 11.11.2014

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.
Website: www.nayarapur.gov.in

Tender Document Contains

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

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

Part (A)

- a) Press Notice
 b) Detailed NIT

Part (B)

a) Schedule-A

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

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

Section-I..... Technical tender forms

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

Section –IIScope of work

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

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

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

Section –VI..... Drawings

- e) Schedule-E
 f) Schedule-F

2. PART TWO (NRDA F-2/3)-Standard form (Not Attached herewith, and not to be submitted along the tender)

Important note: - Link site <http://nayaraipur.com/documents/gcc.pdf>

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

Naya Raipur Development Authority (NRDA) Raipur, Chhattisgarh

Document details

Name of work : "Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur".

Name of Tenderer:

Details

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

Signature of Tenderer

Date:_____

Cost Abstract**Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur**

Sl. No.	Description of Items	Amount in INR in Figures	Amount in INR in Words
A	Civil Works	-	
B	Road Works	-	
C	Plumbing Works	-	
D	Electrification Works	-	
E	HVAC Works	-	
F	Fire Fighting Works	-	
	Total	-	

Bill of Quantities
Construction Of Raja Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

A Civil Work

Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
EARTH WORK						
1	Surface dressing of the ground including removing vegetation and making up undulations and in-equalities not exceeding 15 cms in depth/ height including disposal of rubbish upto 1.5 m lift and lead upto 50m (at least 5m away from the dressed area).	6037.20	SQM			-
2	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 including excavation of work in or under water or liquid mud pumping out of water					
a	In all types of soil	3572.55	CUM			-
b	In ordinary rock	297.24	CUM			-
3	Extra for every additional lift of 1.5 m or part thereof.					
a	All types of soil	990.80	CUM			-
b	Ordinary or hard rock	297.24	CUM			-
4	Carriage by mechanical transport for 5 km lead:					
a	Earth	714.51	CUM			-
5	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.	2858.04	CUM			-

Bill of Quantities

Construction Of Raja Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

A Civil Work

Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
6	Providing and filling in plinth with sand/ Crusher dust under floor in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering, including dressing etc. complete.	1319.76	CUM			-
7	Supplying chlorpyriphos/ Lindane emulsifiable concentrate of 20% in sealed containers including delivery as specified.	3369.82	LITRE			-
8	Diluting chemical emulsion (Chlorpyriphos/ lindane) in water as per manufacturers recommendation and injecting for pre-constructional curative cum preventive anti-termite treatment:(Five year service guarantee bond to be signed by contractor)					
a	Surface treatment by spreading emulsion under floor, over the plinth area before laying base concrete @ 5 litres / sqm.	1019.82	SQM			-
b	Treatment of inside of plinth masonry wall on using diluted chemical emulsion @ 1.5 litre per hole, including drilling 12 mm diameter holes in plinth wall below plinth protection at the intervals of 300 mm and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand).	874.02	METER			-
c	Treatment of outer side of plinth masonry wall using diluted chemical emulsion @ 1.5 litre per hole, including drilling 12 mm diameter holes in plinth wall at the junction of floor at the intervals of 300 mm and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand).	235.00	METER			-
9	Providing and filling brick bats in sunkan portition with sand including dressing etc. complete.	42.72	CUM			-
FORM WORK						
10	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.	3601.31	SQM			-
b	Wall of any thickness including attached pilasters, buttresses etc.	3230.03	SQM			-
c	Small lintel not exceeding 1.5m clear span.	152.15	SQM			-
d	Window sills, anchor blocks, string course, bends, copings, bed plates and like.	116.75	SQM			-

Bill of Quantities

Construction Of Raja Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

A Civil Work

Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
e	Edge of slab, breaks in floor and walls upto 200mm.	1028.04	METER			-
f	Columns, Pillars, Piers and likes- rectangular or square in shape	1633.40	SQM			-
g	Columns, beams & walls- circular or any other geometrical shape other than square and rectangular in all sizes	50.59	SQM			-
h	Suspended floors, roofs, access platform, balconies (plain surfaces) and shelves (cast in situ)	3514.05	SQM			-
i	Beams, lintels, cantilevers & walls	2822.26	SQM			-
j	Vertical and horizontal fins individually or forming box, louvers bands, almirah shelves and likes.	108.64	SQM			-
k	Weather shade, chhajja, Cornices and mouldings	39.28	SQM			-
l	Stair cases of all types excluding spiral and folded plate type, including risers and landings	242.13	SQM			-
11	Extra for additional height every 1m or part thereof where height of staging for formwork exceeds 4.0 m, with adequate bracing, propping etc at all levels, for suspended floor, roof, landing, beam and balcony. (only plan area is to be measured)	855.00	SQM			-
CEMENT CONCRETE (PLAIN AND REINFROCED)						
12	Providing and laying nominal mix cement concrete with crushed stone aggregate using concrete mixer in foundation, plinth and at ground level excluding cost of form work.					
a	1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size).	448.62	CUM			-
b	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size).	164.20	CUM			-

Bill of Quantities

Construction Of Raja Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

A Civil Work

Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
13	Providing and laying nominal mix cement concrete with crushed stone aggregate using concrete mixer in all works upto floor five level excluding cost of form work.					
a	1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20mm nominal size).	9.15	CUM			-
14	Providing and laying nominal 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 nominal size).	126.84	CUM			-
15	Providing and laying design mix reinforcement cement concrete with crushed graded stone aggregate 20mm nominal size using batching plant, transit mixer and concrete pump, in all works upto floor five level excluding cost of reinforcement and form work.					
a	M-20 (using minimum cement 390 kg/cum concrete)	206.70	CUM			-
b	M-25 (using minimum cement 410 kg/cum concrete)	2040.92	CUM			-
c	M-30 (using minimum cement 420 kg/cum concrete)	40.82	CUM			-
16	Providing and placing in position reinforcement for R.C.C. work including straightening, cutting, bending, binding etc. complete as per drawings including cost of binding wire all complete					
a	Thermo-Mechanically treated bars	267949.78	KG			-
17	Providing and laying damp proof course (upto 50mm thick) with plain cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded crushed stone aggregate 20mm nominal size) including formwork.	0.22	CUM			-
18	Providing and mixing water proofing material in PCC/ RCC work in the proportion recommended by the manufacturer such as sika, pidilite, mc bauchemie, finco etc.	23.98	KG			-

Bill of Quantities

Construction Of Raja Soचना Ayog Office Building At North Block, Sector -19, Naya Raipur

A Civil Work

Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
19	Applying a coat of hot bitumen 30/40 using @ 1.7kg/ sqm on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	3.96	SQM			-
20	Making 50mm thick plinth protection of plain cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded crushed stone aggregate 20mm nominal size) over 75mm bed of dry brick ballast 40mm nominal size well rammed and consolidated and grouted with sand including finishing the top smooth.	285.52	SQM			-
WATER PROOFING						
21	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of WC, kitchen and the like consisting of:					
	i) 1st course of applying cement slurry @ 4.4 Kg/sqm mixed with water proofing compound conforming to IS 2645 including rounding off junction of vertical and horizontal surface.					
	ii) 2nd course of 20mm cement plaster 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound including rounding off junction of vertical and horizontal surface.					
	iii) 3rd course of applying blown or residual bitumen applied hot @ 1.7 Kg. per sqm of area.					
	iv) 4th course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 Kg. per sqm of area.	356.07	SQM			-
22	Providing and laying integral cement based water proofing treatment on roofs, balconies, terraces etc with average thickness of 120mm and minimum thickness at khurra as 65 mm, consisting of following operations including surface preparation:					
	i) Applying a slurry coat of neat cement using 2.75 kg/sqm. of cement mixed with water proofing compound conforming to IS. 2645 over the RCC slab including adjoining walls upto 300mm height.					

Bill of Quantities

Construction Of Raja Soचना Ayog Office Building At North Block, Sector -19, Naya Raipur

A Civil Work

Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
	ii) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) mixed with water proofing compound conforming to IS : 2645 over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand) mixed with water proofing compound conforming to IS : 2645 to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs.					
	iii) After two days of proper curing applying a second coat of cement slurry using 2.75kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645.					
	iv) Finishing the surface with 20 mm thick joint less cement mortar of mix 1:4 (1 cement :4 coarse sand) mixed with water proofing compound conforming to IS : 2645 including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3mm deep.					
	v) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order:	1272.64	SQM			-
23	Grading roof for water proofing treatment with					
a	Cement concrete 1:2:4 (1cement : 2 coarse sand:4 graded stone aggregate 20mm nominal size)	19.80	SQM			-
24	Grading roof for water proofing treatment with					
a	Cement mortar 1:4 (1cement : 4 coarse sand)	1.02	CUM			-
BRICK WORK						
25	Brick work with modular fly-ash bricks 100mm thick (FALG Bricks) confirming to IS:12894-2002 of class designation 35 in superstructure above plinth level upto floor five level.					
a	Cement Mortar 1:3 (1 cement : 3 coarse sand)	340.72	SQM			-

Bill of Quantities						
Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur						
A Civil Work						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
26	Extra for providing and placing in position hopping 25x1.60 mm or 2 Nos 6mm dia MS bars reinforcement at every third course of half brick masonry.	340.72	SQM			-
27	Brick work with modular fly-ash bricks (FALG Bricks) confirming to IS:12894-2002 of class designation 35 in foundation and plinth in:					
a	Cement Mortar 1:3 (1 cement : 3 coarse sand)	192.08	CUM			-
b	Cement Mortar 1:5 (1 cement : 5 coarse sand)	890.50	CUM			-
28	Extra for brick work in superstructure:					
a	Above plinth and upto floor five level.	298.13	CUM			-
29	Extra for brick work in square and rectangular pillars.	13.53	CUM			-
30	Half Brick (9cm) work for plinth protection with modular bricks of class designation 35 including grouting with cement mortar 1:4 (1 cement : 4 coarse sand)	263.00	METER			-
WOOD WORK						
31	Providing and fixing flush door shutters, exterior grade, decorative type, core of block board construction with frame of first class hard wood and well matched teak ply veneering with vertical grains or cross bands and face veneers on both faces of shutters excluding hinges.					
a	35 mm. thick (single leaf) PHENOL FORMALDEHYDE BOUNDED	64.80	SQM			-

Bill of Quantities

Construction Of Raja Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

A Civil Work

Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
32	Providing and fixing flush door shutters, exterior 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	35 mm. thick (single leaf) PHENOL FORMALDEHYDE BOUNDED	80.91	SQM			-
33	Extra for double leaf shutter instead of single leaf.	16.56	SQM			-
34	Extra for cutting rebate in flush door shutter (total area of door shutter to be measured).	144.63	SQM			-
35	Supplying and fixing hollow metal steel fire doors flush type of 2 hours fire rating and approved colour approved by EIC as per specification outlined below, all material and labour complete in all respects conforming to IS: 3614 (PART 2) Door frames shall be of double rebate profile of size 143 mm x 57mm with a bending radius of 1.4 mm made out of 1.6 mm thick galvanized steel sheet (16 gauge) and the steel door Shutter shall be double skin door made out of 1.25mm thick galvanized steel sheet (18 gauge) conforming to IS: 277- 1981.The infill material shall be resin bonded oneycomb paper with thermal insulation. The rate shall include applying 2 coats of fire resistant synthetic enamel paint over a coat of primer including all materials and labour complete as approved by EIC.(Two hr fire rated door at GF FD(2.1X1.5)	10.08	SQM			-
36	Extra for providing vision panel not exceeding 0.10 Sqm in all type of flush shutters (excluding cost of glass)					
a	Rectangular or square	5.00	EACH			-
37	Providing and fixing stainless steel butt hinges with necessary stainless steel screws etc complete.					
a	125x2.5mm (heavy)	352.00	EACH			-

