



NAYA RAIPUR DEVELOPMENT AUTHORITY

**Tender Document for the
Construction of boys and girls hostel including compound
wall for IIIT at Naya Raipur
(Following Three-Envelope Tender Procedure)**

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

NIT No : 134/IIIT (Phase-I) /EEC-III/ CE (E) /NRDA/2016-17,Naya Raipur,

Dated: 10.11.2016

Issued by: Chief Executive Officer,
Naya Raipur Development Authority (NRDA)
Paryavas Bhawan, North Block Sector- 19,
Naya Raipur- 492 002, Chhattisgarh
Tel No: + 91 771 2512500; Fax No.: +91 771 2512400.
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 boys and girls hostel including compound wall for IIIT at Naya Raipur"

Name of Tenderer:

Details

a) Cost of Tender Document : Rs

b) EMD : Rs

Signature of Tenderer

Date: _____

Signature of Contractor.....

Signature of NRDA.....

Cost abstract
Construction of boys and girls hostel including compound wall for IIIT at Naya Raipur

Sl. No.	Description of Items	Amount (in INR)	Amount in Words (In INR)
A	Civil Works	-	
B	Plumbing works	-	
C	External Development	-	
D	Fire Fighting works	-	
E	Common infra structure		
a	Approach Road	-	
b	UGR	-	
F	Compound wall	-	
G	Electrical Works	-	
	Total Project Cost	-	

Bill of Quantity
Construction of boys and girls hostel including compound wall for IIIT at Naya Raipur

S.No.	CG So	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
1	1.1	Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the excavated area), including dressing and leveling of pits.					
a	1.1.1	In all types of soil	cum	14654.0			Rs. -
2	1.2	Surface dressing of the ground including removing vegetation and making up undulations and in-equalities not exceeding 15 cms in depth/ height including disposal of rubbish upto 1.5 m lift and lead upto 50m (at least 5m away from the dressed area).	sqm	3579.0			Rs. -
3	1.18	Providing and filling in plinth with sand/ Crusher dust under floor in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering, including dressing etc. complete.	cum	6009.8			Rs. -
4	1.17	Backfilling: Filling from available excavated stuff (Excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering with a lead upto 50 M. and lift upto 1.5 M.	cum	9769.3			Rs. -
5	3.1	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	3.1.3	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size).	cum	865.1			Rs. -

S.No.	CG So	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
6	3.3	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	3.3.2	M-25 Grade	cum	8622.8			Rs. -
7	3.7	Providing and mixing in cement concrete, triangular polyester fiber Recron 3s (Anti-shrinkage Admixture) of 12 mm length of approved make like Reliance industries Ltd etc. in proportion as recommended by manufacturer.	kg	8919.1			Rs. -
8	3.4	Extra for laying PCC/RCC of any grade in superstructure above plinth level for every floor or part thereof in addition to rate for foundation and plinth:					
I	I	GROUND FLOOR	cum	3442.3			Rs. -
II	II	FIRST FLOOR	cum	1123.6			Rs. -
III	III	SECOND FLOOR	cum	1193.4			Rs. -
IV	IV	THIRD FLOOR	cum	1150.2			Rs. -
V	V	FOURTH FLOOR	cum	689.7			Rs. -
VI	VI	FIFTH FLOOR	cum	707.1			Rs. -

S.No.	CG So	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
VII	VII	TERRACE (OR) SIX FLOOR	cum	46.7			Rs. -
9	3.14	Water proofing material: Providing and mixing water proofing material in PCC/ RCC work in the proportion recommended by the manufacturer.	kg	58483.5			Rs. -
10	3.13	DPC: Providing and laying damp proof course (upto 50mm thick) with plain cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded crushed stone aggregate 20mm nominal size) including formwork.	cum	74.2			Rs. -
11	3.15	Applying a coat of hot bitumen VG-10 using @ 1.7kg/ sqm on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	sqm	2397.3			Rs. -

S.No.	CG So	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
12		Anti termite treatment					
a	1.22	Supplying chlorpyrifos/ Lindane emulsifiable concentrate of 20% in sealed containers including delivery as specified.	Litre	5906.0			Rs. -
b	1.23	Diluting chemical emulsion (chlorpyrifos/ lindane) in water as per manufacturers recommendation and injecting for pre-constructional curative cum preventive anti-termite treatment:(Five year service guarantee bond to be signed by contractor)					
i	1.23.1	Surface treatment by spreading emulsion under floor, over the plinth area before laying base concrete @ 5 litres / sqm	sqm	3898.0			Rs. -
ii	1.23.2	Treatment of inside of plinth masonry wall on using diluted chemical emulsion @ 1.5 litre per hole, including drilling 12 mm diameter holes in plinth wall below plinth protection at the interval of 300 mm and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand).	Metre	11155.7			Rs. -
iii	1.23.3	Treatment of outer side of plinth masonrywall using diluted chemical emulsion @ 1.5 litre per hole, including drilling 12 mm diameter holes in plinth wall at the junction of floor at the interval of 300 mm and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand).	Metre	11155.7			Rs. -
13	3.12	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	3.12.2	Thermo-Mechanically treated Bars FE 500D	kg	1030052.2			Rs. -
14	2.1	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for:					

S.No.	CG So	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
a	2.1.1	Foundations, footings, base of columns and plinth beam in any shape and size.	sqm	6463.0			Rs. -
b	2.1.3	Window sills, anchor blocks, string course, bends, copings, bed plates and like.	Sqm	748.9			Rs. -
c	2.1.6	Columns, beams & walls- circular or any other geometrical shape other than square and rectangular in all sizes	sqm	23302.0			Rs. -
d	2.1.7	Suspended floors, roofs, access platform, balconies (plain surfaces) and shelves (cast in situ)	sqm	18906.0			Rs. -
e	2.1.8	Beams, lintels, cantilevers & walls	sqm	21344.0			Rs. -
f	2.1.9	Vertical and horizontal fins individually or forming box, louvers bands, almirah shelves and likes.	sqm	792.6			Rs. -
g	2.1.13	Weather shade, chhajja, Cornices and mouldings	sqm	563.0			Rs. -
h	2.1.15	Stair cases of all types excluding spiral and folded plate type, including risers and landings	sqm	1127.1			Rs. -
15	12.4	15mm thick Marble stone slab flooring over 18mm (Average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with grey cement slurry including grinding rubbing and polishing etc.complete. (Area of slab should be 0.50 sqm and above) (Floor tiles & Skirting)					

S.No.	CG So	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
a	12.3 8.3	Agaria White	sqm	600.5			Rs. -
b	12.3 8.6	Pink plain marble	sqm	356.5			Rs. -
16	7.25	Providing and laying AAC Autoclaved aerated concrete block confirming to IS: 2185 (Part-3)-1984) in block masonry with AAC blocks of width 100/200mm height 200/250/300mm,length 400/500/600 mm (approved sizes)with cement mortar 1:6 (1Cement :6 coarse sand) in superstructure. AAC blocks should have specific gravity 0.6 to 0.65 and crushing strength should not be less than 3 N/ sqmm (testing as per IS: 6441 - 1972).	cum	9689.2			Rs. -
17	7.5	Brick work with modular fly-ash lime bricks (FaLG Bricks) confirming to IS:12894-2002 of class designation 4.0 in foundation and plinth in:					
a	7.5.4	Cement Mortar 1:6 (1 cement : 6 coarse sand)	cum	398.8			Rs. -
18	7.6	Extra for AAC Autoclaved aerated concrete block work in superstructure above Plinth level thereoff in addition to rate for foundation and plinth					
I	I	GROUND FLOOR	cum	1983.7			Rs. -
II	II	FIRST FLOOR	cum	1896.3			Rs. -
III	III	SECOND FLOOR	cum	1773.4			Rs. -

S.No.	CG So	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
IV	IV	THIRD FLOOR	cum	1613.1			Rs. -
V	V	FOURTH FLOOR	cum	1255.4			Rs. -
VI	VI	FIFTH FLOOR	cum	940.0			Rs. -

S.No.	CG So	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
VII	VII	TERRACE (OR) SIX FLOOR	cum	468.3			Rs. -
19	7.20	Extra for providing and placing in position hopping 25x1.60 mm or 2 Nos 6mm dia MS bars reinforcement at every third course of half brick masonry.	sqm	10692.8			Rs. -
20	####	Providing and fixing chicken mesh weighting not less than 250 gms/sqm as per IS : specification in the required width with 40mm long steel nails on vertical and horizontal surface near R.C.C. and brick wallsjunctions including scaffolding and all lead and lifts etc. complete before plastering upto 10mts in height.	Sqm	21385.7			Rs. -
21	12.5	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 sqm and upto 0.50 sqm) (Floor tiles & Skirting)	Sqm	5457.3			Rs. -
22	12.1	Providing and laying vitrified floor tiles with soluble salt printing, of size 600x600mm with water absorption less than 0.5% and conforming to IS : 15622 of approved make, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting the joints with white cement and matching pigments etc. complete: (Floor tiles & Skirting)					
a	12.13.	Size 600x600mm	Sqm	9722.9			Rs. -
23	12.9	Providing and laying ceramic glazed floor tiles conforming to IS : 15622 of approved size, make, colour, shade laid on 20 mm thick Cement Mortar 1:4 (1 cement : 4 coarse sand) including pointing the joints with white cement mixed with matching pigment etc., complete.					
a	12.9.1	Size 300x300mm	Sqm	1756.4			Rs. -

S.No.	CG So	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
24	12.7	Providing and fixing ceramic glazed wall tiles conforming to IS : 15622 of approved make, colours, shades and size on wall and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with matching pigment complete.					
a	12.7.2	Size above 200x300mm	Sqm	2935.1			Rs. -
25	####	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 up to length of 1.0 M.) (Floor tiles & Skirting)	sqm	1838.8			Rs. -
26	####	Extra for nosing in steps and treads of kota stone slab.	metre	4975.5			Rs. -

S.No.	CG So	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
27	13.6	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.					
a	13.6.2	Granite stone black	Sqm	1824.2			Rs. -
28	13.2	Providing and fixing 15mm thick Granite (machine cut, table rubbed & mirror polished on both sides) for partition curtain in toilets or similar locations of required size in wall with cement mortar 1:4 (1 cement : 4 coarse sand) including cutting chase in wall and joint with wall treated with white cement mixed with matching pigment including rubbing and polishing to edge moulding to give high gloss finish.					
a	13.17.1	Granite stone black	sqm	60.0			Rs. -
29	12.5	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)(Floor tiles & Skirting)					
a	12.45.1	Granite stone black	sqm	1000.0			Rs. -
29	11.7	Providing and making 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).	Sqm	17434.2			Rs. -