Bill of Quantities

Construction Of Raja Soचना Ayog Office Building At North Block, Sector -19, Naya Raipur

A Civil Work

Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
38	Providing and fixing bright finished brass sliding door bolt with nuts and brass polished MS screws complete:					
a	250x16 mm	4.00	EACH			-
39	Providing and fixing brass door latch with brass polished MS screws complete:					
a	250x16x5 mm	42.00	EACH			-
40	Providing and fixing bright finished brass tower bolts (barrel type) with brass polished MS screws complete:					
a	150 x10 mm	27.00	EACH			-
41	Providing and fixing bright finished brass door handles with brass polished MS screws complete:					
a	125 mm	70.00	EACH			-
42	Providing and fixing of bright finished brass mortice latch and lock 100x65mm with six levers and a pair of lever handles with brass polished MS screws etc. complete.	21.00	EACH			-
43	Providing and fixing 150mm bright finished brass floor door stopper with rubber cushion & brass polished MS screws etc complete to suit the shutter thickness.	25.00	EACH			-
44	Providing and fixing aluminium sliding door bolts, ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete :etc complete.					
a	250x16 mm	96.00	EACH			-

Bill of Quantities

Construction Of Raja Soचना Ayog Office Building At North Block, Sector -19, Naya Raipur

A Civil Work

Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
45	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :					
a	250x16 mm	62.00	EACH			-
46	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :					
a	125 mm	124.00	EACH			-
47	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.					
a	Single rubber stopper	62.00	EACH			-
48	Providing and fixing factory made P.V.C. door frame of size 50x47mm with a wall thickness of 5mm, made out of extruded 5mm rigid PVC foam sheet mitred at corners and joined with 2 Nos of 150mm long brackets of 15x15mm M.S. square tube, the vertical door profiles to be reinforced with 19x19mm M.S. square tube of 19 gauge, EPDM rubber gasket weather seal to be provided through out the frame. The door frame to be fixed to the wall using M.S. screws of 65/100mm size complete as per manufacturers specification and direction of Engineer-in-Charge.	89.10	METER			-

Bill of Quantities

Construction Of Raja Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

A Civil Work

Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
49	Providing and fixing 30mm thick factory made panel PVC door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19mm x 19mm for styles and 15x15mm for top & bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture . M.S. frame covered with 5mm thick heat moulded PVC 'C' channel of size 30mm thickness, 70mm width out of which 50mm shall be flat and 20mm shall be tapered in 45degree angle on either side forming styles; and 5mm thick, 95mm wide PVC sheet out of which 75mm shall be flat and 20mm shall be tapered in 45 degree on the inner side to form top and bottom rail and 115mm wide PVC sheet out of which 75mm shall be flat and 20mm shall be tapered on both sides to form lock rail. Top, bottom and lock rails shall be provided either side of the panel. 10mm (5mm x 2) thick, 20mm wide cross PVC sheet be provided as gap insert for top rail & bottom rail. paneling of 5mm thick both side PVC sheet to be fitted in the M.S. frame welded/ sealed to the styles & rails with 7mm (5mm+2mm) thick x 15mm wide PVC sheet beading on inner side, and joined together with solvent cement adhesive. An additional 5mm thick PVC strip of 20mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent adhesive etc. complete as per Manufacturer's specification including 3 nos ISI marked stainless steel hinges of size 100x58x1.9 mm complete. (for W.C. and bathroom door shutter).					
	PVC door shutter	28.35	SQM			-
50	Providing and fixing IS: 3564 marked Aluminium die cast body tubular type universal hydraulic door closer with necessary accessories and screws etc complete.	22.00	EACH			-
STEEL AND ALUMINIUM WORK						
51	Providing stainless steel railing/ grill made of S.S. flats, hollow S.S. pipe or square/ rectangular sections of grade 304 conforming to ASTM and other intunational standard of approved design fixing in stair case, balcony or other places with metal fasteners and stainless steel bolts etc complete.	1906.35	KG			-
52	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.	435.00	KG			-
53	Providing and fixing M.S. grill of approved pattern made of M.S. flats or square or round bars welded to steel frame and welded with 15x3 mm lugs 10cm long embedded in cement concrete blocks 15x10x10cm of grade M-10. including applying a priming coat of red oxide zinc chromate primer..	8466.80	KG			-

Bill of Quantities

Construction Of Raja Soचना Ayog Office Building At North Block, Sector -19, Naya Raipur

A Civil Work

Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
54	Providing and fixing in position doors, windows and ventilators frames made of cold rolled pressed steel sheet framed profiles made from commercial M.S. Sheets conforming to I.S. 513 of 1973 and as per general specifications of I.S 4351 including hinges jamb, lock jamb, steel butt hinges, base tie, joints mitred and welded with 10cm long legs of size 15x3mm M.S. flat, embedded in cement concrete blocks 15x10x10cm size of grade M-10 or rawl plugs and screws or with fixing clips or with bolts and nuts including neatly compacted filling M-10 cement concrete in profile section applying a priming coat of red oxide zinc chromate primer.					
a	Single rebate 100mmx50mm size, 1.6mm thick sheet.	289.95	METER			-
55	Providing and fixing steel door with M.S. sheet 1mm thick, frame of angle iron, diagonal braces of angle/ flat iron of suitable size, 3.00 mm M.S. gusset plates at junctions and corners, all necessary fittings complete including applying a priming coat of red oxide zinc chromate primer..	608.40	KG			-
56	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.					
a	Angle-iron frames	176.45	KG			-
57	Providing and fixing M.S. fan clamp/ hook for ceiling fan made out of 16 mm dia M.S. bar bent to shape with hooked ends in R.C.C. slabs, beams during laying including painting the exposed portion of loop.	72.00	EACH			-
58	Providing and fixing aluminium work for doors, windows, ventilators and partitions made out of extruded aluminium standard sections (main section with minimum 1.5mm thickness) conforming to IS: 733, IS: 1285 mitred and jointed mechanically including aluminium cleats, neoprene weather stripping gasket beveled edge beading, screws duly fixed in wall/ floor with fixing clips or hold fasteners or bolts and nuts as required aluminium sections shall be anodized transparent or dyed to approved shade according to IS: 1868, minimum anodic coating shall be of grade AC-15. (Glazing and panelling to be paid for separately					
a	For fixed portion	958.86	KG			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

A Civil Work

Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
b	For shutter of doors, windows & ventilators including providing and making provision for fixing of fitting wherever required including the cost of PVC/ neoprene gasket required (Fittings shall be paid for separately).	799.22	KG			-
59	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with PVC/ neoprene gasket etc. complete. (Cost of aluminium snap beading shall be paid in basic item):					
a	With float glass panes of 4 mm thickness	163.55	SQM			-
b	With float glass panes of 6 mm thickness	49.68	SQM			-
c	With float glass panes of 8 mm thickness	258.65	SQM			-
60	Providing and fixing of six/seven levers branded and approved mortise lock.	11.00	EACH			-
61	Extra for providing and fixing tinted glass panes in aluminium door, window, ventilator shutters and partitions instead of float glass.					
a	4 mm thickness	163.55	SQM			-
b	6 mm thickness	49.68	SQM			-
c	8 mm thickness	258.42	SQM			-

Bill of Quantities						
Construction Of Raja Soचना Ayog Office Building At North Block, Sector -19, Naya Raipur						
A Civil Work						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
62	Designing, providing and fixing aluminum frame work made of special aluminum section on building face with M.S. angle iron brackets fixed on RCC structure with S.S. hold fasteners, including providing and fixing two sided structural adhesive tape of appropriate grade (NORTON or equivalent), on aluminium sections for fixing aluminium/ glass panel, sealing on periphery of frame work, by providing EPDM gasket, silicon weather sealant between aluminium frame and building structure including hire charges of double scaffolding complete.	1939.85	KG			-
ROOFING AND CEILING						
63	Providing & Fixing of Flexalum® Lay-in Plain Tile False Ceiling on 24mm 'T' Framework of module 600mm x 600mm. Panels shall be manufactured by Hunter Douglas of size 575mm x 575mm made out of 0.5mm thick Galvanised Steel. Tiles to be stove enamelled on a continuous application for pre-treatment. The coils to go through 4 stages of pre-treatment, three times oven baked through conversion coating, priming and finish coat ensuring superior adhesion, high corrosion resistance and good colour stability. The coils to be painted on both sides after degreasing. Inside surface to have a primer of 5 microns and a coat of natural colour of 5 microns, exposed surface to have a primer of 5 microns, binder of 5 microns and topcoat of approved colour of 15 microns. The Tile will be manufactured on advanced equipment, which includes several levelling. The tile end shall be raised upward by 38mm and bend outward to lay the tile in framework. Grid system for fixing ceiling tiles shall comprise of Tees. The 24mm main tee runners shall be suspended at an interval of 1200mm centre to centre. The 24mm cross tee runner shall be suspended at 600mm centre to centre and further supported with 24mm cross tee at 600mm centre to centre with interlocking arrangements to form grid of 600mm x 600mm. The main tee shall be supported by means of 4mm G.I. rod from slab/roof. The suspension shall be provided at 1200 to 1500mm centre to centre. Mode of Measurements: Measurements shall be wall to wall without any deductions for lights, diffusers, columns etc. Flexalum® Lay-in G.I., Un-perforated, Coil Coated, Tile Ceiling System:	1412.63	SQM			-
64	Hall Ceiling Specification (Auditorium): Providing and fixing of Anutone Subtex Nubby Soft Fibre Square edge 15mm for Ceiling of size 595x595x15 mm is to be installed on framework . (Concealed grid system to be used) Which will comprise of NRC 0.94 base panel with humidity resistance of 90% RH and light reflectance upto 85% with Leed points Green Performance certified. Subtex Nubby Soft Fibre 15mm for Ceiling tile meet the stringent fire test required having Class 'A' rating for Flame Ignitability test as per ASTM E 84, with complete framework as per Installation details given	122.72	SQM			-

Bill of Quantities

Construction Of Raja Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

A Civil Work

Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
65	Providing and laying Metal Ceilings GI Lay in Microperforated for grids size 600mmx600mm suspension system shall be armstrong suprafine 38 exposed grid T section Flange exposed shall be powder coated white colour, Main runner size shall be 24mmx32mm cross runner 24x27mm, Perimeter 19mmx19mm. All section out of 0.45m thick G.I. Sheet. (Make: Hunter Douglas)	18.00	SQM			-
PLASTERING AND POINTING						
66	6mm thick cement plaster of mix:					
a	In Cement mortar 1:3 (1 cement : 3 fine sand)	1472.02	SQM			-
67	12mm thick cement plaster of mix:					
a	In Cement Mortar 1:4 (1 cement : 4 fine sand)	6397.24	SQM			-
68	18 mm thick cement plaster with under layer of 12mm thick cement plaster 1:5 (1 cement : 5 fine sand) finished with a top layer of 6mm thick cement plaster 1:3 (1 cement : 3 fine sand).	2031.37	SQM			-
69	18mm thick cement plaster in two coats with under layer of 12mm thick plaster 1:5 (1 cement : 5 fine sand) and top layer of 6mm thick with cement plaster 1:3 (1 cement : 3 fine sand) finished rough with sponge.	1177.30	SQM			-
70	Extra for plastering of exterior walls when height exceeds 10m above ground level for every additional height of 3.0m or part thereof.	1185.08	SQM			-
71	18 mm thick plain cement mortar band in cement mortar 1:4 (1 cement : 4 fine sand) per cm width:					
a	Sunk Bands	600.00	METER			-
b	Raised Bands	138.45	METER			-

Bill of Quantities

Construction Of Raja Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

A Civil Work

Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
72	Providing and fixing chicken mesh weighting not less than 250 gms/ sqm as per IS : specification in the required width with 10mm long steel nails on vertical and horizontal surface near R.C.C. and brick walls junctions including scaffolding and all lead and lifts etc. complete before plastering upto 10mts in height.	1921.18	SQM			-
FLOORING						
73	52 mm thick cement concrete flooring with under layer of 40mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) and top layer of 12 mm thick cement metallic hardener concrete mix 1:2 (1 cement hardener mix : 2 stone aggregate of 6 mm size by volume) with metallic hardening compound of approved quality mixed with cement in ratio of 4:1 (4 cement : 1 metallic floor hardening compound by weight) including finishing etc. complete.	14.56	SQM			-
74	Extra for making chequers of approved pattern on cement concrete flooring, landing, pavement etc.	14.56	SQM			-
75	Providing and fixing ceramic glazed wall tiles conforming to IS : 15622 of approved make, colours, shades and size(300x450) on wall and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with matching pigment complete.	483.42	SQM			-
76	Providing and laying ceramic glazed floor tiles 300x300mm conforming to IS : 15622 of approved make, colour, shade laid on 20 mm thick Cement Mortar 1:4 (1 cement : 4 coarse sand) including pointing the joints with white cement mixed with matching pigment etc., complete.					
	In all colours except White, Ivory, Grey, Fume Red Brown,	77.22	SQM			-
77	Providing and laying ceramic Anti skid floor tiles 600x600mm conforming to IS : 15622 of approved make, colour, shade laid on 20 mm thick Cement Mortar 1:4 (1 cement : 4 coarse sand) including pointing the joints with white cement mixed with matching pigment etc., complete.	122.06	SQM			-
78	Providing and laying vitrified floor tiles with double charge/ multi charge printing with water absorption less than 0.5% and conforming to IS : 15622 of approved make in all colours and shades and size mentioned below (+/- 10mm), laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting the joints with white cement and matching pigments etc. complete:					

Bill of Quantities

Construction Of Raja Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

A Civil Work

Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
a	Size 600x600mm	379.16	SQM			-
b	Size 800x800mm	484.64	SQM			-
79	Extra for nosing in Granite stone for treads.	364.65	METER			-
80	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)	425.68	SQM			-
81	15 mm thick Table rubbed polished Granite stone slab in risers and treads of steps skirting dado and pillars laid on 12mm (average) thick base of cement mortar 1:3 (1 cement : 3 coarse sand) and jointed with grey cement slurry including rubbing and polishing etc. complete (single stone is to be used for risers and treads of steps and width of stone for skirting and dado shall be equal to the height of skirting & dado and length of 1.0 m).	167.31	SQM			-
82	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)	493.66	SQM			-
83	KOTA stone slab 25mm thick in risers and treads of steps, skirting dado and pillar laid in 12mm (average) thick cement mortar 1:3 (1 cement : 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete. (single stone is to be used for riser and treads of steps and the width of stone for skirting and dado shall be equal to the height of skirting/ dado with a minimum length of 1.0 M.)	64.24	SQM			-
MARBLE WORK (Wall Lining)						
84	15mm thick Granite work (machine cut, table rubbed & mirror polished) for wall lining (vener work) in cement mortar 1:3 (1 cement : 3 coarse sand) including pointing with cement mortar 1:2 (1 white cement: 2 marble dust) mixed with matching pigment. (Area of slab should be over 0.5 sqm).	32.36	SQM			-

Bill of Quantities

Construction Of Raja Soचना Ayog Office Building At North Block, Sector -19, Naya Raipur

A Civil Work

Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
85	15mm thick Granite work (machine cut, table rubbed & mirror polished) for kitchen platform, vanity counters, window sills and similar locations of required size laid over 20mm thick base cement mortar 1:4 (1 cement : 4 coarse sand) including joints treated with white cement mixed with matching pigment including rubbing and polishing to edge moulding to give high gloss finish.	7.10	SQM			-
86	Extra for providing edge moulding to 15mm thick stone counters, vanities etc. including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge.					
a	Granite work	61.40	METER			-
DISTEMPERING, PAINTING AND FINISHING						
87	Distempering with acrylic washable distemper to give an even shade.					
a	On new work (Two or more coats)	1128.45	SQM			-

Bill of Quantities

Construction Of Raja Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

A Civil Work

Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
88	Wall painting with acrylic luxury emulsion (plastic) paint (top most approved branded quality) to give an even shade.					
a	On new work (two or more coats)	6740.81	SQM			-
89	Applying one coat of cement primer on wall surface.	11085.71	SQM			-
90	Providing and applying 2mm thick ready mix exterior grade putty (Birla wall care, Alltek Superfine W/R of (NCL), J.K. wall putty) on walls to make the surface smooth and even.	8190.12	SQM			-
91	Painting new exterior surface (two or more coats) with PREMIUM TEXTURED paint as per manufacturer's specifications to give protective and decorative finish including cleaning washing of surface etc. complete with:					
a	On new work (Two or more coats)	1283.47	SQM			-
92	Painting new exterior surface with PREMIUM SMOOTH EMULSION paint as per manufacturer's specifications to give protective and decorative finish including cleaning washing of surface etc. complete with:					
a	On new work (Two or more coats)	1925.20	SQM			-
93	Painting on new work (two or more coats) to give an even shade with:					
	Satin synthetic enamel paint (top most approved branded quality)	161.66	SQM			-
	SUB TOTAL OF CIVIL WORKS					-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

B Road Works						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
1	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	5153.239			-
2	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					
a	Plant mix method					
	for grading-III Material	CUM	565.612			-
3	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	282.806			-

Bill of Quantities						
Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur						
B Road Works						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
4	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	424.209			-
5	Cast in Situ Cement Concrete M20 kerb (Construction of cement concrete kerb with top and bottom width 115 and 165 mm respectively, 300 mm high in M 20 grade PCC on M-10 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	1071.88			-
6	Painting on Concrete Surfaces					
	Two coats on new surfaces (Painting two coats after filling the surface with synthetic enamel paint in all shades on new plastered concrete surfaces)	SQM	750.316			-
7	Painting Lines, Dashes, Arrows etc on Roads in Two Coats on New Work (Painting lines, dashes, arrows etc on roads in two coats on new work with ready mixed road marking paint conforming to IS:164 on bituminous surface, including cleaning the surface of all dirt, dust and other foreign matter, demarcation at site and traffic control)					

Bill of Quantities						
Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur						
B Road Works						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
a	Over 10 cm in width	SQM	440.256			-
b	Up to 10 cm in width	SQM	34.5			-
8	Extra for precast PCC/ RCC work of any mix including form work, hoisting and fixing in Cement Mortar. 1:2 (1 Cement : 2 coarse sand) and finishing with cement plaster in Cement Mortar 1:3 (1 Cement : 3 coarse sand) but excluding reinforcement.	CUM	108			-
9	Precast interlocking premium 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					
a	Plain or coloured precast interlock concrete block	SQM	750			-
10	Providing and fixing precast compressed plain cement concrete edge restraint of size 500mmx250mmx60mm of compressive strength of 200kg. per sq.cm manufactured by electro hydraulically operated block machine by excavated trench of 150mm depth etc. complete	METER	50.8			-

Bill of Quantities						
Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur						
B	Road Works					
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
	TOTAL AMOUNT					-

Bill of Quantities							
Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur							
C	Plumbing Works						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)	
1	Providing and fixing water closet squatting pan (Indian type W.C. pan), 100mm sand cast Iron P or S trap, 10 litre low level P.V.C. flushing cistern (same colour) conforming to IS : 7231, with flush bend and other fittings and fixtures complete including cutting and making good the walls and floors wherever required :						
a	White Orissa pattern W.C. pan of size 580x440 mm	Each	10			-	
2	Providing and fixing vitreous china water closet (European type W.C. pan) with white ISI marked plastic seat and lid, 10 litre low level white P.V.C. flushing cistern (same colour), conforming to IS : 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required :						
a	White wall hung type	each	8			-	
3	Providing and fixing white colour vitreous china Wall mounted water closet (European type W.C pan) with fitting, seat cover, with fittings, uPVC Connector & Necessary Hanging Arrangements, Rubber Seal etc. complete including cutting and making good the walls and floors where ever required.						
a	W.C pan with Solid plastic seat cover	Each	12			-	

Bill of Quantities						
Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur						
C	Plumbing Works					
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
4	Providing and fixing Concealed Cisterns including all necessary fixing arrangements etc complete.	Each	10			-
5	Providing and fixing 15 mm nominal bore uplasticised PVC connection pipe with C.P brass nuts collar and PVC bush of approved quality and colour:					
a	30 CM length	each	4			-
b	45 CM length	each	5			-
6	Providing and fixing white vitreous china urinal basin with waste fitting as per IS : 2556, and other couplings in C.P. brass complete:					
a	Flat back half stall urinal of size 580x380x350mm	each	20			-
7	Providing and fixing 15 mm dia sensor and solenoid valves with C.P flange spreadset, including connecting spreader for individual urinals complete in all respects including cutting and making good the walls where ever required.	Each	20			-
8	Providing and fixing vitreous china wash basin with C.I. brackets, 32 mm C.P. brass waste of standard pattern, including painting of brackets, cutting and making good the walls wherever required :					

Bill of Quantities

Construction Of Raja Sookhna Ayog Office Building At North Block, Sector -19, Naya Raipur

C Plumbing Works						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
a	for Officers Toilet (size 1000 x 470 mm)	each	10			-
b	White Oval or round size 560x410mm. For Staff Toilet	each	20			-
9	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink without drain board as per IS 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required :					
a	610x510 mm bowl depth 200 mm.	each	1			-
10	Providing and fixing flexible P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.					
a	32 mm dia	each	24			-
b	40 mm dia	each	10			-
11	Providing and fixing cast iron grating for gully trap.					
a	150x150mm square	each	20			-

Bill of Quantities						
Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur						
C	Plumbing Works					
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
12	Providing and fixing 600x450 mm beveled edge 4mm mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	each	30			-
13	Providing and fixing 600x120x5mm glass shelf with edges rounded off supported on anodised aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs etc., complete.	each	22			-
14	Providing and fixing C.P. brass twin robe hooks two way including cutting and making good the walls wherever required complete to the satisfaction of Engineer in charge.	Each	28			-
15	Providing and fixing C.P. brass soap dish including cutting and making good the walls wherever required complete to the satisfaction of Engineer in charge.	Each	30			-
16	Providing and fixing vitreous china Division Plate white (680 x 300 mm x 450) & with expandable anchor fasteners with C.P. brass bolts and washers complete, including cutting and making good the walls where required to the satisfaction of Engineer in charge.	Each	16			-