S.No.	CG So	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
30	11.2	Providing and making 12mm thick cement plaster of mix:					
a	11.2.1	In Cement Mortar 1:4 (1 cement : 4 fine sand)	Sqm	68693.1			Rs. -
31	11.1	6mm thick cement plaster of mix: (ceiling)					
a	11.1.1	In Cement mortar 1:3 (1 cement : 3 fine sand)	sqm	20132.3			Rs. -
32	11.1	Extra for plastering of exterior walls when height exceeds 10m above ground level for every additional height of 3.0m or part thereof.	sqm	7293.3			Rs. -
33	14.4	Preparation of wall surface by applying a coat of putty comprising of chalk mitti, varnish and white lead in ratio 2½:1:1 (2½ kg chalk mitti : 1 litre varnish : 1 kg white lead) respectively, sand papering and making the surface smooth to proper shape and presentable conditions.	Sqm	88825.4			Rs. -
34	14.1	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.					
a	14.1.1	Upto 2 mm thickness to make surface even and smooth in line and level.	Sqm	17434.2			Rs. -
35	14.9	Distemping with acrylic washable distemper to give an even shade					
a	14.9.1	on new wrk (Two or more coats)	sqm	88825.4			Rs. -

S.No.	CG So	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
36	14.2	Painting exterior surface with PREMIUM ACRYLIC SMOOTH exterior paint of required shade as per manufacturer's specifications to give protective and decorative finish including cleaning washing of surface etc.complete with:					
a	14.1 6.1	On new work (Two or more coats applied @ 1.43 ltr/ 10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm)	sqm	17434.2			Rs. -
37	4.5	Providing and laying water proofing treatment in sunken portion of WCs,bathroom, kitchen etc., by applying cement slurry mixed with waterproofing cement compound consisting of following applications including surface preparation: i) First layer of slurry of cement @ 0.488 kg/sqm mixed with waterproofing cement compound @ 0.253 kg/sqm. This layer will be allowed to air cure for 4 hours. ii) Second layer of slurry of cement @ 0.242 kg/sqm mixed with waterproofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.	sqm	3406.7			Rs. -
38	on So	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 hutter 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.	Each	20.0			Rs. -

S.No.	CG So	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
39	MR	<p>EXPANSION JOINTS: HORIZONTAL & VERTICAL</p> <p>Following procedure shall be followed to treating the expansion joints of roof and walls. · The expansion joints shall be thoroughly cleaned including chipping of existing mortar, thermocol / shalitek board etc. up to a depth of 200 mm. · The expansion joint shall be treated upto a depth of 200 mm filled with polysulphide sealant (gun grade) with polysterene board (thermocool sheet) of 50 mm thick and 50 mm wide as a backing material. Polysulphide sealant (gun grade)Shaliseal PS GG of STP ltd shall be applied over the thermocol sheet to have a watertight surface.</p> <p>·Place 1 mm thick aluminium sheet over the expansion joint with minimum 75 mm on either side of the expansion joint.</p> <p>·One side of the aluminium sheet shall be screwed to the concrete surface and the other side of the aluminium sheet shall be free to move.</p> <p>· One layer of EPDM membrane shall be fixed on the surface of the aluminium sheet and concrete with minimum 75 mm width of sheet glued to the concrete surface.</p> <p>· A compressible tube (Polyurethane rod) of diameter equal to the width of the expansion joint shall be placed in position. The PU rod is placed to allow for excess length of the membrane across the expansion joint. · The expansion joint is then covered with second layer of EPDM membrane / Tarfelt APP membrane of STP ltd over the PU rod with minimum 75 mm width of sheet glued to the concrete surface.</p>	Meter	600.0			Rs. -
40	MR	<p>Enough extra length of membrane is ensured to accommodate building movement. ·Necessary Waterproofing shall be carried out over this treatment. 25 mm thick cement mortar screed shall be provided over the EPDM membrane / Tarfelt APP membrane of STP ltd. To prevent shrinkage cracks in mortar, polyester fibers shall be added in the cement mortar screed with a dosage of 0.25 % of weight of cement used. A geo textile polyester membrane (200 gsm) shall be provided between EPDM membrane / Tarfelt APP membrane of STP ltd and cement mortar screed for the protection of water proofing membrane.</p> <p>The top of the finished surface shall match with the top surface of the slab for easy movement of rainwater / movement of vehicles.</p>	Meter	600.0			Rs. -

S.No.	CG So	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
41	10.7	Providing and fixing of aluminium tile false ceiling comprising of Tile of size 600 x 600mm x 0.7mm. The Tile ends will be raised with pips and stops to ensure positive engagement into the spring to enable for demounting of individual panels. The Tile sides will be sufficiently high to ensure a minimum deflection across the length of Tile. All Tiles will be bevel edged. The Tile shall be powder coated. The Tile shall be clipped into clip-in profile made of 0.5mm thick G.I sheet. The clip-in profile shall be supported from slab by means hold on clamp with clip and 4mm dia G.I. rod fixed to ceiling rigidly.					
	10.6 5.1	With Plain tiles	sqm	316.0			Rs. -
42	10.6	Providing and fixing of aluminium panel false ceiling of approved colour consisting of panels 300mm wide x 30 mm deep x 0.7mm thick with bevel edge and length up to 6.0 metre. The panels are made from corrosion resistance aluminium alloy AA 3005 (Al. Mg) (for higher strength and good roll forming characteristics) sheet chromatised for maximum bond between metal and paint, enamel painted twice under high temperature, one side with a full primer and finish coat and the other side (inner side) with a primer coating and Skin Coat on a Continuous Paint Line. Panel shall be fixed by clipping to panel carrier of size 41.5mm wide x 62mm deep x 0.95mm thick in standard length of upto 5 metre made of doubled baked black enamelled aluminium alloy AA 5050 (Al. Mg) with cut outs to hold the 300mm wide panels fixed at a distance of 0.3 m from wall and 2.4 m from centre to center. Panel carrier shall be suspended by means of G.I. suspension rod 4mm dia and a Galvanised suspension spring clip at a distance of 1.7 m centre to center. Wall trim box of size 15x30x15mm made from 0.4mm thick aluminium alloy sheet to be provided all along the wall to hold panels (only surface area of false ceiling is to be measured and no deductions for lights, diffusers, columns etc shall be made)* (Make : Hunter Douglas/ Approved Make)					
a	10.6 4.2	With long perforated panels having perforation with 2.0mm dia and 5mm center to center and pasted with non woven tissue on the back side	sqm	1013.0			Rs. -
43	9.13	Providing and fixing steel door/ window 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.	kg	22733.8			Rs. -

S.No.	CG So	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
44	9.16	Providing and fixing M.S. frames of doors, windows, ventilators and cupboards 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	9.16.2	Angle-iron frames	kg	7996.8			Rs. -
45	9.54	Providing and fixing anodized aluminium framed grill (minimum anodic coating of grade AC 15) of approved shape, pattern and design including cutting, bending, hoisting and erecting/ fixing to door, window frame or to wall with fixing clips or hold fasteners or bolts and nuts as required etc. complete.	kg	6896.7			Rs. -
46	9.18	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	9.18.1	Single rebate/ mullion 80mmx50mm size, 1.25mm thick sheet	meter	3583.5			Rs. -
47	8.15	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.	meter	1308.9			Rs. -

S.No.	CG So	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
48	9.14	Providing and fixing steel door made of angle iron of suitable sizes with M.S. grill of approved pattern made of M.S. flats or square or round bars coat of red oxide zinc chromate primer.	kg	340.2			Rs. -
49	9.16	Providing and fixing M.S. frames of doors, windows, ventilators and cupboards 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	9.16.1	"T" –iron frames	kg	181.5			Rs. -
50	9.51	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with PVC/ neoprene gasket etc. compl etc. (Cost of aluminium snap beading shall be paid in basic item):					
a	9.51.4	With float glass panes of 8 mm thickness	sqm	59.9			Rs. -
51	8.13	Providing and fixing flush door shutters, conforming to IS 2202 (Part 1), interior grade, commercial type, core of block board construction with frame of first class hard wood and well matched commercial ply veneering with vertical grains, cross bands and face veneers on both faces of shutters excluding hinges.					
a	8.13.2	35 mm. thick (single leaf)	sqm	563.7			Rs. -

S.No.	CG So	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
52	8.15	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).					
	8.152.	PVC door shutter	sqm	398.0			Rs. -
		DOOR FIXTURES					
53	8.77	Providing and fixing antique/ SS finished brass butt hinges with antique/SS polished MS screw complete:					
a	8.77.1	125x85x5.50mm (Heavy Type)	each	672.0			Rs. -

S.No.	CG So	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
54	8.8	Providing and fixing antique/ SS finished brass door latch with antique/ SS polished MS screw complete:					
a	8.80.1	300 x16x5 mm	each	672.0			Rs. -
55	8.81	Providing and fixing antique/ SS finished brass tower bolts (Barrel type) with antique/ SS polished MS screw complete:					
a	8.81.1	250 x10 mm	each	672.0			Rs. -
56	8.84	Providing and fixing antique/ SS finished brass handles with antique/ SS polished MS screw complete:					
a	8.84.1	125mm	each	1344.0			Rs. -
57	8.90	Providing & fixing 150mm antique/ SS finished brass floor door stopper with rubber cushion and antique/SSpolished MS screw complete to suit the shutter thickness.	each	672.0			Rs. -
58	8.16	Providing and fixing IS: 3564 marked aluminium die cast body tubular type universal hydraulic door closer with necessary accessories and screws etc complete.	each	8.0			Rs. -
59	9.24	Providing and fixing tinted glass panes with steel glazing clips and special metal sash putty of approved make in steel doors, windows, ventilators:					
a	9.24.1	4 mm thick	sqm	1072.6			Rs. -

S.No.	CG So	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
60	9.47	Providing and fixing aluminium work for doors, windows, ventilators and partitions made out of extruded aluminium standard sections (main section with minimum 1.5mm thickness) conforming to IS: 733, IS: 1285 mitred and jointed mechanically including aluminium cleats, neoprene weather stripping gasket beveled edge beading, screws duly fixed in wall/ floor with fixing clips or hold fasteners or bolts and nuts as required aluminium sections shall be anodized transparent or dyed to approved shade according to IS: 1868, minimum anodic coating shall be of grade AC-15. (Glazing to be paid for separately):					
a	9.47.2	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).	kg	4442.3			Rs. -
61	9.58	Extra for providing and fixing tinted glass panes in aluminium door,window, ventilator shutters and partitions instead of float glass.					
a	9.58.1	4 mm thickness	sqm	1072.6			Rs. -
62	9.15	Providing and fixing M.S. grill of approved pattern made of M.S. flats or square or round bars welded to steel frame of windows etc. including applying a priming coat welded to frame with all necessary fitting complete including applying a priming of red oxide zinc chromate primer.	kg	22179.8			Rs. -