Bill of Quantities						
Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur						
C Plumbing Works						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
17	Providing and fixing CP brass hand shower (health faucets) with 8 mm dia 1meter long flexible tube and wall hook with all fittings and fixtures complete including cutting and making good the walls and floors wherever required:	Each	14			-
18	Providing C.P. Brass Pillar Cock Pressmatic type (Autoclosing System) of 15 mm dia & including necessary cutting and making good) (for handwash and wash basin)	Each	30			-
19	For Officer Toilet (Single Lever Basin Mixer (Small Spout) with Popup Waste System with 450mm Long Copper Pipes & Brass Nuts	Each	10			-
20	Providing and fixing complete set of sanitary fixtures for handicapped toilets, make of Cera "Crane" / Hindware Cat. no. 70002) comprising of EWC - P , Cistern, Seat Cover, Twin Flush Fittings, Wash Basin 450x300, Half pedestal, 1 faucet with spatula lever, 1 hinged rail and 2 grab bars, including cutting and making good the walls and floors wherever required complete as per directions of Engineer incharge.	Each	4			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

C Plumbing Works						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
21	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. (Make : (KML Classic /Equivalent))					
a	75 mm dia pipe.	metre	175			-
b	110 mm dia pipe.	metre	225			-
22	Providing and fixing on wall face UV stabilized Unplasticised -PVC moulded fittings/ accessories having 3.2mm wall thickness for Rigid PVC pipes conforming to IS : 13592 (heavy) jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion. (Make : (KML Classic /Equivalent))					
a	Coupler					
i	75 mm	each	45			-
ii	110 mm	each	60			-
b	Single tee with door					

Bill of Quantities

Construction Of Rajya Sookhna Ayog Office Building At North Block, Sector -19, Naya Raipur

C Plumbing Works						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
i	75x75x75 mm	each	4			-
ii	110x110x110 mm	each	4			-
c	Single tee without door					
i	75x75x75 mm	each	2			-
ii	110x110x110 mm	each	2			-
d	Bend 45°					
i	75 mm bend	each	4			-
ii	110 mm bend	each	4			-
e	Plain bend					
i	75 mm bend	each	10			-
ii	110 mm bend	each	10			-
f	Vent cover					

Bill of Quantities

Construction Of Raja Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

C Plumbing Works						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
i	75 mm	each	18			-
ii	110 mm	each	18			-
g	Access door cap					
i	75 mm	each	18			-
ii	110 mm	each	18			-
h	"P" trap 110mmx110mm long	each	10			-
l	Nahani trap 110x75mm	each	72			-
j	Multi floor trap 110	each	17			-
k	Plain reducing Tee 110x75mm	each	8			-

Bill of Quantities

Construction Of Raja Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

C Plumbing Works						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
23	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes on wall surface , having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. (Make : (KML Classic /Equivalent))					
a	15 mm nominal outer dia .Pipes.	metre	31			-
b	20 mm nominal outer dia .Pipes.	metre	40			-
c	25 mm nominal outer dia .Pipes.	metre	77			-
d	32 mm nominal outer dia .Pipes.	metre	65			-
e	40 mm nominal outer dia .Pipes.	metre	65			-
f	50 mm nominal outer dia .Pipes.	metre	65			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

C Plumbing Works						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
24	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes in concealed in wall , having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints including cutting chases and making good the walls etc complete as per direction of Engineer in Charge. (Make : (KML Classsic /Equivalent))					
a	15 mm nominal outer dia .Pipes.	metre	70			-
b	20 mm nominal outer dia .Pipes.	metre	60			-
c	25 mm nominal outer dia .Pipes.	metre	131			-
d	32 mm nominal outer dia .Pipes.	metre	75			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

C Plumbing Works						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
25	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 direction of Engineer in Charge. (Make : (KML Classic /Equivalent))					
a	32 mm nominal outer dia pipes	metre	35			-
b	40 mm nominal outer dia pipes	metre	75			-
c	50 mm nominal outer dia pipes	metre	45			-
d	62.50 mm nominal inner dia pipes	metre	5			-
e	75 mm nominal inner dia pipes	metre	20			-
26	Providing and fixing 15 mm nominal bore C.P. brass fittings of approved make and conforming to IS:8931 including C.P. brass extension if required:					
a	Bib cock (450gms)	each	40			-

Bill of Quantities

Construction Of Rajya Sookhna Ayog Office Building At North Block, Sector -19, Naya Raipur

C Plumbing Works						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
b	Angle valve for basin mixer and geyser points (450gms)	each	74			-
c	Bottle trap set with extension pipes	each	16			-
d	Toilet paper holder	each	20			-
e	Soap dish plate	each	40			-
f	Towel rail (600mm long x 20mm dia)	each	28			-
27	Providing and fixing stainless steel drain jali of approved make/quality.	each	81			-
28	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end):					
a	25 mm nominal bore	each	46			-
b	32 mm nominal bore.	each	37			-
c	40 mm nominal bore	each	10			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

C Plumbing Works						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
d	50 mm nominal bore	each	5			-
29	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :					
a	15 mm nominal bore	each	29			-
b	20 mm nominal bore	each	25			-
c	25 mm nominal bore	each	26			-
30	Providing and fixing gun metal non- return valve (horizontal type) of approved quality (screwed end) :					
a	40 mm nominal bore	each	1			-
b	50 mm nominal bore	each	5			-
c	65 mm nominal bore	each	1			-
31	Providing and fixing gun metal non- return valve (vertical type) of approved quality (screwed end) :					

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

C Plumbing Works						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
a	32 mm nominal bore	each	5			-
b	40 mm nominal bore	each	2			-
c	50 mm nominal bore	each	2			-
d	65 mm nominal bore	each	2			-
32	Providing and placing in position C.I. double acting air valve of approved make.					
	50 mm dia	each	15			-
33	Providing and fixing enclosed type water meter (bulk type) conforming to IS : 2373 and tested by Municipal Board complete with bolts, nuts, rubber insertions etc. (The tail pieces if required will be paid separately)					
	80/ 50 mm dia nominal bore	each	3			-
34	Providing and fixing C.I. dirt box strainer for bulk type water meter with nuts, bolts, rubber insertions etc. complete conforming to IS : 2373 :					

Bill of Quantities						
Construction Of Raja Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur						
C	Plumbing Works					
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
	50/80 mm dia	each	2			-
35	Providing and placing on terrace (at all levels) polyethylene water storage tank ISI marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	litre	20000			-
36	Cutting holes upto 30x30 cm in walls including making good the same :	each	15			-
37	Cutting holes upto 15x15 cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including finishing complete so as to make it leak proof.	each	8			-
38	Making chases upto 7.5x7.5 cm in walls including making good and finishing with matching surface after housing G.I. pipe etc.	metre	50			-
39	Making hole upto 20x20 cm and embedding pipes upto 150 mm diameter in masonry and filling with cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) including disposal of malba.	metre	10			-

Bill of Quantities

Construction Of Raja Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

C Plumbing Works						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
40	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, with C. I. surface box 100x100 x75 mm (inside) with hinged cover fixed in cement concrete slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) 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	4			-
41	Constructing masonry Chamber 60x60x75 cm, inside with fly ash bricks of 35 kg/ cm ² in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100mm. top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) necessary excavation foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design :	each	4			-

Bill of Quantities						
Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur						
C	Plumbing Works					
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
42	Constructing masonry Chamber 90x90x100 cm, inside with fly ash bricks of 35 kg/ cm ² in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100 mm. top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) necessary excavation foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design :	each	2.00			-
43	Providing, laying and jointing following P.V.C. - U pipes with solvent cement joint for Non-pressure gravity drain and sewer application including testing for joints, cost of jointing materials etc. complete in all respect [Conform to IS 15328:2003, solvent cement shall Conform to IS 14182]. SN-8 (Make : (KML Classic /Equivalent))					
a	110 mm diameter	metre	315			-
b	160 mm diameter	metre	95			-
c	200 mm diameter	metre	55			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

C Plumbing Works						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
44	Providing and fixing square-mouth S.W. gully trap grade 'A' complete with C.I. grating brick masonry chamber with fly ash bricks crushing strength not less than 35kg/ cm ² , water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design :					
a	100x100 mm size P type	each	12			-
b	150 x 100 mm size P type.	each	6			-
c	180 x 150 mm size P type	each	3			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

C Plumbing Works						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
45	Constructing brick masonry manhole with fly Ash bricks crushing strength not less than 35kg/ cm ² in cement mortar 1:4 (1 cement : 4 coarse sand), R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation in cement concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size) inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design :					
a	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) : (Type A)	each	27			-
b	Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (medium duty) 500 mm internal diameter, total weight of cover and frame to be not less than 116 kg (weight of cover 58 kg and weight of frame 58 kg) :	each	10			-
46	Extra for depth for manholes					
a	Size 90x80 cm	meter	6			-

Bill of Quantities

Construction Of Raja Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

C Plumbing Works						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
b	Size 120x90 cm	meter	3			-
47	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910 on 12mm dia steel bar conforming to IS : 1786 having minimum cross section as 23 mmx25mm and over all minimum length 263 mm and width as 165mm with minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design. (Type D)	each	75			-
48	Supplying and fixing C.I. cover without frame for SUMP TANK & O.H.T. :					
	455x610 mm rectangular C.I. cover (light duty) the weight of the cover to be not less than 23 kg.					
	FOR SUMP TANK & O.H.T.	EACH	10			-

Bill of Quantities

Construction Of Rajya Sookhna Ayog Office Building At North Block, Sector -19, Naya Raipur

C Plumbing Works						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
49	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete :					
	For pipes 100 to 230 mm diameter	each	10			-
50	Providing and constructing brick masonry road gully chamber 50x45x60 cm with fly ash bricks crushing strength not less than 35kg/cm ² in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm precast R.C.C. horizontal grating with frame complete as per standard design :	each	22			-
51	Providing and constructing brick masonry road gully chamber 45x45x77.5 cm with fly Ash bricks crushing strength not less than 35kg/cm ² in cement mortar 1:4 (1 cement : 4 coarse sand) with precast R.C.C. vertical grating complete as per standard design :	each	15			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

C Plumbing Works						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
52	Providing and constructing brick masonry chamber for underground C.I. inspection chamber and bends with fly ash bricks crushing strength not 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 not 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 nominal size) foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design :					
	Inside dimensions 500x700 mm and 45 cm deep for pipe line with one or two inlets :	Each	15			-
53	Providing and laying non-pressure NP3 class (light duty) RCC pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 find sand) including testing of joints etc. complete.					
a	150mm dia RCC Pipe	metre	230			-
b	250mm dia RCC Pipe	metre	110			-
c	300mm dia RCC Pipe	metre	110			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

C Plumbing Works						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
54	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine sand: 10 graded stone aggregate 40 mm nominal size) upto haunches of RCC pipes including bed concrete as per specifications.					
a	150mm dia RCC Pipe	metre	230			-
b	250mm dia RCC Pipe	metre	110			-
c	300mm dia RCC Pipe	metre	110			-
55	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 .)					
a	450 mm dia	metre	65			-
b	600 mm dia	metre	75			-

Bill of Quantities						
Construction Of Rajya Sookhna Ayog Office Building At North Block, Sector -19, Naya Raipur						
C	Plumbing Works					
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
	Sub Total of Plumbing Work					-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
	HV CABLE LAYING (33 KV)					
1	Supplying and laying one number following sizes XLPE, steel armoured, aluminium conductor power cable of 33 KV grade direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required.					
a	3 x 150 sq mm	Meter	20			-
2	Supplying and laying one number following sizes XLPE, steel armoured, aluminium conductor power cable of 33 KV grade in existing RCC/HUME/STONEWARE/METAL pipe as required.					
a	3 x 150 sq mm	Meter	10			-
3	Supplying and laying one number following sizes XLPE, steel armoured, aluminium conductor power cable of 33 KV grade in existing masonry open duct as required.					
a	3 x 150 sq mm	Meter	5			-
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 33 KV grade as required :					
a	150 sq. mm	Each	2			-

Bill of Quantities

Construction Of Rajya Sookhna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
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 33 KV grade as required :					
	150 sq. mm	Each	1			-
CABLE TRAYS AND ROUTE MARKER						
6	Supplying and installing following size powder coated, perforated M.S. cable trays with perforation not more than 17.5% rigidly suspended from the ceiling with M.S. suspenders at a distance not more than 2.5 metre and near every junction/ joint etc complete as required.					
a	300 mm width X 50 mm depth X 1.6 mm thickness	Meter	10			-
b	600 mm width X62.5 mm depth X 2.0 mm thickness	Meter	10			-
7	Supplying and fixing of following sizes vertical, powder coated, perforated, M.S. cable trays bends (vertical) turning at 900 in another plane with perforation not more than 17.5% rigidly jointed with cable tray etc. complete as required.					
a	300 mm widthX50 mm depthX1.6 mm thick	Each	4			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
b	600 mm widthX62.5 mm depthX2 mm thick	Each	4			-
8	Supplying and making cable route marker with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) of size 60 cm X 60 cm at the bottom and 50 cm X 50 cm at the top with a thickness of 10cm including inscription duly engraved as required.	Each	5			-
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	5			-
POLE AND POLE ERECTION						
10	Supply of hot dipped galvanized (in single dip to average 70 micron) octoganal pole made of 3mm thick steel plate having base plate 200x200x12mm, 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 240x240x3mm with 4 nos 450mm long, 16mm dia foundation bolts bolts (EN8 grade).					
a	5 metre high, minimum dia 129mm at bottom and 75mm at top	Each	4			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
11	Supply and fixing following street light pole bracket on existing pole made out of 50 mm dia MS "B" class pipe welded to 300 mm long MS pole canopy of suitable dia at a angle of 102.50 including having MS triangular stiffner of size 150 X 50 X 5 mm thick, making arrangement for tightening the bracket with pole by providing suitable size heavy duty nuts and bolts in canopy, painting with one coat of approved steel primer etc. as required.					
a	Single Over Hang 0.75 metre Long	Each	4			-
12	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	4			-
13	Designing and providing suitable RCC foundation for 3m to 12 metre high GI octogonal pole including steel reinforcement (minimum 90kg per cum), form work, embedding 2 nos 50mm dia PVC pipe for cable entry in Each foundation, excavation disposal of surplus soil and curing etc. as required.	cum	4			-
MV CABLE LAYING						
14	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	3.5 x 50 sq. mm.	Meter	50			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
b	3.5 x 95 sq. mm.	Meter	50			-
c	3.5 x 300 sq. mm.	Meter	20			-
d	4 x 10 sq. mm.	Meter	200			-
15	Supplying and laying following sizes additional one number , PVC insulated, PVC sheathed, steel armoured, aluminium conductor power cable of 1.1 KV grade direct in ground as in the same trench in one tier horizontal formation including excavation, sand cushioning, protective covering and refilling the trench etc as required.					
a	3.5 x 50 sq. mm.	Meter	60			-
b	3.5 x 120 sq. mm.	Meter	50			-
c	3.5 x 300 sq. mm.	Meter	30			-
d	4 x 10 sq. mm.	Meter	100			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
16	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 50 sq. mm.	Meter	10			-
b	3.5 x 95 sq. mm.	Meter	15			-
c	3.5 x 300 sq. mm.	Meter	10			-
d	4 x 10 sq. mm.	Meter	20			-
17	Supplying and laying following sizes one number, steel armoured, aluminium conductor power cable of 1.1 KV grade on surface/ existing cable tray as required.					
a	4 x 10 sq. mm.	Meter	200			-
18	Supplying and laying following sizes one number, steel armoured, aluminium conductor power cable of 1.1 KV grade on surface/ existing cable tray with M.S flat clamp and steel dash fastener/ G.I. bolts and nuts as required.					
a	3.5 x 95 sq. mm.	Meter	50			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
b	3.5 x 120 sq. mm.	Meter	100			-
19	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 50 sq. mm	Each	4			-
b	3½ X 95 sq. mm	Each	4			-
c	3½ X 120 sq. mm	Each	8			-
d	3½ X 300 sq. mm	Each	8			-
e	4 X 10 sq. mm	Each	80			-
	HDPE, G.I. & RCC PIPES					
20	Supplying and laying following size RCC Hume pipe class NP-2 (in standard length og 2 metre) with collar in ground below road, path etc at a depth not less than 50 cm including excavation, dismantling of road if required and refilling the trench etc. as required.					

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
a	200 mm dia	Metre	25			-
b	300 mm dia	Metre	10			-
EARTHING						
21	Providing and fixing 25 mm X 5 mm copper strip in 40 mm dia G.I. pipe from earth electrode at 0.5 Metre depth below ground level including excavation and refilling the trench etc. as required.	Meter	30			-
22	Providing and fixing 25 mm X 5 mm copper strip on surface or in recess for connections etc. as required.	Meter	20			-
23	Supplying and laying 6 SWG G.I. wire at 0.50 Meter below ground level for conductor earth electrode, including soldering, excavation and refilling the trench etc. as required.	Meter	2000			-
24	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	Meter	300			-
25	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	Meter	1500			-
MAIN SWITCHES, MCCB'S, MCB'S & MCB DB'S						

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
26	Supplying and fixing on surface/ recess prewired horizontal type following way, 415 volts TP&N, MCB distribution board of sheet steel phosphatized and powder painted complete complete with loose wire box, terminal blocks, tinned copper busbar, neutral link, earth bar, din bar, detachable gland plate, duly prewired with suitable size FR PVC insulated copper conductor up to terminal blocks including interconnections, earthing etc. as required. (But without MCB/ RCCB/ Isolator)					
a	4 way (4 + 12), Double door	Each	3			-
b	6 way (4 + 18), Double door	Each	3			-
c	8 way (4 + 24), Double door	Each	4			-
27	Supplying and fixing on surface/ recess prewired vertical type following way, 415 volts TP&N, MCB distribution board of sheet steel phosphatized and powder painted complete complete with loose wire box, terminal blocks, 200 amps tinned copper busbar, common neutral link, earth bar, din bar, detachable gland plate, loose wire box, superior make terminal connectors for all incoming and outgoing circuits, duly prewired with suitable size FR PVC insulated copper conductor up to terminal blocks including interconnections, earthing etc. as required. (But without MCB/ RCCB/ Isolator) (Note: Prewired vertical type MCB TPDB is normally used where 3 phase outlets are required.)					
a	4 way (4 + 12), Double door	Each	1			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
b	8 way (4 + 24), Double door	Each	1			-
c	12 way (4 + 36), Double door	Each	1			-
28	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.					
	6 amps to 32 amps	Each	300			-
29	Supplying and fixing SP MCB, 240 volts, 'C' series, suitable for inductive load in the existing MCB DB complete with connections, testing and commissioning etc. as required.					
	6 amps to 32 amps	Each	100			-
30	Supplying and fixing TP MCB, 440 volts, 'C' series, suitable for inductive/ motor load in the existing MCB DB complete with connections, testing and commissioning etc. as required.					
a	6 amps to 32 amps	Each	20			-
b	40 amps	Each	4			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
31	Supplying and fixing TP&N 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	40 amps	Each	6			-
b	63 amps	Each	20			-
32	Supplying and fixing TP&N MCB, 440 volts, 'C'series, suitable for inductive/ motor load in the existing MCB DB complete with connections, testing and					
a	40 amps	Each	2			-
b	63 amps	Each	2			-
33	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	Each	10			-
34	Supplying and fixing TPN and earth, 440 volts, industrial type, socket outlet, enclosed metal plug top along with MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.					
a	20 Amp with "C" series TP MCB	Each	12			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
b	32 Amp with "C" series TP MCB	Each	12			-
35	Supplying and fixing sheet steel enclosure of suitable size made of 1.6mm thick CRCA MS sheet, for 100 amps MCCB on existing metal board/ wall including painting etc as required.	Each	2			-
	WIRING IN CONCEALED PVC CONDUIT (POINT WIRING)					
36	Wiring for light/ fan/ exhaust fan / call bell point with 1.5 sqmm FR PVC insulated stranded copper conductor single core cable in concealed PVC conduit, with 5 amp modular switch, modular base and cover plate, suitable size G.I. box and earthing the point with same size cable as required.					
a	Short Point	Point	151			-
b	Medium Point	Point	420			-
c	Long Point	Point	50			-
37	Wiring for twin control light point with 1.5 sqmm FR PVC insulated stranded copper conductor single core cable in concealed PVC conduit, with 5 amp modular switch, modular base and cover plate, suitable size G.I. box and earthing the point with same size cable as	Point	15			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
38	Wiring for light plug point with 2x2.5 sq mm FR PVC insulated stranded copper conductor cable in concealed PVC conduit along with modular type 6 Amp switch and 3 pin 6 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size cable etc. as required.					
a	Short Point	Point	30			-
b	Medium Point	Point	26			-
c	Long Point	Point	20			-
d	Extra Long Point I	Point	8			-
e	Extra Long Point II	Point	3			-
39	Wiring for power plug point with 2x4 sq mm FR PVC insulated stranded copper conductor cable in concealed PVC conduit along with modular type 16 Amp switch and 6 pin 16 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size cable etc. as required.					
a	Short Point	Point	15			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
b	Medium Point	Point	10			-
c	Long Point	Point	10			-
d	Extra Long Point I	Point	12			-
e	Extra Long Point II	Point	4			-
40	Wiring for power plug point with 2x6 sq mm FR PVC insulated stranded copper conductor cable in concealed PVC conduit along with modular type 32 Amp SPMCB "C" series and 6 pin 20 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size cable etc. as required.					
a	Short Point	Point	10			-
b	Medium Point	Point	10			-
41	Wiring for circuit/ sub main wiring along with earth wire with the following sizes of FR PVC insulated copper conductor, single core cable in concealed PVC conduit as required.					
a	3 X 1.5 sq. mm in 20mm conduit	Meter	1200			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
b	3 X 2.5 sq. mm in 20mm conduit	Meter	800			-
c	4 X 25 sq. mm + 2 X 16 sq. mm in 50mm conduit	Meter	300			-
42	Supplying and fixing of following sizes PVC conduit along with accessories in concealed complete as required.					
a	20 mm	Meter	560			-
b	25 mm	Meter	600			-
c	32 mm	Meter	150			-
d	50 mm	Meter	100			-
43	Extra for providing modular starter in power point wiring instead of modular 32 amp SPMCB and 16 amps socket outlet as required.	Point	20			-
SWITCHES & ACCESSORIES						
44	Supplying and fixing following modular switch, socket, other accessories on the existing modular plate & switch box including connections but excluding modular plate etc. as required.					