S.No.	CG So	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
63	9.37	Providing and fixing M.S. fan clamp/hook for ceiling fan made out of 16mm dia M.S. bar bent to shape with hooked ends in R.C.C. slabs, beams during laying including painting the exposed portion of loop.	each	657.0			Rs. -
64	9.57	Providing stainless steel railing/ grill made of S.S. flats, hollow S.S. pipe or square/ rectangular sections of approved design fixing in stair case, balcony or other places with metal fasteners and stainless steel bolts etc complete.					
a	9.57.2	SS Grade 304	Kg	6807.8			Rs. -
65	14.2	Painting on new work (two or more coats) to give an even shade with:					
a	14.22.1	Premium synthetic enamel paint	sqm	13604.2			Rs. -
66	12.2	40mm thick marble chips flooring rubbed and polished to granolithic finish with under layer 31mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand: 4 graded stone aggregate 12.5 mm nominal size) and top layer 9mm thick with white or black or white and black marble chips of size from 4mm to 7mm nominal size laid after mixing with cement marble powder in mix 3:1 (3 cement :1 marble powder by weight) in proportion of 4:7 (4 cement marble powder mix : 7 marble chips by volume).					
a	12.19.1	Light shade pigment with white cement	sqm	3677.0			Rs. -
67	3.16	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 PCC	sqm	3779.0			Rs. -

S.No.	CG So	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
68	10.4	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1mx1mx650 micron thick (0.65mm), finished with 12mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement rounding the edge sand making and finishing the outlet complete.	each	95.0			Rs. -
69	MR	Supply & Application of Dr. Fixit BlueSealSystem or approved equivalent system as per the application method indicated in Annexure I with 10 years of waterproofing guarantee from Manufacturer's Group of Company					
a	i	Surface preparation including final cleaning of the surface, treating of construction joints, filling of honeycombs etc...	Sqm	3677.0			Rs. -
	ii	Supplying and applying instant setting spray applied polyurethane waterproofing system Dr. Fixit BlueSeal or approved equivalent as per the manufacturer's recommendations, with 10 years composite guarantee against leakages, to be provided by the principal manufacturer or group company. Dr. Fixit BlueSeal should confirm to following properties: a) Core Density - 55 – 60 Kg/m ³ as per ASTM D-1622 b) Closed cell content, apparent vol,- 96-98% as per ASTM D-2856 c) Initial Thermal Conductivity @ 25°C - 0.018 W/m.k as per ASTM C - 518 d) Fire Resistance - Class B2 as per DIN 4102 e) Water Absorption, per cm ² (gm/cc) with protective coating – 0.009 as per ASTM C – 272					
	iii	Supplying and apply Dr. Fixit Roofseal or approved equivalent at average consumption of 0.9-1ltr/Sqmtr in two coats by brush with an elongation of Dr. Fixit Roofseal should confirm to following properties: a) Elongation at break – 500% b) Water Resistant - No blistering and re-emulsification c) Peel adhesion to concrete – 1.5 N/mm ² d) Elongation % ≥ 1000% as per ASTM D412 e) Crack Bridging - No crack at 2mm gap as per ASTM C 836:00 f) Shore A hardness – 50 as per ASTM D2240:91					
b		Supply and spreading 120 gsm Geotextile (non woven polyester).	Sqm	3677.0			Rs. -

S.No.	CG So	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
70	20.1	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910 on 12mm dia steel bar conforming to IS : 1786 having minimum cross section as 23 mmx25mm and over all minimum length 263 mm and width as 165mm with minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design.	Each	40.0			Rs. -
71	20.2	Providing and fixing in position precast circular 560mm internal dia SFRC/ R.C.C. manhole cover or cover and frame of approved quality:					
a	20.17.	Cover and frame H D - 20	Each	4.0			Rs. -

S.No.	CG So	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
72	PHE SOR 29.3	Providing, hoisting and fixing in position inverted „J” type 100 mm dia. C.I. Cowl type ventilators with mosquitoproof aluminium mesh at top including applying 2 coats of anti-corrosive paint, etc.complete as directed by Engineer-in-charge, weighing not less than 35 Kg.	Each	8.0			Rs. -
73	9.20	Fixing standard steel doors, windows, and ventilators in walls with 10 cm long lugs of size 15x3mm embedded in cement concrete block 15x10x10cm size 1:3:6 (1 Cement : 3 Sand : 6 Stone aggregate 20 nominal size) or rawl plugs and screws or with bolts and nuts as required (steel windows with lugs shall be supplied by department).	sqm	1072.6			Rs. -
74	9.44	Providing and fixing “NETLON insect screens” with 25mm wide Hook and loop tape all around to wooden/ aluminium/ steel windows, ventilators and the like complete.	sqm	214.5			Rs. -
75	####	Making groove in cement plaster while plastering upto 10 mm deep and 10 mm	sqm	120.0			Rs. -
76	8.1	Providing wood work in frames of doors, windows, clerestory windows and other frames wrought framed and fixed in position.					
a	8.1.2	Sal, bijasal, benteak, khair, haldu	cum	0.4			Rs. -
77	9.60	Designing, providing and fixing aluminium frame work made of special aluminium section on building face with M.S. angle iron brackets fixed on RCC structure with S.S. hold fasteners, including providing and fixing two sided structural adhesive tape of appropriate grade (NORTON or equivalent), on aluminium sections for fixing aluminium/ glass panel, sealing on periphery of frame work, by providing EPDM gasket, silicon weather sealant between aluminium frame and building structure including hire charges of double scaffolding complete.	sqm	30.0			Rs. -
Sub Total of Civil Works							Rs. -

Bill of Quantity						
Construction of boys and girls hostel including compound wall for IIIT at Naya Raipur						
Sr.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount 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	53.00			Rs. -
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	84.00			Rs. -
3	Providing and fixing white vitreous china urinal basin with waste fitting as per IS : 2556, and other couplings in C.P. brass complete:					
	Flat back type urinal of size 460x380x250mm	each	37.00			Rs. -
4	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 :					
a	White Oval or round size 550x400mm	each	150.00			Rs. -

Sr.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
5	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink with 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	1145x510 mm bowl size 560x410x241 mm	each	4.00			Rs. -
6	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	345x445 mm bowl depth 200 mm.	each	2.00			Rs. -
7	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	152.00			Rs. -
8	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	149.00			Rs. -
9	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	61.00			Rs. -

Sr.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
10	Providing and fixing M.S. holder-bat clamps of approved design to Sand Cast iron/cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) including cost of cutting holes and making good the walls etc. :					
a	For 100 mm dia pipe	each	202.00			Rs. -
b	For 75 mm dia pipe	each	134.00			Rs. -
11	Providing and fixing on wall face or under floor UV stabilized Unplasticised Rigid PVC pipes (single socketed) having 3.2mm wall thickness conforming to IS : 13592 (4kg/sqcm) including required couplers, jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion etc complete.(Make: KML Classic / Approved Make)					
a	50 mm dia pipe	metre	600.00			Rs. -
b	75 mm dia pipe	metre	1986.40			Rs. -
c	110 mm dia	metre	3172.20			Rs. -
d	160 mm dia pipe.	metre	98.50			Rs. -

Sr.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
12	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 / Approved Make)					
a	Tee/ Tee with door/ Bend 45°/ Bend 90°					
b	75 mm	Nos.	481.00			Rs. -
c	110 mm	Nos.	143.00			Rs. -
d	150 mm	Nos.	12.00			Rs. -
e	Double "Y" with or without door					
f	75 mm	Each	89.00			Rs. -
g	110 mm	Each	50.00			Rs. -
h	Vent covel					
i	110 mm	Nos.	14.00			Rs. -

Sr.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
j	Access door cap					
k	75 mm	Each	184.00			Rs. -
l	110 mm	Each	121.00			Rs. -
m	P trap 110mmx110mm long	Nos.	82.00			Rs. -
n	Nahani trap 110x75mm	Nos.	210.00			Rs. -
o	Multi floor trap 110	Nos.	651.00			Rs. -
p	Plain reducing Tee 110x75mm	Each	42.00			Rs. -
13	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, 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. (UV stabilized, Nitrile Insulation)(Make: KML Classsic / Approved Make)					
a	20 mm nominal outer dia .Pipes.	metre	615.00			Rs. -

Sr.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
b	32 mm nominal outer dia .Pipes.	metre	1616.40			Rs. -
c	50 mm nominal outer dia .Pipes.	metre	798.00			Rs. -
14	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings. This included jointing of pipes & fittings with onestep CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge.EXTERNAL WORK (UV stabilized, Nitrile Insulation) (Make: KML Classic / Approved Make)					
a	32 mm nominal outer dia pipes	metre	40.00			Rs. -
b	50mm dia.	metre	638.00			Rs. -
c	100mm dia	metre	173.00			Rs. -
15	Providing and fixing 15 mm nominal bore Brass bib/stop cock of approved quality:					
a	Bib cock (350 grams)	each	432.00			Rs. -
b	Stop cock (350 grams)	each	224.00			Rs. -

Sr.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
16	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	Long nose bib cock (500gms)	each	18.00			Rs. -
b	Wall mixer with elegant knob (1400 grams)	each	136.00			Rs. -
c	Bottle trap set with extension pipes	each	132.00			Rs. -
d	Toilet paper holder	each	143.00			Rs. -
e	Soap dish plate	each	181.00			Rs. -
f	Shower rose (revolving type) (150mm)	each	137.00			Rs. -
g	Towel rail (600mm long x 20mm dia)	each	137.00			Rs. -
h	Towel ring (150 mm dia)	each	40.00			Rs. -
17	Providing and fixing stainless steel drain jali of approved make/quality.	each	430.00			Rs. -

Sr.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
18	Providing and fixing brass/ gun metal gate valve with C.I. wheel of approved quality (screwed end):					
a	32 mm nominal bore.	each	30.00			Rs. -
19	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :					
a	20 mm nominal bore	each	46.00			Rs. -

Sr.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
20	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	19.00			Rs. -
21	Constructing brick masonry manhole with well burnt modular clay 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) :	each	11.00			Rs. -
22	Extra for depth for manholes					
a	Size 90x80 cm	metre	2.00			Rs. -
23	Providing and fixing 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.					
a	100mm dia	Each	6.00			Rs. -