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK

Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
a	Plug Top (Deluxe type) 3 pin 5/6 Amps (For light plug).	Each	110			-
b	Plug Top (Deluxe type) 3 pin 16 Amps (For power plug).	Each	20			-
c	Telephone socket outlet	Each	80			-
d	T.V. antenna socket outlet	Each	5			-
e	Computer Outlet Jack	Each	25			-
f	25/32 amp A.C. Starter switch	Each	7			-
45	Providing and fixing composite unit for computer points having modular type 1 No 6 pin 16 amp socket outlet, 1 No 16 amp switch, 3 Nos 3 pin 6 amp socket outlets, 3 Nos 6 amp switches, suitable G.I. box, base and cover plates, earthing the sockets and switch box including etc. as required.	Each	75			-
46	Supplying and fixing modular stepped type electronic fan regulator (two module size) moving all rounds on the existing modular plate and switch box including connections but excluding modular plate etc. as required.	Each	100			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
47	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	Each	74			-
METAL WOODEN AND PVC BOXES						
48	Supplying and fixing following size/ modules, GI box along with modular base & cover plate for modular switches in recess etc as required.					
	75mmX75mm (1 Module)	Each	150			-
WIRING IN EXISTING CONCEALED / SURFACE STEEL / PVC CONDUIT						
49	Supplying and drawing following pair 0.5 sq mm FR PVC insulated copper conductor, unarmored telephone cable in the existing surface/ concealed steel/ PVC conduit as required.					
	4 Pair	Meter	800			-
50	Supplying and drawing following co-axial TV cable PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ concealed steel/ PVC conduit as required.					
	RG-8 grade, 0.7 mm solid copper conductor	Meter	300			-
FANS, LUMINARIES AND LAMPS						
51	Supplying, installation, testing and commissioning of following sizes ceiling fan with resistance type regulator, including wiring the down rods of standard length up to 30 cm with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable, earthing etc. complete as required.					
a	1200 mm sweep	Each	100			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
52	Supplying, installation, testing and commissioning of following sizes heavy duty (continuous running) exhaust fan in existing opening in wall including earthing etc. complete as required.					
a	450 mm sweep	Each	15			-
53	Supplying, installation, testing and commissioning of following sizes fancy exhaust fan having built in lovers in existing opening in wall including earthing etc. complete as required.					
a	300 mm sweep	Each	5			-
54	Supplying, installation, testing and commissioning of following surface type fluorescent fitting T5 (luminaries) complete with electronic ballast, but without fluorescent lamp, on ceiling/wall surface, earthing the fitting etc. as required.	Each	40			-
a	4' x 28 W (T5) single Box type with end caps					
55	Supplying, installation, testing and commissioning of following mirror optics concealed type CFL fitting (luminaries) complete with copper ballast, but without CFL lamp, on ceiling/wall surface, earthing the fitting etc. as required.					
a	3 x 36 W	Each	40			-
b	2 x 11 W	Each	70			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
56	Supplying, installation, testing and commissioning of following mirror optics concealed type CFL fitting (luminaries) complete with copper ballast, but without CFL lamp, in false ceiling, earthing the fitting etc. as required.					
a	3 x 36 W	Each	80			-
b	2 x 36 W	Each	24			-
57	Supplying, fixing and testing of approved make bulk head luminaire consisting of pressure die cast Alu. Housing, lamp holder, prismatic glass cover, rubber gasket and wire guard delux type including fixing on wall as required, with necessary material complete.	Each	6			-
58	Supplying, fixing, testing and commissioning of following CFL without ballast in existing CFL lighting luminaries as required.					
a	36 W	Each	300			-
b	11 W	Each	150			-
59	Supplying, fixing, testing and commissioning of following 230/250 volts fluorescent lamp (tube) in existing lighting luminaries as required.					
a	4' x 28 W (T5)	Each	50			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
	SUB STATION WORKS					
60	Supply of steel rail pole as per IS specifications in standard length for over head line work:					
a	Rail pole standard weight 52 kg /meter	M	26			-
61	Supplying and fixing approved make 33 KV glazed porcelain pin insulator with G.I. spindle on existing pole bracket with necessary materials as required:	Nos.	18			-
62	Supplying and fixing approved make 33 KV glazed porcelain disc type insulator with tension hardware on existing pole/ support/ cross arm channel as required complete:	Nos.	15			-
63	Supplying and erection of galvanised stay set for 33 KV over head lines complete with 19/ 20 mm dia X 1.8 metres long stay rod, anchor plate of size 45 cm X 45 cm X 7.5 mm thick, thimble, stay clamps, turn buckle (20 mm X 600 mm), 7/ 4.00 mm dia G.I. stay wire and 33 KV strain insulator etc 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.	set	4			-
64	Erection of steel tubular or rail pole strut in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation including excavation and refilling and securing with holding clamps, bolts and nuts etc. as required:	Nos.	4			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
65	Supplying and installation of outdoor type Transformer ONAN type with copper winding having a continuous rating of 500 KVA, 33 KV/415 Volts 3 Phase 50 Hz Vector group DY-11, tapings in steps of ± 2.5%, ± 5%, -- 7.5% with oil conservator, silica gel breather having connecting terminals on HV side suitable for bare conductor connection, cable end box on medium voltage side suitable for 1.1 KV 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.	Each	1			-
66	Supplying and erection of 33 KV gang operated air break switch on existing two ope structure with insulators and all other accessories complete including locking arrangement as required.	Set	1			-
67	Supplying and erection of single piece nonlinear resistor type lightning arrestor suitable for 3 wire, 33 KV overhead lines with rated voltage 30 KV (rms) with a nominal discharge current rating of 10 KA (station class) and complete with galvanised clamping arrangement, G.I. bolts, nuts, washers etc. as required.	Set	1			-
68	Supplying and erection of 11 KV D.O. fuse unit on existing two ope structure with insulators and all other accessories complete including locking arrangement as required.	Set	1			-
69	Supplying of channel iron 100x50x6.4x4.0mm (7.9kg/m) cross arm (1.15m long) for 4 wire overhead line complete with clamps, bolts and nuts including drilling of holes for insulator pins, bolts and nuts etc as required.	SET	6			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
70	Supplying and erection of stay set complete (galvanized) with 19/20mm dia x 1.8 metre long stay rod, anchor plate of size 300mm x 300mm x 6.4 mm, thimble stay clamps, turn buckle (19/20mm x 600mm), strain insulator and specified G.I. stay wire etc. 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.					
a	With 7/4.00 mm dia G.I. stay wire	Nos.	4			-
71	Earthing with G.I. earth pipe 4.5 mtr 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.	set	6			-
72	Supplying and laying following size medium class G.I. pipe in ground below road, path etc at a depth not less than 40 cm including excavation, dismantling of road if required and refilling the trench etc. as required.					
a	80 mm internal dia	M	50			-
METAL BOARD, BBC AND IC SWITCHES						
73	Providing and making interconnection in cubical panel between BBC and switchgears with following size aluminium strip of length upto 50cm as required (To be measured separately for Each phase/ neutral).					

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
a	100x10mm (1000 amps)	Each	12			-
74	Providing and making interconnection in cubical panel between BBC and switchgears with following size copper strip of length upto 50cm as required (To be measured separately for Each phase/ neutral).					
a	60x5mm (500 amps)	Each	10			-
75	Fabrication, supply, installation, testing and commissioning of cubicle type compartmentalized wall/ floor mounted power cum control panel board of specified size and depth above 300 mm and upto 450mm made out of not less than 2 mm thick CRCA MS sheet with suitable size compartments for bus bars, switchgears and necessary cutouts for voltmeters, ameters ets as per specifications including powder coating painting but without busbars, switchgears and other accessories etc complete as required. (Only face area is to be measured)	sqm	12			-
76	Supply, installation, testing and commissioning of 4 pole (3 phase + neutral) aluminium bus bars in existing cubicle type compartmentalized wall/ floor mounted panel board alongwith suitable size and shape insulators, necessary bolts and nuts etc complete as required.					
a	1000 amp (100x10mm)	Each	8			-

Bill of Quantities

Construction Of Rajya Sookhna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
77	Supply, installation, testing and commissioning of 4 pole (3 phase + neutral) copper (electrical grade) bus bars in existing cubicle type compartmentalized wall/ floor mounted panel board alongwith suitable size and shape insulators, necessary bolts and nuts etc complete as required.					
	500 amp (50x5mm)	Each	10			-
RISING MAINS AND BUS TRUNKING						
78	Supplying, installing on wall, testing and commissioning of following capacity rising mains with metal clad enclosure, wall straps, fully PVC insulated TPN aluminum busbars in convenient sections and suitable for 400/650 volts, 3 phase, 4 wire, 50 Hz, A.C. supply with extension joints, fire proof barriers, expansion joints, thrust pads including jointing, and earthing with 2 runs of galvanised iron strips etc. as required. (Rising mains confirming to IS 8623, TEC 439)					
a	800 amps (S.C. rating for 1 sec - 50 KA)	Metre	4			-
79	Supplying, installing, testing and commissioning of TPN tap off box of following capacity on existing rising mains complete with 25/35 KA TP MCCB, interconnections with copper lead and copper lugs/thimbles, earthing etc. as required.					
a	400 amps (35KA)	Each	4.00			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
80	Supplying, installation, including suspension, testing and commissioning of bus trunking arrangement in convenient sections complete with aluminum busbars for use on, 3 phases, 4 wires, 415 volts, 50 Hz, A.C. supply for following current capacity, including jointing of sections, flexible joints, expansion joints, bends and earthing with 2 runs of galvanised iron strips etc. as required.					
a	800 amps	Metre	6			-
MAIN SWITCHES, MCCB'S, MCB'S & MCB DB'S						
81	Providing and fixing following rating and breaking capacity MCCB in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc. as required.					
a	4 pole MCCB, 100A, 50KA	Each	3			-
b	4 pole MCCB, 200A, 50KA	Each	4			-
c	4 pole MCCB, 400A, 50KA	Each	2			-
ACB'S, PANEL MOUNTING SWITCHES & ACCESSORIES						

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK

Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
82	Providing and fixing metal clad, 4 pole, on load change over switch unit (without sheet steel enclosure), 415/500 volts, in cubicle panel including drilling holes on the board, connections, earthing the body, testing and commissioning etc. as required. (Connecting lead if required shall be paid separately)					
a	800 amps	Each	1			-
83	Providing and fixing 2 pole, 230/250 volts following rating power contactor in existing starter/ cubical panel including, connections, testing and commissioning etc. as required.					
a	32 amps	Each	1			-
84	Providing and fixing following rating current transformer in existing starter/ cubical panel including, connections, testing and commissioning etc. as required.					
a	500/5 amps	Each	3			-
85	Providing and fixing Timer switch (timer) with day programe in existing panel including connection, testing and commissioning as required.	Each	1			-
86	Providing and fixing penal mounting following rating analog type ammeter of size 100x100 (NS) in existing cubical panel including, connections, testing and commissioning etc. as required.					

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
a	0-1000 amps	Each	6			-
87	Providing and fixing panel mounting 0-500 volt voltmeter of size 100x100 (NS) in existing cubical panel including, connections, testing and commissioning etc. as required.					
a	Analog type	Each	6			-
88	Providing and fixing panel mounting selector switch in existing cubical panel including, connections, testing and commissioning etc. as required.					
a	For voltmeter	Each	6			-
b	For ammeter	Each	6			-
89	Providing and fixing panel mounting 230 volt LED type indicating lamp in existing cubical panel including, connections, testing and commissioning etc. as required.	Each	36			-
POWER DISTRIBUTION BOARDS						
METAL BOARD, BBC AND IC SWITCHES						
90	Providing and making interconnection in cubical panel between BBC and switchgears with following size aluminium strip of length upto 50cm as required (To be measured separately for Each phase/ neutral).					

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
a	30x5mm (200 amps)	Each	20			-
91	Providing and making interconnection in cubical panel between BBC and switchgears with following size copper strip of length upto 50cm as required (To be measured separately for Each phase/ neutral).					
a	25x5mm (200 amps)	Each	20.00			-
92	Fabrication, supply, installation, testing and commissioning of cubicle type compartmentalized wall/ floor mounted power cum control panel board of specified size and depth above 300 mm and upto 450mm made out of not less than 2 mm thick CRCA MS sheet with suitable size compartments for bus bars, switchgears and necessary cutouts for voltmeters, ameters ets as per specifications including powder coating painting but without busbars, switchgears and other accessories etc complete as required. (Only face area is to be measured)	sqm	10			-
93	Supply, installation, testing and commissioning of 4 pole (3 phase + neutral) aluminium bus bars in existing cubicle type compartmentalized wall/ floor mounted panel board alongwith suitable size and shape insulators, necessary bolts and nuts etc complete as required.					
a	200 amp (30x5mm)	M	8			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
94	Supply, installation, testing and commissioning of 4 pole (3 phase + neutral) copper (electrical grade) bus bars in existing cubicle type compartmentalized wall/ floor mounted panel board alongwith suitable size and shape insulators, necessary bolts and nuts etc complete as 200 amp (25x5mm)	M	32			-
RISING MAINS AND BUS TRUNKING						
95	Supplying, installing on wall, testing and commissioning of following capacity rising mains with metal clad enclosure, wall straps, fully PVC insulated TPN aluminum busbars in convenient sections and suitable for 400/650 volts, 3 phase, 4 wire, 50 Hz, A.C. supply with extension joints, fire proof barriers, expansion joints, thrust pads including jointing, and earthing with 2 runs of galvanised iron strips etc. as required. (Rising mains confirming to IS 8623, TEC 439)					
a	315 amps (S.C. rating for 1 sec - 20 KA)	meter	8.00			-
96	Supplying, installing, testing and commissioning of TPN tap off box of following capacity on existing rising mains complete with 25/35 KA TP MCCB, interconnections with copper lead and copper lugs/thimbles, earthing etc.					
a	200 amps (25KA)	Each	6			-
MAIN SWITCHES, MCCB'S, MCB'S & MCB DB'S						
97	Providing and fixing following rating and breaking capacity MCCB in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc. as required.					

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
a	4 pole MCCB, 63A, 25KA	Each	20			-
b	4 pole MCCB, 200A, 35KA	Each	4			-
	ACB'S, PANEL MOUNTING SWITCHES & ACCESSORIES					
98	Providing and fixing following rating current transformer in existing starter/ cubical panel including, connections, testing and commissioning etc. as required.					
a	200/5 amps	Each	12			-
99	Providing and fixing penal mounting following rating analog type ammeter of size 100x100 (NS) in existing cubical panel including, connections, testing and commissioning etc. as required.					
a	0-200 amps	Each	6			-
100	Providing and fixing penal mounting 0-500 volt voltmeter of size 100x100 (NS) in existing cubical panel including, connections, testing and commissioning etc. as required.					
a	Analog type	Each	6			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
101	Providing and fixing penal mounting selector switch in existing cubical panel including, connections, testing and commissioning etc. as required.					
a	For voltmeter	Each	6			-
b	For ammeter	Each	6			-
102	Providing and fixing penal mounting 230 volt LED type indicating lamp in existing cubical panel including, connections, testing and commissioning etc. as required.	Each	36			-
SUB STATION SAFETY EQUIPMENT						
103	Supply and fixing glass framed standard shock treatment chart in two different languages in A2 size.	Job	2			-
104	Supply and fixing of flame retardant electrical insulation mat of 3.0 mm thick to withstand upto 33 kV conforming to IS 15652:2006 with upto date amendments and having minimum width 1000mm (+ 20mm). The sufficient of adhesive / compound shall be supplied to fix the insulation mat on the front/rear side of electrical installation. Mat shall be ISI marked. Its leakage current at 11 KV shall not be more than 10 mA. The mat shall be welded by hot gas welding with filler material method by making V groove cut at joints with suitable welding cord of insulating material of matching colour to provide a seamless jointed surface as per IS :8002.	RM	3			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
105	Supply and fixing of flame retardant electrical insulation mat of 2.0 mm thick to withstand upto 3.3 kV conforming to IS 15652:2006 with upto date amendments and having minimum width 1000mm (+ 20mm). The sufficient of adhesive / compound shall be supplied to fix the insulation mat on the front/rear side of electrical installation. Mat shall be ISI marked. Its leakage current at 11 KV shall not be more than 10 mA. The mat shall be welded by hot gas welding with filler material method by making V groove cut at joints with suitable welding cord of insulating material of matching colour to provide a seamless jointed surface as per IS :8002.	RM	10			-
106	Supply and fixing single line diagram, schematic diagrams etc. of A1 size on suitable Aluminium sheet including lamination etc. as required complete on wall.	Job	1			-
107	Supply & fixing following danger notice plate 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.					
a	Danger board for 33KV size 250mm x 200mm.	Each	2			-
b	Danger board for 433V size 200mm x 150mm .	Each	5			-
c	Caution board printed in signal red "Man on Line", size 200mm x 150mm .	Each	2			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
d	Caution board printed in signal red "Don't switch on", size 200mm x 150mm .	Each	2			-
108	Supply and fixing G.I. Fire Buckets 13 litre capacity painted in post office red colour and written with white paint 'FIRE', filled with Dry Sand and suitable hanging arrangement on wall hook made out of 13 mm dia MS rod & conforming IS 2546 - 1974.	Each	6			-
109	Supply of First Aid Box containing material as prescribed by St. John Ambulance brigade OR Indian Red Cross conforming to IS 2217-1963.	Each	4			-
COMPUTER SYSTEM						
110	Supplying and laying cable trunking /raceway with two coparments of GI 1.6 mm thick specially treated corrosion proof rectangular profiles high tensile strenth, top and bottom plates are double folded and spot welded together to the full hight of the traks to give the required regidity and to prevent seepage of concrete or screed water ect. complete with removable 12 SWG stenless steel covers, rigt angles and 145° bends, adapters, tee peices, couplers etc. all as per specification of the following sizes.					
a	300mmx38mmx1.6mmthk.	Rmtr	20			-
b	225mmx38mmx1.6mmthk.	Rmtr	30			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
c	150mmx38mmx1.6mmthk.	Rmtr	40			-
111	Supplying and installation of underfloor fly over junction box of following sizes to be connected to the underfloor trunking for drawing of cables for LAN and VOICE. The cover plate shall be screwed with 1.6 mm thick this should be of GI type.					
a	300 mm x 300 mm x 40 mm GI	Nos.	8			-
b	225 mm x 225 mm x 40 mm GI	Nos.	7			-
c	150 mm x 150 mm x 40 mm GI	Nos.	6			-
112	Supplying and fixing suitable size MS boxes (with hinged cover and duly painted) recessed in wall with adequate knockouts including chase cutting and making the surface good and making connections complete as required as a junction box in shaft	Nos.	8			-
EARTHING						

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
113	Supply, installation, testing and commissioning of Maintenance Free Gel Earthing or equivalent- Dual Pipe (G.I) Technology of 3 mtr long 80/100 mm dia with the lead terminal at top filled with special earth inhenceing compound for lowering the effective ground impedece value to less than one ohm and ensuring that it should be less than one ohm by adding more earthing pits as a combined sets.The earthing inhancement compound shall boost moisture to retain the moisture duly tested & certified by CPRI & CETL Laboratory.Incase more earthing pits are added then interconnecting these pits shall be included in this item	Nos.	6			-
	FLOOD LIGHTING					

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
114	Supply, Installation, wiring, connection, testing and commissioning of flood light conforming to the technical specifications and drawings forming part of this document. The work for Each light point comprises of:					
	Supply, Installation, Testing , Mounting junction box suitable for terminating incoming and outgoing 4-core cable along with suitable rating MCB.					
	Supplying, Storing, Handling and Mounting the flood light fixture with one no. 400 watts HPI-T lamp on brick pedestal, Connecting the fixture by using suitable size PVC flexible copper wires of colour green, red and black to the junction box.(The civil construction materials are the part of the supply against this assignment)					
	Testing the connections and completing the installation	Nos.	4			-
	FIRE ALARM SYSTEM					
	AUTOMATIC ANALOGUE ADDRESSABLE FIRE DETECTION & ALARM SYSTEM					

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK

Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
115	Supply, Installation, Testing & Commissioning of 16 bit intelligent Addressable Fire Alarm Panel suitable for 230V+ /- 10% with 2 loops (Each loop accessing at least 120 Devices) including battery backup. The panel shall be microprocessor based with its own micro controller, memory, communication module and fire device loop interface cards for intelligent initiating and indicating devices and should also be networkable in peer-to-peer basis with other Addressable Fire Alarm Panels. The Panel shall be able to give pin point location of all Fire/Fault conditions of addressable units via the address codes for Each unit. The Panel shall also be able to automatically switch off all Control Switches when ever any Alarm is triggered. The panel shall have Keypad operation, L C D unit to indicate Fire / Fault Signal of individual unit, etc complete in all respects. Battery shall be SMF type and shall be capable of operating the system for 24 hrs normal working conditions and capable of operating the system for 2 hrs during emergency conditions. The Panel shall (a) programming software for the system (b) automatic system test activates (c) detector sensitivity adjustments (d) alarm verification (e) Alpha/numerical display (f) provision to connect to PCs and external printers (g) Support modbus and bacnet protocol.	Each	1			-
116	Supply, installation, testing and commissioning of intelligent Addressable type Optical Smoke Detector complete with all accessories like base. base box, etc. to be installed under/above false ceiling, roof and concealed space, etc. interconnecting to loop cable complete as required.	Each	30			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

D ELECTRICAL WORK						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
117	Supply, installation, testing and commissioning of of Response Indicators outside the rooms for getting fire indications of detectors installed above false ceiling area interconnecting to loop cable complete as required.	Each	10			-
118	Supply, installation, testing and commissioning of addressable Loop Isolators to protect one area or a number of devices with complete set to be installed under/above false ceiling, roof, concealed space, wall, etc. interconnecting to loop cable complete as required.	Each	4			-
119	Supply, installation, testing and commissioning of Addressable type Manual Call Point (break glass type) complete with Input Module, push button, enclosed in box with provision for cable or conduit coupling. The unit to be painted fire red outside, white inside and written 'In case of fire break glass'.	Each	4			-
120	Providing, installing, testing and commissioning of UL listed Hooter cum Strobe with Base plate	Each	3			-
121	Supplying and drawing following sizes of FR PVC insulated copper conductor, single core cable in the existing surface/ concealed, steel/ PVC conduit/ PVC casing capping as required (for control cabling of Fire detection and alarm devices and interconnecting them	Metre	400			-
SUB TOTAL OF ELECTRICAL WORKS						-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

E HVAC						
S. No	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
AIR CONDITIONING SYSTEM						
Refrigerant Piping						
1	Supply, Installation, testing and commissioning of Interconnecting refrigerant pipe work with (19 mm/13mm thick) closed cell elastomeric nitrile rubber tubular insulation between each set of indoor & outdoor units as per specifications, all piping inside the room shall be properly supported with MS hanger and all external piping shall run in covered cable tray.					
a	22.2 mm O.D.(insulation : 13 mm)	Rm	55			Rs. -
b	15.9 mm O.D.(insulation : 13 mm)	Rm	45			Rs. -
c	12.7 mm O.D.(insulation : 13 mm)	Rm	40			Rs. -
d	6.4 mm O.D.(insulation : 13 mm)	Rm	85			Rs. -
2	Supply, Installation, testing and commissioning of PPRC piping complete with fittings, supports as per specifications					
a	25 mm Dia	Rmt	48			Rs. -
3	Supply, Fabrication, Installation and testing of Rectangular sheet metal ducts in accordance with the approved shop floor drawings and specifications, and shall also confirm to the specifications. All ducts shall be factory fabricated. (special pieces like Y joints, bends, to suit pieces can be site fabricated.)					
a	24 gauge	SqM	90			Rs. -