Sr.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
24	Providing and fixing brass GM/ ball valve (full bore type) with plastic coated lever and screwed female ends tested to 20 Kg/ cm2 of approved quality as specified.					
a	25 mm dia	each	18.00			Rs. -
b	50 mm nominal bore	each	80.00			Rs. -
25	Gunmetal non-return valve - vertical (screwed end) 50 mm dia	Each	12.00			Rs. -
26	Gunmetal non-return valve-horizontal (screwed end) 50 mm dia	Each	8.00			Rs. -
27	Water Cooler & Purification system: Providing and fixing Water Cooler (with Full SS-panels), Storage Capacity – 380 liters, Cooling Capacity - 170 liters with Faster cooling, Eco friendly, Stainless steel body, Stainless steel tank, In-C2 power saving PUF insulation, Easy controls, Speedy drainage, Rotary type compressor, trouble free operation and Water purification system Equipped with E-boiling+, an Intelligent Purity sensor system, Mineral Preserver system, Hi Flo rate and safe water including all taxes with 12 months warranty, enstalation at site, necessesary electrical conneection, approved make etc. Complete as per Technical Specification and Engineer in charge. (Height as per NBC standard)(Make : Approved make)	No.	29.00			Rs. -
28	Supply, erection, jointing, testing & commissioning of Solar water tank etc. (2500 ltr.) of approved make complete with all accessories and fittings .(Make RACOLD / TATA / Approved Make)	each	3.00			Rs. -
29	Supply, erection, jointing, testing & commissioning of Solar water tank etc. (2000 ltr.) of approved make complete with all accessories and fittings .(Make RACOLD / TATA / Approved Make)	each	2.00			Rs. -
Total Amount						Rs. 0

<p align="center">Bill of Quantity Construction of boys and girls hostel including compound wall for IIIT at Naya Raipur</p>							
S.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
1	1.1	Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the excavated area), including dressing and leveling of pits.					
	1.1.1	In all types of soils.	Cum	909.37			Rs. -
2	1.17	Filling from available excavated stuff (Excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering with a lead upto 50 M. and lift upto 1.5 M.	Cum	120.00			Rs. -
3	1.18	Providing and filling in plinth with sand/ Crusher dust under floor in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering, including dressing etc. complete.	cum	92.52			Rs. -
4	2.1	Centring and shuttering at all levels including strutting, propping etc. and removal of form for :					
a	2.1.1	Foundations, footings, bases of columns, etc. for mass concrete	Sqm	169.71			Rs. -
b	2.1.7	Suspended floors, roofs, access platform, balconies (plain surfaces) and shelves (cast in situ)	Sqm	964.46			Rs. -

S.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
5	2.3	Clearing and grubbing row land including uprooting rank vegetation, grass, bushes, shrubs, saplings and trees girth up to 300 mm, removal of stumps of trees cut earlier and disposal of unserviceable materials and stacking of serviceable material to be used or auctioned up to a lead of 1000 meters including removal and disposal of top organic soil not exceeding 150 mm in thickness if required and as per relevant clauses of section-200.					
a	A	In area of light jungle	Ha	0.71			Rs. -
6	3.1	Providing and laying nominal mix plain cement concrete with crushed stone aggregate using concrete mixer in all works upto plinth level excluding cost of form work.					
a	3.1.3	1:3:6 (1cement:3coarse sand : 6graded stone aggregate 40mm nominal size).	Cum	96.20			Rs. -
b	3.1.5	1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20mm nominal size).	cum	15.53			Rs. -
7	3.3	Providing and laying design mix reinforced cement concrete with crushed graded stone aggregate 20mm nominal size using batching plant, transit mixer and concrete pump, in all works upto plinth level excluding cost of form work.					
a	3.3.1	M-20 Grade	Cum	64.29			Rs. -
b	3.3.2	M-25 (using minimum cement 410 kg/cum concrete)	Cum	7.36			Rs. -
9	3.9	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	85.64			Rs. -

S.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
10	Road 3.12	Construction of embankment with Material Obtained from Borrow Pits/Borrow Area (Construction of embankment with approved material/selected soil having C.B.R.>5 (unless specified otherwise in the contract) obtained from borrow pits with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement of table 300-2)	cum	10107.60			Rs. -
11	3.12	Providing and placing in position reinforcement for R.C.C. work including straightening, cutting, bending, binding etc. complete as per drawings including cost of binding wire in foundation and plinth all complete:					
	3.12.2	Thermo-Mechanically treated bars FE 500D	kg	6093.63			Rs. -
12	3.14	Providing and mixing water proofing material in PCC/ RCC work in the proportion recommended by the manufacturer.	kg	58.85			Rs. -
13	4.1	Granular Sub-base as per Table:- 400-1					
		Construction of granular sub-base by providing close graded Material carriage of mixed Material to work site,spreading in uniform layers with motor grader on prepared surface watering, rolling and compacting with vibratory power roller at OMC to achieve the desired density,complete as per clause 401					
	A	Plant Mix Method					
a		Grading -VI Material	cum	82.80			Rs. -
14	4.15	Providing & laying precast interlocking concrete blocks of minimum compressive strength of 300 kg/sq.cm and approved size , shape/ pattern over coarse sand bed of thickness upto 40 mm and joints thick filled with fine sand including leveling with surface vibrator, temping and sweeping etc. complete as per IRC-SP-63-2004.	sqm	300.00			Rs. -

S.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
15	6.2	Providing and laying cement concrete for plain concrete/ reinforced concrete i/c form work, shuttering, provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, de-bonding strip complete in as per drawings and specifications.all complete					
a	(i)	M-30	cum	82.80			Rs. -
16	7.5	Brick work with modular fly-ash lime bricks (FaLG Bricks) confirming to IS:12894-2002 of class designation 4.0 in foundation and plinth in:					
	7.5.4	Cement Mortar 1:6 (1 cement : 6 coarse sand)	Cum	217.17			Rs. -
17	8.8	Painting on Concrete Surfaces					
	A	Two coats on new surfaces (Painting two coats after filling the surface with synthetic enamel paint in all shades on new plastered concrete surfaces)	Sqm	60.00			Rs. -
18	11.3	Providing and making 15mm thick cement plaster on the rough side of single or half brick wall of mix:					
a	11.3.2	In Cement Mortar 1:4 (1 cement : 4 fine sand)	Sqm	349.52			Rs. -

S.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
b	11.3.4	In Cement Mortar 1:6 (1 cement : 6 fine sand)	Sqm	810.00			Rs. -
19	11.4	Planting of Trees and their maintenance for one year (Planting of trees by the row side(Avenue trees) in 0.60m dia.holes, 1m. Deep dug in the ground, mixing the soil with decayed farm yard/sludge manure,planting the saplings, backfilling the trench, watering, fixing the tree guard and maintaining the plants for one year	Each	50.00			Rs. -
20	PHE SOR 14.1	Providing, laying and jointing following P.V.C. - U pipes with solvent cement joint for Non-pressure gravity drain and sewer applications including testing of joints, cost of jointing materials etc. complete in all respect. [Conform to IS 15328:2003,solvent cement shall Conform to IS 14182]. SN-8 (Make: KML Classic / Approved Make)					
a		160 mm dia pipe.	metre	130.00			Rs. -
b		200 mm dia pipe.	metre	350.00			Rs. -
21	18.76	Providing and fixing on wall face or under floor UV stabilized Unplasticised Rigid PVC pipes (single socketed) having 3.2mm wall thickness conforming to IS : 13592 (4kg/sqcm) including required couplers, jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion etc complete.(Make: KML Classic / Approved Make)					
	18.76.3	160 mm dia pipe.	metre	40.00			Rs. -

S.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
22	18.77	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 / Approved Make)					
	18.77.3 .1	75 mm	Each	3.00			Rs. -
23	19.48	Constructing masonry Chamber 60x60x75 cm, inside with modular well burnt clay 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	each	18.00			Rs. -
24	19.49	Constructing masonry Chamber 90x90x100 cm, inside with modular well burnt clay 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	42.00			Rs. -
25	20.12	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910 on 12mm dia steel bar conforming to IS : 1786 having minimum cross section as 23 mmx25mm and over all minimum length 263 mm and width as 165mm with minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design.	Each	22.00			Rs. -

S.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
26	20.17	Providing and fixing in position precast circular 560mm internal dia SFRC/R.C.C. manhole cover or cover and frame of approved quality:					
	20.17.1	Cover and frame H D - 20	Each	3.00			Rs. -
27	20.31	Providing and constructing soak pit 1.20x1.20x1.20m filled with brickbats including S.W. drain pipe 100 mm diameter and 1.20 m long complete as per standard design.	Each	9.00			Rs. -
28	21.14	Supplying, filling, spreading & leveling stone boulders/ Gravels/ Coarse sand, in recharge pit, in the required layers and thickness, for all leads & lifts, all complete as per direction of Engineer-in-charge. (excavation of pit will be paid separately).					
	21.14.1	Stone boulders of size range 5 cm to 20 cm, in recharge pit	Cum	18.00			Rs. -
29	22.25	Providing and planting following herbs in garden including preparation of soil, base plantation, providing and spreading different fertilizers, soil and sand:					
a	22.25.1	Hedges like Alife, Dorenta, Tikoma etc	Each	1836.00			Rs. -
b	22.25.4	Carpet grass (well developed)	sqm	400.00			Rs. -
Sub Total of External Development Works							Rs. 0

Bill of Quantity							
Construction of boys and girls hostel including compound wall for IIIT at Naya Raipur							
S.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
1	2.1	Providing and fixing form work including centring, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for:					
a	2.1.8	Beams, lintels, cantilevers & walls	Sqm	56.82			Rs. -
2	3.3	Providing and fixing form work including centring, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for:					
a	3.3.2	M-25 (using minimum cement 410 kg/cum concrete)	Cum	24.09			Rs. -
3	3.14	Providing and mixing water proofing material in PCC/ RCC work in the proportion recommended by the manufacturer.	kg	192.75			Rs. -
4	3.12	Providing and placing in position reinforcement for R.C.C. work including straightening, cutting, bending, binding etc. complete as per drawings including cost of binding wire in foundation and plinth all complete:					
a	3.12.2	Thermo-Mechanically treated bars FE 500D	kg	2400.35			Rs. -
5	11.7	Providing and making 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).	Sqm	65.60			Rs. -

Bill of Quantity							
Construction of boys and girls hostel including compound wall for IIIT at Naya Raipur							
S.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
6	20.12	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910 on 12mm dia steel bar conforming to IS : 1786 having minimum cross section as 23 mmx25mm and over all minimum length 263 mm and width as 165mm with minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design.	Each	40.00			Rs. -
7	20.17	Providing and fixing in position precast circular 560mm internal dia SFRC/ R.C.C. manhole cover or cover and frame of approved quality:					
	20.17.1	Cover and frame H D - 20	Each	4.00			Rs. -
8	23.1	Supply, erection, jointing, testing & commissioning of "C" Class MS pipes (as per IS: 1239) including necessary specials such as tees, bends, flanges reducers etc., complete on wall/ ceiling. The pipes to be erected on wall or suspended from beams, RCC roof slabs with suitable size MS bars/ angle irons including painting of metal part except pipe line.					
a	19.7.3	25mm dia.	Metre	40.00			Rs. -
b	23.1.1	50mm dia.	Metre	20.00			Rs. -
c	23.1.2	65mm dia.	Metre	18.80			Rs. -

Bill of Quantity							
Construction of boys and girls hostel including compound wall for IIIT at Naya Raipur							
S.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
d	23.1.4	100mm dia.	Metre	416.00			Rs. -
9	23.2	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	23.2	25mm dia.	Metre	40.00			Rs. -
b	23.2.1	50mm dia.	Metre	20.00			Rs. -
c	23.2.2	65mm dia.	Metre	18.80			Rs. -
d	23.2.4	100mm dia.	Metre	416.00			Rs. -
10	23.4	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	23.4.2	100mm dia	each	4.00			Rs. -
11	23.5	Supplying, fixing, testing and commissioning of flanged butterfly valve PN 1.6, with Bronze/Gunmetal seat duly ISI marked complete with Nuts, Bolts, washers, gaskets, conforming to IS: 13095 of following sizes as required.					

Bill of Quantity							
Construction of boys and girls hostel including compound wall for IIIT at Naya Raipur							
S.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
a	23.5.1	65mm dia	each	2.00			Rs. -
b	23.5.2	100mm dia	each	12.00			Rs. -
12	23.7	Providing and fixing brass GM/ ball valve (full bore type) with plastic coated lever and screwed female ends tested to 20 Kg/ cm2 of approved quality as specified.					
a	23.7.1	25mm dia.	each	20.00			Rs. -
b	23.7.2	50 mm dia	each	22.00			Rs. -
13	23.8	Providing, fixing, testing and commissioning 50mm dia drain system in wet riser line with 50mm dia GM valve, necessary MS "C" class pipe line (upto 1 metre) and accessories complete as required.	each	22.00			Rs. -
14	23.9	Providing and fixing gunmetal single acting air release valve with screwed inlet 25 mm dia and with necessary G.I. coupling, valve to be fitted on top of Air vessel or on wet riser as per specification.	each	4.00			Rs. -
15	23.10	Providing and fixing Flow switches suitable for fixing in 50mm to 150mm dia pipe line, complete with all accessories to provide indication in annunciator panel.	each	2.00			Rs. -

Bill of Quantity							
Construction of boys and girls hostel including compound wall for IIIT at Naya Raipur							
S.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
16	23.11	Providing and fixing pressure switch with suitable for 1-10 Kg/cm ² including 12/15 mm Ø isolation valve, G.I. nipple, elbow, electrical connections setting of Cut-In and cut-Off pressure complete in all respects and in an approved manner.	each	2.00			Rs. -
17	23.12	Supplying and installing pressure gauge of 100 mm Ø, 0-300 PSI or 0-21 kg per cm square fitted with 12/15 mm Ø. pad cock valve, and G.I. pipe, elbow etc. as per requirement in approved manner.	each	2.00			Rs. -
18	23.14	Supplying and fixing swinging type First-Aid Hose Reel drum with MS construction spray painted in Post office Red colour, conforming to IS: 884 with upto date amendments, complete with brackets for fixing on wall, connections from riser with 25 mm dia MS/GI pipe and GM gate valve but excluding hose reel.	each	20.00			Rs. -
19	23.18	Supplying and fixing single headed internal hydrant valve with instantaneous Gun metal 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	20.00			Rs. -
20	23.20	Supplying and erecting orifice plate having 6 mm thickness, 140 mm outer dia at every single outlet hydrant valve as per specification.	each	20.00			Rs. -
21	23.23	Supplying and fixing 63 mm dia, 15 mtr long Flax canvas 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 (Type -A) as required.	each	20.00			Rs. -
22	23.25	Supplying and fixing of MS hose cabinet box of made of 2 mm thick MS sheet and 40 x 40 x 5mm angle iron with front openable cover having 6 mm thick glazed glass viewing window i/c necessary locking arrangement, on existing wall/ brick platform etc complete as required.					
a	23.25.3	Size 600 mm x 600 mm x 500 mm	each	20.00			Rs. -

Bill of Quantity Construction of boys and girls hostel including compound wall for IIIT at Naya Raipur							
S.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
23	23.26	Providing and fixing fire brigade 63mm dia GM suction coupling to 100/150 mm dia suction pipe complete.	each	2.00			Rs. -
24	23.35	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 steel fasteners, clamp in RCC structural members as directed, including two coat of enamel painting over one coat of red oxide primer complete.	Kg.	300.00			Rs. -
25	23.28	Supply and fixing 100 mm dia CI foot valve in suction line from water tank complete.	each	2.00			Rs. -

Bill of Quantity							
Construction of boys and girls hostel including compound wall for IIIT at Naya Raipur							
S.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
26	23.31	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 conforming to IS: 904 including connection to existing MS pipe line complete as required.	each	2.00			Rs. -
27	23.33	Providing and fixing standard fireman's axe (tested for 20000 Volts) with heavy insulated rubber handle. (ISI marked)	Each	40.00			Rs. -
28	RAJYA YOJAN A AYOG OFFIC E	Supply & Fixing ISI marked (IS:13849) Portable Fire Extinguisher, ABC type capacity 5 kg, finished externally with red enamel paint, complete in all respects including initial fill and wall suspension. Capacity 5 kg	Each	50.00			Rs. -
29	RAJYA YOJAN A AYOG OFFIC E BUILDI NG- PCC	Supply & Fixing ISI marked (IS:2878) 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 conforming to IS:307-1966 filled to a filling ratio of not more than 0.667 and wall suspension bracket. Capacity 4.5 Kg	Each	50.00			Rs. -
30	RAJYA YOJAN A AYOG OFFIC E BUILDI NG- PCC	Supply & Fixing ISI marked (IS:10204) 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	4.00			Rs. -
31	RAJYA YOJAN A AYOG OFFIC E BUILDI NG- PCC	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	4.00			Rs. -
32	Chhatti sgarh State Wareh ouse Corner	Supply, installation, testing and commissioning of Installation Control Valve with Gong Bell Unit with tapping, pipes, Valves, interconnecting hoses and pipings complete as required to make it operational.	Set	10.00			Rs. -

Bill of Quantity							
Construction of boys and girls hostel including compound wall for IIIT at Naya Raipur							
S.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
33	PHE SOR-29.3	Providing, hoisting and fixing in position inverted „J" type 100 mm dia. C.I. Cowl type ventilators with mosquitoproof aluminium mesh at top including applying 2 coats of anti-corrosive paint, etc. complete as directed by Engineer-in-charge, weighing not less than 35 Kg.	each	8.00			Rs. -
34	PHED SOR-31.10.3	Supplying & fixing monoblock booster pump of capacity 900 Lt/min & against head of 35 m to get a pressure of 3.5 kg / sq.cm at the topmost hydrant with booster starter with M.S. frame and clamps as necessary for fixing the pumps on the top of slab as per site conditions and instructions of site engineer in charge.	No	1.00			Rs. -
35	PHED SOR-31.10.3	Supplying & fixing monoblock booster pump of capacity 450 Lt/min & against head of 35 m to get a pressure of 3.5 kg / sq.cm at the topmost hydrant with booster starter with M.S. frame and clamps as necessary for fixing the pumps on the top of slab as per site conditions and instructions of site engineer in charge.	No	1.00			Rs. -
36	CG. Ele. SOR-2015, 5.11	Providing and fixing copper conductor PVC covered control cables from individual flow switches on each floor to annunciation panel installed in fire control room in basement including sleeves, cable clips, supports for horizontal runs making connection to each switch complete.					
a	5.11.2	2 core 1.5 Sqmm	Metre	400.00			Rs. -
b	5.11.13	4 core 2.5 Sqmm	Metre	600.00			Rs. -
37	Electrical SOR 2010,2 6.24	Supply, installation, testing and commissioning of cubicle type wall/ floor mounted power cum control panel made out of not less than 1.6 mm thick MS sheet and comprising of following panel mounting switchgears there in including connection inter-connection etc. as required. a) Phase indicating lamps with fuses and toggle switches 1 set b) Star-delta starter suitable for 7.5 HP 3 phase AC induction motor with overload and no volt relay c) 32 A "C" series TPMCB 1 No d) Voltmeter 0-500 V with selector switch 1 set e) Ammeter 0-10 A with CT's and selector switch 1 set.	Set	2.00			Rs. -

Bill of Quantity Construction of boys and girls hostel including compound wall for IIIT at Naya Raipur							
S.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
38		Manual Break Glass or Manual call point.	No.	50.00			Rs. -
39		Analog addressable Hooter for alarm/evacuation signal	No.	50.00			Rs. -
		Total Amount					Rs. 0

Bill of Quantity							
Construction of boys and girls hostel including compound wall for IIIT at Naya Raipur							
Sr.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
E		Approach Road & Pathways					
1	2.3	Clearing and grubbing road land including uprooting rank vegetation, grass, bushes, shrubs, saplings and trees girth up to 300 mm, removal of stumps of trees cut earlier and disposal of unserviceable materials and stacking of serviceable material to be used or auctioned up to a lead of 1000 meters including removal and disposal of top organic soil not exceeding 150 mm in thickness if required and as per relevant clauses of section-200.					
a	A	In area of light jungle	Ha	0.14			Rs. -
2	3.12	Construction of embankment with Material Obtained from Borrow Pits/Borrow Area (Construction of embankment with approved material/selected soil having C.B.R.>5 (unless specified otherwise in the contract) obtained from borrow pits with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement of table 300-2)	cum	720.00			Rs. -
3	4.1	Granular Sub-base as per Table:- 400-1					
a		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	A	Plant Mix Method					
i		Grading -VI Material	cum	288.00			Rs. -
4	6.1	Dry Lean Cement Concrete Sub-base as per IRC:SP-49 (Construction of dry lean cement concrete Sub-base over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 26.5 mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per table 600-1, cement content not to be less than 150 kg/cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller,finishing and curing as per clause 601.)	cum	108.00			Rs. -

Sr.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
5	6.3	Cement Concrete Pavement (Construction of un-reinforced, dowel jointed, plain cement concrete pavement as per IRC:58 over a prepared sub-base, coarse and fine aggregate conforming to IS:383 and graded as per table 600-3 mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver, spread, compacted and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, dowel bar, tie rod, admixtures as approved, curing compound, finishing to lines and grades as per drawing as per clause 602.)					
a	(i)	With Cement concrete grade M-40 and minimum cement content @ 400 kg/cum.(6m wide)	cum	194.40			Rs. -
		Landscaping					
6	11.4	Planting of Trees and their maintenance for one year (Planting of trees by the road side(Avenue trees) in 0.60m dia.holes, 1m. Deep dug in the ground, mixing the soil with decayed farm yard/sludge manure,planting the saplings, backfilling the trench, watering, fixing the tree guard and maintaining the plants for one year	each	18.00			Rs. -
7	8.1	Cast in Situ Cement Concrete M20 kerb (Construction of cement concrete kerb with top and bottom width 115 and 165 mm respectively, 250 mm high in PCC M20 grade on PCC M10 grade foundation 150 mm thick, foundation having 50 mm projection beyond kerb stone, kerb stone laid with kerb laying machine,foundation concrete laid manually, all complete as per clause 409)	Meter	720.00			Rs. -
8	4.16	Footpaths and Separators (Construction of footpath/separator byproviding a 150 mm compacted granular sub base as per clause 401and 75 mm thick cement concrete base with PCC grade M-15, overlaid with precast cement concrete tiles 25mm thick fixed in 20mm	sqm	504.00			Rs. -
9	8.8	Painting on Concrete Surfaces					
a	A	Two coats on new surfaces (Painting two coats after filling the surface with synthetic enamel paint in all shades on new plastered concrete surfaces)	Sqm	720.00			Rs. -
		Sub Total of Approach Road					-