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

E HVAC						
S. No	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
b	22 Gauge	SqM	120			Rs. -
4	Supply, Installation, Testing and commissioning of single louvered supply air grille as per approved colour and shop floor drawings.					
a	Supply air diffuser.	SqM	2			Rs. -
b	Return air grill	SqM	3			Rs. -
5	Supply and Application of thermal insulation of ducting with approved sample of closed cell Elastomeric Nitrile rubber insulation, as per specifications.					
a	25 mm thick with aluminum foil	SqM	100			Rs. -
6	Acoustic Insulation of duct with perforated sheet	Sqm	150			Rs. -
AIR WASHING SYSTEM						
7	Supply and Installation GI duct work, factory fabricated spotless GP sheets, GI flanges & cleats, gaskets, GI nuts and bolts and threaded rods. All ducts pieces shall be fully fabricated in factory and joined together at site. Duct fabrication and duct supports shall be as per IS-655.					
a	24 G	Sqm	850			Rs. -
b	22 G	Sqm	650			Rs. -
8	50 mm thick glass wool insulation for the ventilation duct exposed to sun out side the building. Duct shall be insulated with 50 mm thick glass wool insulation supported with GI chicken wire mesh followed by 12 mm thick cement plaster	Sqm	600			Rs. -

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

E HVAC						
S. No	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
9	Supply and fixing of Powder coated Cont. Aluminium supply air Grill. Grills shall have flange on all four sides.	Sqm	25.00			Rs. -
10	Supply and fixing of GI B class piping for Air Washer Unit with all ISI make GI pipe fitting like union, elobow & tee					
a	25 mm	Rm	29			Rs. -
b	40 mm	Rm	29			Rs. -
c	65 mm	Rm	45			Rs. -
d	80 mm	Rm	18			Rs. -
11	Supply and fixing of butterfly valve , non return valve, strainer & brass valve of ISI make					
a	25 mm Brass valve	No.	6			Rs. -
b	40 mm Brass valve	No.	2			Rs. -
c	65 mm Butterfly valve	No.	6			Rs. -
d	80 mm Butterfly valve	No.	15			Rs. -
e	65 mm Non Return valve	No.	6			Rs. -

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

E HVAC						
S. No	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
f	80 mm Strainer	No.	2			Rs. -
g	25 mm dia float valve	No.	2			Rs. -
12	Electrically operated fire damper,	Sqm	6			Rs. -
13	Flexible canvas connection	No.	2			Rs. -
SUBTOTAL OF HVAC WORK						-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

F FIRE FIGHTING SYSTEM AND HYDRANT SYSTEM						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
FIRE FIGHTING SYSTEM AND HYDRANT						
1	Providing, laying, testing and commissioning of C class heavy duty MS pipe conforming to IS: 1239 / IS:3589 including MS fittings like elbows, tees, flanges, tapers, nuts, bolts, gaskets etc., in ground including excavation and providing cement concrete blocks as supports, anticorrosive treatment with coaltar / asphaltic tape as per IS:10221, refilling the trench etc. complete of following sizes as required.					
a	25mm dia.	Metre	12.00			-
b	50mm dia.	Metre	6.00			-
c	65mm dia.	Metre	6.00			-
d	80mm dia.	Metre	30.00			-
e	100mm dia.	Metre	120.00			-
f	150mm dia.	Metre	340.00			-
g	200mm dia	Metre	12.00			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

F FIRE FIGHTING SYSTEM AND HYDRANT SYSTEM						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
2	Painting for M.S. pipe with a coat of red oxide primer and two or more coats of synthetic enamel paint of approved colour and Quality to give an even shade including surface preparation.					
a	25 mm dia	Meter	12.00			-
b	50mm dia.	Meter	6.00			-
c	65mm dia.	Meter	6.00			-
d	80 mm dia	Meter	30.00			-
e	100 mm dia	Meter	120.00			-
f	150 mm dia	Meter	340.00			-
g	200 mm dia	Meter	12.00			-
3	Providing and applying one coat of 4 mm thick 'PYPKOTE' or COATEK anti rust pipe protection including approved primer as per manufacturers specifications and lap of 25 mm to make an impermeable layer on MS pipes in trenches or on structural/masonry members complete including surface preparation.					

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

F FIRE FIGHTING SYSTEM AND HYDRANT SYSTEM						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
a	80 mm dia	Meter	30.00			-
b	100 mm dia	Meter	80.00			-
c	150 mm dia	Meter	310.00			-
4	Supplying and fixing Stainless Steel -IS:3444 Grade-1 single headed internal/ external hydrant valve with instantaneous Stainless Steel couplings of 63 mm dia with cast iron wheel ISI marked conforming to IS 5290 (Type - A) with blank Gunmetal cap and chain as required.	Each	25.00			-
5	Supplying and fixing 63 mm dia, 30 mtr. long Aqua Dura RRL hose pipe with 63 mm dia Male and Female Stainless Steel-IS:3444 Grade-1 couplings duly binded with GI wire, rivets etc. conforming to IS 636 /903 (Type -A) as required.	Each	50.00			-
6	Supplying and fixing First-Aid Hose Reel with MS construction spray painted in Post office Red, cinforming to IS 884 with upto date amendments, complete with the following as required.					
	(A) 30 m. long 20 mm (nominal internal) dia water hose rubber as per IS: 444 marked.					
	(B) 20 mm (nominal internal) dia gun metal globe valve & nozzle.					
	(C) Drum and brackets for fixing the equipmets on wall.					
	(D) Connections from riser with 25 mm dia stop valve (gun metal) & M.S. Pipe.	Set	12.00			-

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

F FIRE FIGHTING SYSTEM AND HYDRANT SYSTEM						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
7	Supplying & fixing 63 mm dia Stainless Steel IS: 3444 Grade-1 branch pipe with 20 mm (nominal internal diameter) size S.S nozzle conforming to IS 903, suitable for instantaneous connection to interconnect hose pipe coupling as required.	Each	25.00			-
8	Supplying and fixing of hose cabinet of size 900 mm x 600 mm x 300 mm made of 2 mm thick MS sheet with 6 mm thick glazed glass doors i/c 'necessary locking arrangement suitable to accommodate external hydrant with butterfly valve, 2 Nos. 15 mtr. long Hose pipe, 1 No. branch pipe, mounted on wall OR raised brick platform & duly painted with Post office red externally and white internally with synthetic enamel paint complete in all respect, for external hydrant as required.	Each	25.00			-
9	Providing, installation, testing and commissioning of dual plate non-return valve of following sizes confirming to IS: 5312 complete with rubber gasket, GI bolts, nuts, washers etc. as required.					
a	80mm dia	Each	2.00			-
b	100mm dia	Each	5.00			-
c	150mm dia	Each	5.00			-
10	Supplying, fixing, testing and commissioning of butterfly valve PN 1.6, with ISI marked complete with Nuts, Bolts, washers, gaskets, conforming to IS 13095 of following sizes as required.					

Bill of Quantities

Construction Of Rajya Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

F FIRE FIGHTING SYSTEM AND HYDRANT SYSTEM						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
a	80mm dia	Each	2.00			-
b	100mm dia	Each	7.00			-
c	150mm dia	Each	3.00			-
d	200mm dia	Each				
11	Providing and fixing brass ball valve (full bore type) with plastic coated lever and screwed female ends tested to 20 Kg/ cm ² of approved quality as specified.					
a	25 mm dia	Each	25.00			-
12	Providing and fixing suction coupling for fire brigade drawl of water from tank with 150 mm dia GI (Medium) pipe and foot valve (Pipe max 8 M long).	Each	1.00			-
13	Providing and fixing M.S. structural work fabricated from standard sections, (MS rounds, angles, channels etc.) including cutting to size,drilling welding including cost of (Hilti) fasteners, clamp in RCC structural members as directed, including two or more coats of synthetic enamel paint over one coat of primer after surface preperation including cutting and making good walls.	KG.	960.00			-

Bill of Quantities

Construction Of Raja Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

F FIRE FIGHTING SYSTEM AND HYDRANT SYSTEM						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
14	Providing and fixing 150 mm dia C.I. double flanged sluice valves rated to PN 1.6 with C.I. Wheel bolts, nuts, washers 3mm thick insertion rubber gasket including matching flanges table E, complete.	Each	3.00			-
15	Supplying and fixing 4 way fire brigade connection of cast iron body with 4 Nos. Gun metal male instantaneous inlet couplings complete with cap and chain as reqd. for 150mm dia MS pipe connection, conforming to IS 904 as	Each	2			-
16	Providing and fixing gunmetal single acting air release valve with screwed inlet 25 mm dia.	Each	7.00			-
17	Providing and fixing standard fireman's axe (tested for 20000 Volts) with heavy insulated rubber handle.(ISI marked)	Each	15.00			-
18	Providing and constructing masonry chamber 90x 90 x 100 cms inside with 75 class designation brick work in cement mortar 1:5 (1 cement : 5 fine sand) for water meter ,M.S. cover (6mm thick sheet with locking arrangement, 600 x600 with M.S. frame etc. all epoxy coated and R.C.C. top slab 1:2:4 mix (1 Cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) including necessary excavation, back filling foundation concrete 1:5:10 mix (1 cement : 5 fine sand and 10 graded stone aggregate 20mm nominal size) leaving a pocket of 30x30 cm with out concrete and filled with pebbles and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement and outside plaster finished rough complete.	Each	2.00			-
19	Providing and fixing pressure switch with suitable for 1-10 Kg/cm ² including electrical connections setting of Cut-In and cut-Off pressure complete in all respects.	Each	4.00			-

Bill of Quantities

Construction Of Raja Soochna Ayog Office Building At North Block, Sector -19, Naya Raipur

F FIRE FIGHTING SYSTEM AND HYDRANT SYSTEM						
Sr. No.	Description of Items	Unit	Quantity	Rate (in INR)	Rate in words (in INR)	Total Amount (In INR)
II HAND APPLIANCES						
20	Supply & Fixing ISI marked (IS:15683) Portable Fire Extinguisher, ABC type capacity 6 kg, finished externally with red enamel paint, complete in all respects including initial fill and wall suspension.	Each	31.00			-
21	Supply & Fixing ISI marked (IS:15683) Portable fire Extinguisher, Carbon-dioxide type flat base including valve, discharge hose of not less than 10 mm dia. min. 600 mm long & complete in all respects including initial fill with CO2 gas confirming to IS:307-1966 filled to a filling ratio of not more than 0.667and wall suspension bracket. Capacity 4.5 Kg	Each	20.00			-
22	Supply & Fixing ISI marked (IS:15683) Portable Fire Extinguisher, Trolley mounted Mech. Foam type capacity 09 ltrs with gun-metal cap and nozzle and complete respects in all respects including initial fill and wall suspension. Capacity 9.0 ltrs	Each	12.00			-
23	Supply & Fixing of ISI marked (IS:2878) Fire Extinguisher, Trolley mounted, CO2 (gas pressure) type capacity 22.5 Kg. with gun-metal cap. And nozzle and complete in all respects including initial fill and wall suspension bracket. Capacity 22.5 Kg	Each	1.00			-
TOTAL OF FIRE FIGHTING SYSTEM , HYDRANT SYSTEM & HAND APPLIANCES						-