Bill of Quantity							
Construction of boys and girls hostel including compound wall for IIIT at Naya Raipur							
S.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
1	1.1	Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the excavated area), including dressing and leveling of pits.					
a	1.1.1	In all types of soil	Cum	129.472			Rs. -
2	3.1	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	3.1.3	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size).	Cum	3.844			Rs. -
3	3.3	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	3.3.2	M-25 Grade	Cum	34.399			Rs. -
4	3.14	Water proofing material: Providing and mixing water proofing material in PCC/ RCC work in the proportion recommended by the manufacturer.	kg	275.193			Rs. -
5	3.12	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	3.12.1	Thermo-Mechanically treated bars FE 415	kg	3439.92			Rs. -

S.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
6	2.1	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for:					
a	2.1.1	Foundations, footings, base of columns and plinth beam in any shape and size.	Sqm	236.36			Rs. -
7	7.5.2 + 7.6	Brick work with modular fly-ash lime bricks (FaLG Bricks) conforming to IS:12894-2002 of class designation 4.0 in foundation and plinth in: Extra for brick work in superstructure above plinth level for every floor or part thereof in addition to rate for foundation and plinth:					
a		Cement Mortar 1:4 (1 cement : 4 coarse sand)	Cum	13.665			Rs. -
8	11.1	6mm thick cement plaster of mix: (ceiling)					
a	11.1.1	In Cement mortar 1:3 (1 cement : 3 fine sand)	Sqm	31.36			Rs. -
9	11.2	Providing and making 12mm thick cement plaster of mix:					
a	11.2.1	In Cement Mortar 1:4 (1 cement : 4 fine sand)	Sqm	76.008			Rs. -
10	11.3	15mm thick cement plaster on the rough side of single or half brick wall of mix:					
a	11.3.2	In Cement Mortar 1:4 (1 cement : 4 fine sand)	Sqm	168.96			Rs. -

S.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
11	20.11	Providing M.S. foot rests including fixing in manholes with 20x20x10 cm cement concrete blocks 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) as per standard design:					
a	20.11.1	With 20x20 mm square bar	each	9			Rs. -
12	20.15	Providing and fixing in position precast R.C.C. manhole cover and frame LD- 2.5 of required shape and approved quality					
a	20.15.1	Rectangular shape 600x450mm internal dimensions	each	1			Rs. -
13	19.35	Providing flanged joints to double flanged C.I./ D.I. pipes, valves and specials including rubber insertion 3mm thick, suitable bolts and nuts and testing of joints complete:					
a	19.35.2	100 mm diameter pipe	each	4			Rs. -
11	PHE SOR 29.3	Providing, hoisting and fixing in position inverted „J” type 100 mm dia. C.I. Cowl type ventilators with mosquitoproof aluminium mesh at top including applying 2 coats of anti-corrosive paint, etc. complete as directed by Engineer-in-charge, weighing not less than 35 Kg.	each	4			Rs. -

S.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
		(Doors & windows)					
12	9.18	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 351 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	9.18.4	Single rebate/ mullion 100mmx50mm size, 1.6mm thick sheet.	meter	5.40			Rs. -
13	9.47	Providing and fixing aluminium work for doors, windows, ventilators and partitions made out of extruded aluminium standard sections (main section with minimum 1.5mm thickness) conforming to IS: 733, IS: 1285 mitred and jointed mechanically including aluminium cleats, neoprene weather stripping gasket beveled edge beading, screws duly fixed in wall/floor with fixing clips or hold fasteners or bolts and nuts as required aluminium sections shall be anodized transparent or dyed to approved shade according to IS: 1868, minimum anodic coating shall be of grade AC-15. (Glazing to be paid for separately:					
a	9.47.2	For shutter of doors, windows & ventilators including providing and making provision for fixing of fitting wherever required including cost of PVC/neoprene gasket required (Fittings shall be paid for separately).	Kg	20.16			Rs. -
14	9.51	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	9.51.3	With float glass panes of 6 mm thickness	Sqm	1.44			Rs. -
15	8.12	Providing and fixing flush door shutters, conforming to IS : 2202(Part-I), decorative type core of block board construction with frame of first class hard wood and well matched teak ply veneering with vertical grains or cross bands and face veneers on both faces of shutters excluding hinges.					
a	8.12.2	35 mm. thick (single leaf)	Sqm	2.60			Rs. -

S.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
16	8.77	Providing and fixing antique/ SS finished brass butt hinges with antique/SS polished MS screw complete:					
a	8.77.1	125x85x5.50 mm (Heavy Type)	each	3.00			Rs. -
17	8.780	Providing and fixing antique/ SS finished brass parliamentary hinges with antique/ SS polished MS screw complete:					
a	8.78.1	150x125x27x5mm	each	3.00			Rs. -
18	8.79	Providing and fixing antique/ SS finished brass sliding door bolt with necessary bolts, nuts and antique/ SS polished MS screw complete:					
a	8.79.1	300x16 mm	each	2.00			Rs. -
19	8.80	Providing and fixing antique/ SS finished brass door latch with antique/ SS polished MS screw complete:					
a	8.80.1	300x16x5mm	each	2.00			Rs. -
20	9.15	Providing and fixing M.S. grill of approved pattern made of M.S. flats or square or round bars welded to steel frame of windows etc. including applying a priming coat welded to frame with all necessary fitting complete including applying a priming of red oxide zinc chromate primer.	kg	43.20			Rs. -
21	14.22	Painting on new work (two or more coats) to give an even shade with:					
a	14.22.2	Premium synthetic enamel paint	Sqm	1.44			Rs. -

S.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
22	12.2	25mm thick cement concrete flooring with 1:2:4 cement concrete (1cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominal size) finished with floating coat of neat cement.	Sqm	40.96			Rs. -
23	14.6	White washing with whitening to give an even shade.					
a	14.6.1	On new work (Three or more coats)	Sqm	276.33			Rs. -
		Mechanical and Electrical works					
24	HED-3	Centrifugal Monoblock Pumpset Providing, erecting and giving test of centrifugal monoblock pump set Conforming to IS 9079 operating at 2900 RPM with CI Impeller, priming funnel, cock, suitable flanges at suction and delivery side. Pump shall have common shaft for pump and motor. Motor shall be suitable for working on 415V+10%, 3Ph, 50Hz A.C. Supply. Motor shall be TEFC type. Pump set shall be suitable for working at various discharge and head requirements. Pump shall be erected on Provided C.C. foundation block with suitable foundation bolts grouted in C.C. foundation block.					
		Centrifugal Monoblock Pumpset (Two Stage)					
a	31.10.3	10.0 HP, head of 40 metres,	Each	2			Rs. -
25	Electrical SOR 2010, 17.1	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	17.1.23	4 x 16 sq. mm.	Meter	40			Rs. -
26	Electrical SOR 2010, 26.24	Supply, installation, testing and commissioning of cubicle type wall/ floor mounted power cum control panel made out of not less than 1.6 mm thick MS sheet and comprising of following panel mounting switchgears there in including connection inter-connection etc. as required. a) Phase indicating lamps with fuses and toggle switches 1 set b) Star-delta starter suitable for 7.5 HP 3 phase AC induction motor with over load and no volt relay c) 32 A "C" series TPMCB 1 No d) Voltmeter 0-500 V with selector switch 1 set e) Ammeter 0-10 A with CT's and selector switch 1 set.	Set	1			Rs. -
27	Building 23.12	Supplying and installing pressure gauge of 100 mm Ø., 0-300 PSI or 0-21 kg per cm square fitted with 12/15 mm Ø. pad cock valve, and G.I. pipe, elbow etc. as per requirement in approved manner.	set	2			Rs. -

S.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
28	Buildi ng 23.1	Supply, erection, jointing, testing & commissioning of "C" Class MS pipes (as per IS: 1239) including necessary specials such as tees, bends, flanges reducers etc., complete on wall/ ceiling. The pipes to be erected on wall or suspended from beams, RCC roof slabs with suitable size MS bars/ angle irons including painting of metal part except pipe line.					
a	23.1.3	80mm dia.	Rm.	10			Rs. -
b	23.1.4	100mm dia.	Rm.	900			Rs. -
29	MR	M.S. Pipe work and Fabricated platforms: Providing, lowering, laying, aligning, fixing in position at and jointing at all levels, fabricating, erecting, jointing and testing MS flanged pipes and specials supply with necessary iron clamp coupler, bend, tee, Tee, elbow, reducer, nuts and bolts etc. complete and fabricated platforms wherever required, assembling and butt welding as per detailed specifications including painting with epoxy paint etc. testing and commissioning and as per drawing and directed by the engineer.	kg	200			Rs. -
30	Buildi ng 23.2	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	23.2.3	80mm dia.	Rm.	10			Rs. -
31	HED-8	Providing & fixing of Cast iron double flanged sluice valves as per I.S.:14846-2000 fitted with cast iron cap including jointing & testing with cost of jointing material such as bolts, nuts, rubber insertions etc. all complete. (Steel Spindle)					
a		100 mm dia. (Class -PN 1.6 rating)	Nos	3.00			Rs. -

S.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
32	PHE 8.10a	Providing and fixing following cast iron double flanged single door reflux (non return) valve including jointing and testing with cost of jointing material such as bolts, nuts and rubber insertion all complete as per IS:5312 9 (Part I)					
a		100 mm dia. (Class -PN 1.0 rating)	Nos	2			Rs. -
33	HED-8.	Providing & fixing cast iron double air valves, flanged without in-built isolating valve as per IS:14845-2000 including jointing & testing with cost of jointing material and rubber insertion all complete as per IS :13095-1991					
a		80 mm dia PN-1.6	Each	1			Rs. -
		Mechanical Joints / Fittings					
34	HED-8.	Providing and Supply of C.I. Mechanical Compression flanged/socket tail piece (Popularly known as 1TM Flanged/Socket Tail piece) suitable for making flanged connection with the plain barrel of C.I. Spun Pipes (as per IS-1536/2001) and D.I. Pipes (as per IS 8329/2000). The Tail piece to be supplied complete with sealing rubber gasket of S.B.R., C.I. Follower Gland sand M.S.Nut Bolts. The whole assembly should be mechanically and hydraulically tested to the provisions as laid down in IS : 1538/1993.					
a		100 mm	Each	5.00			Rs. -
35	IoN So	Construction of RCC valve chamber internal size 1.2m x 1.2m x 1.5m, 100mm thick PCC- M10 and RCC M20 grade 150mm thick wall, precast cover 125mm thick slab on top for protection of valve coming under traffic & extended MS valve operating spindle rod as reqd etc. Including steel reinforcementon 10mm dia. 150mm c/c bothways wall & precast cover, shuttering, labour charges etc as per drawing and as per direction of Engineer complete etc.	No	2.00			Rs. -
		Sub Total of UGR Works					-

Bill of Quantity							
Construction of boys and girls hostel including compound wall for IIIT at Naya Raipur							
S.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
1	1.2	Surface dressing of the ground including removing vegetation and making up undulations and in-equalities not exceeding 15 cms in depth/ height including disposal of rubbish upto 1.5 m lift and lead upto 50m (at least 5m away from the dressed area).	Sqm	1356.6			Rs. -
2	1.1	Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the excavated area), including dressing and leveling of pits.					
	1.1.1	In all types of soil	cum	728.1			Rs. -
3	1.17	Backfilling: Filling from available excavated stuff (Excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering with a lead upto 50 M. and lift upto 1.5 M.	cum	568.8			Rs. -
4	3.1	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					
	3.1.3	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size).	cum	357.5			Rs. -
5	3.3	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	cum	343.5			Rs. -
							Rs. -
6	3.4	Extra for laying PCC/RCC of any grade in superstructure above plinth level for every floor or part thereof in addition to rate for foundation and plinth:	cum	97.3			Rs. -

S.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
7	3.12	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:					
	3.12.2	Thermo-Mechanically treated Bars FE 500D	kg	26089.6			Rs. -
8	7.5	Brick work with modular fly-ash lime bricks (FaLG Bricks) confirming to IS:12894-2002 of class designation 4.0 in foundation and plinth in:					
	7.5.4	Cement Mortar 1:6 (1 cement : 6 coarse sand)	cum	828.7			Rs. -
9	7.6	Extra for brick work in superstructure above plinth level for every floor or part thereof in addition to rate for foundation and plinth	cum	828.7			Rs. -
10	2.1	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for:					
a	2.1.1	Foundations, footings, base of columns and plinth beam in any shape and size.	Sqm	1730.6			Rs. -
11	11.3	Providing and making 15mm thick cement plaster on the rough side of single or half brick wall of mix:					
	11.3.4	In Cement Mortar 1:6 (1 cement : 6 fine sand)	sqm	2709.7			Rs. -

S.No.	CG SoR	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
12	14.10	Wall painting with acrylic premium emulsion (plastic) paint of required shade to give an even shade.					
	14.10.1	On new work (two or more coats)	sqm	2709.7			Rs. -
13	11.40	Making groove in cement plaster while plastering upto 10 mm deep and 10 mm wide.	metre	2709.7			Rs. -
14	Road SoR :9.11	Providing and laying Pitching Stone/Boulder on slopes laid over prepared filter media including boulder apron laid in Cement Mortar 1:6 complete as per drawing and Technical specification as per relevant clauses of section 2503	cum	90.0			Rs. -
Sub Total of Compound Wall							Rs. -

Bill of Quantity						
Construction of boys and girls hostel including compound wall for IIIT at Naya Raipur						
S.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
i	MAIN L.T. Panel					
1	<p>Supply,Instalation,testing and commissioning of cubicle type free floor mounted, free standing, indoor duty dust proof, vermin proof etc. front operated panels made out of 14 SWG stove enameled sheet steel and manufactured exactly as per specifications laid in this document and will be complete with the main and auxiliary bus bars, interconnection, cable glands, earth terminals and aluminum earth tape of 25 x 3 mm from end to end of the panel, earth bus and will be powder coated paint finished and consisting of the following.(All MCCBs shall have rotary handle)</p> <p>Incoming</p> <p>1 Nos. 1250A, FP, 50 kA, EDO ACB with Microprocessor based release having short circuit, over current, earth fault, under voltage relay with communication port RS 485</p> <p>Outgoing</p> <p>1 Nos. 800A, FP, 50 kA, EDO ACB with Microprocessor based release having short circuit, over current, earth fault, under voltage relay with communication port RS 485</p> <p>1 Nos. of 800A, FP, 50 kA,EDO ACB with Contactor Microprocessor based release having short circuit, over current, earth fault, under voltage relay with communication port RS 485</p> <p>BUSBARS</p> <p>1200 Amp TPN busbars of high conductivity electrolytic quality aluminium alloy</p> <p>INSTRUMENTS</p> <p>3 Nos. 0 to 500 Volt Digital type voltmeter for 3 phase, 4 wire operation and selector switch alongwith 3 Nos.control MCB's.</p> <p>3 Nos. of Digital type Ammeter of suitable range (as per SLD) for 3 phase, 4 wire operation alongwith suitable range Cast Resin CT's.</p> <p>Intelligent multi function digital meter to read V,A,KVA, KW, KVAR, KWH, PF, Hz etc with communication module (RS485) and LED display with 3 Nos CTs, 15 VA, class 1.0 and control circuit wiring with 2 Amp. SP/MCBs.-2 sets.</p> <p>3 Sets of phase indicating lamps, LED type, RYB with control MCBs.</p> <p>3 Sets of ON-OFF indication lamps (LED type) control MCBs.</p> <p>1 No. Suitable Rating C.T. meter for common Services</p>	Set	1.00			Rs. -

S.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
ii	Building Electrification work (Boys & Girls Hostel)					
2	Supplying and laying ISI marked double wall HDPE pipe (IS 14930 Part II) having corrugation on the outer wall and plan surface on inner wall in ground below road, path etc at a depth not less than 40 cm and upto 90 cm including excavation,dismantling of road if required and refilling the trench with excavated material, ramming and making the surface good etc. as required.					
a	200 mm dia	Mt	650.00			Rs. -
b	90 mm dia	Mt	90.00			Rs. -
3	Supplying and laying following sizes one number PVC insulated/ XLPE, PVC sheathed, steel armoured, aluminium conductor power cable of 1.1 KV grade in existing RCC/ HUME/ STONEWARE/ METAL/ HDPE pipe as required					
a	3.5C X150 sqmm	Mt	500.00			Rs. -
b	3.5C X240 sqmm	Mt	800.00			Rs. -
c	3.5C X120 sqmm	Mt	40.00			Rs. -
d	3.5C X95 sqmm	Mt	60.00			Rs. -
4	Supplying and making outdoor end termination with cast resin compound including aluminum lugs and other jointing materials for following size of PVC insulated and PVC sheathed / XLPE aluminum conductor power cable of 1.1 KV grade as required.					
a	3.5Cx 240 sqmm	Each	4.00			Rs. -
b	3.5Cx 120 sqmm	Each	4.00			Rs. -

S.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
c	3.5C X150 sqmm	Each	4.00			Rs. -
d	3.5C X95 sqmm	Each	4.00			Rs. -
5	Supply and fixing of cable route markers of 100x100x5mm GI plate with inscripton there on, bolted/welded to 35x35x6mm angle iron of 600mm long and fixing the same in the ground as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.	Each	15.00			Rs. -
6	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe, with charcoal and salt as required.	Set	22.00			Rs. -
7	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe, with charcoal and salt as required.	Set	18.00			Rs. -
8	Earthing with G.I. earth pipe 3.0 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	30.00			Rs. -
9	Supplying and laying 25 mm X 5 mm copper strip at 0.50 metre below ground as strip earth electrode, including soldering,excavation and refilling the trench etc. as required.	Meter	300.00			Rs. -
10	Supplying and laying 25 mm X 6 mm G.I. strip at 0.50 metre below ground as strip earth electrode, including soldering,excavation and refilling the trench etc. as required.	Meter	1300.00			Rs. -
11	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. etc. required for completeness and as per attached specification, direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	3.5x 35 sqmm	mtr	120.00			Rs. -

S.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
b	4 x 10 sqmm	mtr	200.00			Rs. -
c	2x 6 sqm	mtr	400.00			Rs. -
d	2x 10 sqm	mtr	100.00			Rs. -
e	4X25 sqm	mtr	200.00			Rs. -
12	Supply and making of end termination with brass compression gland and aluminum lugs for following sizes armoured aluminium conductor power cable of 1.1KV grade along with accessories, hardwares etc. required for completeness and as per attached specification, direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	3.5x240 sqmm	Nos.	8.00			Rs. -
b	3.5x120 sqmm	Nos.	4.00			Rs. -
c	3.5x35 sqmm	Nos.	30.00			Rs. -
d	4x10 sqmm	Nos.	16.00			Rs. -
e	2x 6 sqmm	Nos.	20.00			Rs. -
f	2 x 10 sqmm	Nos.	20.00			Rs. -

S.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
g	3.5C X150 sqmm	Nos.	8.00			Rs. -
h	3.5C X95 sqmm	Nos.	4.00			Rs. -
i	4x25 sqmm	Nos.	30.00			Rs. -
13	MDB (Boys hostel)					
	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 with busbars, switchgears and other accessories etc complete as required as per direction of Engineer					
	INCOMER					
	4 pole MCCB, 630A, 50KA					
	BUS-BAR					
	1 Set of 600A 4P Aluminium Bus Bar with colour coded PVC Sleeves	set	1			Rs. -
	analog type 0-500 amp ammeter of size 100x100 (NS) (1no.)					
	analog type 0-500 volt voltmeter of size 100x100 (NS) (1no.)					
	selector switch fro voltmeter (1no.)					
	selector switch fro ammeter (1no.)					
	230 volt LED type indicating lamp (3nos.)					
	OUTGOINGS					
	4P MCCB, 400A 2NOS as out going 35KA					
	4P MCCB, 100A 2 NOS as out going 35KA					
	4P MCCB, 63A 2 NOS as out going 35KA					
	1 No 4 pole 200 A MCCB ,35 KA as D.G supply incommer 1no 4 pole 200 A auto changeover switch					

S.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
	MDB (Girls hostel)					
14	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 with busbars, switchgears and other accessories etc complete as required as per direction of Engineer	set	1			Rs. -
	INCOMER					
	4 pole MCCB, 400 A, 50KA					
	BUS-BAR					
	1 Set of 400A 4P Aluminium Bus Bar with colour coded PVC Sleeves					
	analog type 0-500 amp ammeter of size 100x100 (NS) (1no.)					
	analog type 0-500 volt voltmeter of size 100x100 (NS) (1no.)					
	selector switch fro voltmeter (1no.)					
	selector switch fro ammeter (1no.)					
	230 volt LED type indicating lamp (3nos.)					
	OUTGOINGS					
	4P MCCB, 200A 2NOS as out going 35KA					
	4P MCCB, 100A 2 NOS as out going 35KA					
	4P MCCB, 63A 2 NOS as out going 35KA					
	Rising Mains					
15	Supplying, installing on wall, testing and commissioning of following capacity Air Insulated COMPACT/ Sandwich TYPE RISING MAINS for use on 3 phase 4 wire 415 volts, 50Hz A.C. supply with enclosure made of 1.6mm thick steel sheet duly powder coated in convenient sections complete with 4 Nos aluminium bus bars, necessary joints & expansion joints, fire barrier at each floor, provision of tapping at every metre, continuous earthing with 2 Nos aluminium strip of suitable size (one on each side) including, G.I. clamping brackets, angle iron bracket, steel fasteners, connecting to earthing system etc. as required:					
a	400 amps (S.C. rating for 1 sec – 20 KA)	Meter	40.00			Rs. -
b	200 amps (S.C. rating for 1 sec – 20 KA)	Meter	30.00			Rs. -
16	Supplying, installing, testing and commissioning of TPN tap off box of following capacity, made of 1.6mm thick sheet steel enclosure duly painted with powder coating, on existing rising mains with space for TP Disconnecter switch/ MCCB (without switch/MCCB), interconnections with copper lead and copper lugs/thimbles, earthing etc. as required					
a	100 amps	Each	20.00			Rs. -

S.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
17	Supplying, installing, End Feed Unit and connecting to existing general/ Compact Type bus trunking/ Rising mains, of following capacity for use on 3 phase 4 wire 415 volts, 50Hz A.C. supply made with 1.6mm thick steel sheet enclosure duly powder coated with space provision of Disconnecter switch/ MCCB/ ACB (but without Switch/MCCB/ACB) complete with necessary joints including clamping brackets, angle iron bracket, steel fasteners, connecting to earthing system etc. as required					
a	400 amps 25KA SC for 1 sec	Each	2.00			Rs. -
b	200 amps 25KA SC for 1 sec	Each	2.00			Rs. -
	SMDB					
18	Supplying and fixing on surface/ recess prewired vertical type 6 way (4+18)double door, 415 volts TP&N, MCB distribution board of sheetsteel phosphatized and powder painted 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.	set	22			Rs. -
	1 No. 100 A 4pole MCCB as Incomer;					
	6 Nos. 40A TP&N MCB C Curve as out going feeder.					
19	DB					
	Supplying and fixing on surface/ recess prewired vertical type 4 way (4+12)double door, 415 volts TP&N, MCB distribution board of sheet steel phosphatized and powder painted 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	set	82			Rs. -
	1 No. 32A 4pole MCCB as Incomer;					
	10 Nos. 6-32A SP MCB C series 10kA as out going feeder.					
20	Point Wiring for light/ fan/ exhaust fan/ call bell point with 1.5 sqmm FRLS PVC insulated stranded copper conductor single core cable in concealed PVC conduit, with 6 A modular switch ,modular base and cover plate with suitable size GI. box and earthing the point with same size cable along with accessories, hardwares etc required for completeness and as per direction of Engineer, CGPWD standards ,Electrical Inspectorate standards					
a	Short Point	Nos	1902.00			Rs. -
b	Medium Point	Nos	950.00			Rs. -
c	Long point	Nos	800.00			Rs. -

S.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
21	Providing and fixing light plug point on board in concealed PVC conduit point wiring with modular type 3 pin 5 amp socket outlet and 5 amp switch including cost of base and cover plate and G. I. box etc. as required	NOS	620.00			Rs. -
22	Point wiring for light plug point with 2.5 sq mm FRLS PVC insulated stranded copper conductor single core cable in concealed PVC conduit along with 6 A modular switch and 3 pin 6 A modular socket outlet, modular base and cover plate with suitable size GI. box, earthing the switch box and socket outlet with same size cable along with accessories, hardwares etc. required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	Short Point	Nos	1120.00			Rs. -
b	Medium Point	Nos	250.00			Rs. -
c	Long Point	Nos	180.00			Rs. -
d	Extra Long Point I	Nos	90.00			Rs. -
e	Extra Long Point II	Nos	90.00			Rs. -

S.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
23	Point wiring for Power plug point with 4 sq mm FRLS PVC insulated stranded copper conductor single core cable in concealed PVC conduit along with 16 A modular switch and 6 pin 6/16 A modular socket outlet, modular base and cover plate with suitable size GI. box earthing the switch box and socket outlet earthing with same size cable along with accessories, hardwares etc. required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	Short Point	Nos	500.00			Rs. -
b	Medium Point	Nos	100.00			Rs. -
c	Long Point	Nos	120.00			Rs. -
24	Supply and fixing of 2 pole and earth, 240 V, industrial type socket outlet for AC units, enclosed metal top plug with SP MCB in sheet steel enclosure, on surface or in recess, with chained metal top metal cover for the socket and complete with connections, testing, commissioning etc required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	32A with C series MCB	Each	15.00			Rs. -
25	Circuit/ sub main wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in concealed PVC conduit along with accessories, hardwares etc. required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	3 x 10 sqmm in 25 mm conduit	Rmt	1320.00			Rs. -
b	3 x 6 sqmm in 25 mm conduit	Rmt	3300.00			Rs. -
c	3 x 4 sqmm in 25 mm conduit	Rmt	15700.00			Rs. -

S.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
d	3 x 1.5 sqmm in 20 mm conduit	Rmt	6700.00			Rs. -
e	3 x 2.5 sqmm in 32 mm conduit	Rmt	6000.00			Rs. -
26	Supplying of approved make split type Air Conditioner unit with cooling unit and condensing unit with standard length of upto 3 metre of copper piping with insulation etc complete as required					
a	1.5 ton split type capacity 4500 kcal / hr (5 star).	no	15.00			Rs. -
27	Supply and fixing of metal box of following sizes in recess with suitable size phenolic laminated sheet cover in FRLSont including painting, accessories, hardwares etc required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	100mm x 100mm x 60mm deep	Each	600.00			Rs. -
28	Supply and fixing of GI box of following sizes in recess with modular base & cover plate for modular switches including accessories, hardwares etc required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	125mmx75mm	Each	600.00			Rs. -
29	Supply and fixing of following sizes PVC conduit in concealed manner along with accessories, hardwares etc required for completeness and as per attached specification, direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	20mm	Rmt	2500.00			Rs. -
b	25mm	Rmt	2500.00			Rs. -
c	32mm	Rmt	2000.00			Rs. -

S.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
30	Supply and fixing of following modular type switches and accessories of approved make and type such as switch, socket etc on the existing modular plates & switch box including connections along with accessories, hardwares etc required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	3 pin 5/6 amp socket outlet	Each	1550.00			Rs. -
b	6 pin 15/16 amp socket outlet	Each	640.00			Rs. -
c	Fan Regulator Electronic, step type moving all round	Each	720.00			Rs. -
d	5/6 amps one way switch	Each	400.00			Rs. -
31	Supply and fixing of round/hexagonal fan box (125mm dia) depth 75mm (max.) with 12mm dia steel bar hook, 1.6mm thick MS sheet cover, in RCC slab along with accessories, hardwares etc as required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.	Each	720.00			Rs. -
32	Supply, installation, testing and commissioning of following sizes ceiling fan of approved make and type including down rods of 30 cm, wiring with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, earthing, connections along with accessories, hardwares etc required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	1050mm sweep	Each	35.00			Rs. -
b	1200mm sweep	Each	640.00			Rs. -

S.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
c	1400mm sweep	Each	45.00			Rs. -
33	Supply, installation, testing and commissioning of following sizes exhaust fan (heavy duty) of approved make and type in existing opening in wall including earthing, connections along with accessories,hardwares etc as required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	300 mm sweep	Each	16.00			Rs. -
b	225 mm sweep	Each	92.00			Rs. -
34	Supply and fixing of 18 W ,4Ft LED batten having >1800 lm system lumen output. LED Batten shall be Co-extruded channel in thermally conductive material with plastic colour. LED batten shall have HET diffuser to provide uniform light distribution. LED batten shall use lower wattage of multiple LEDs over complete length of tube to create uniform light distribution with minimum guaranteed lumen output of 1800 lm from LEDs. The LED shall be compliant with LM80-08 standard with Useful L70 life of >= 50000 Hrs. The LEDs used in LED Tube Light should be with CCT of 6500 K and CRI of Minimum 70. LED batten shall have isolated type multi stage Constant Current Constant voltage driver suitable to operate in input voltage range of 150V to 270V (nominal rated voltage – 240V) with minimum 2.5 KV surge protection, Power factor shall be greater than 0.9 and total harmonic distortion (THD) of less than 20%and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.	Each	1300.00			Rs. -

S.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
35	Supply and Fixing of Recess/surface mounted, 36 W, 2 Ft X 2 Ft, IP20 LED luminaire having > 3600 lm system output. Luminaire shall be made up of Extruded aluminium white powder coated housing. Luminaire shall have Edge lit optics from reflector+light guide plate+diffuser configuration. LM 80-08 compliant, ANSI rated LEDs from reputed makes should be provided. Luminaire shall use multiple LEDs of less than 1W Class for better diffusion and heat management. The LEDs shall be driven at not more than maximum allowed current from LED manufacturer for higher reliability. The LED shall be compliant with LM80-08 standard with Useful L70 life of 50000Hrs (Complete LM 80 test report for LED should be submitted). The LEDs used in luminaire should be ANSI standard Rated LED with CCT of 5700 K and CRI of Minimum 70. LEDs used must be tested as per EN62471 for Photo biological Safety of humans. Isolated type, multistage Constant Current Constant Voltage topology driver suitable to operate in input voltage range of 150V to 270V (nominal rated voltage – 240V) with minimum 3KV surge protection, Power factor greater than 0.95 and total harmonic distortion (THD) of less than 10% should be integral to the luminaire. Driver output voltage shall be less than SELV limits for safe DC operation and maintenance. The driver should be fully designed and manufactured in India for easy availability and service	Each	70.00			Rs. -
36	Supplying, installation, testing and commissioning of following LED fitting (luminaries) down lighters in round shape complete with electronic driver heat sink capacitor and all other accessories on surface/Recess etc. as required and furnishing 2 Yrs Guarantee certificate from manufacturer. etc as required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	12 W	Each	480.00			Rs. -
b	9 W	Each	420.00			Rs. -
c	18W	Each	485.00			Rs. -
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 required for completeness and as per direction of Engineer,CGPWD standards Electrical Inspectorate standards.	Each	40.00			Rs. -
38	Supplying and laying double wall HDPE pipe having corrugation on the outer wall and plan surface on inner wall in ground below road, path etc at a depth not less than 40 cm including excavation, dismantling of road if required and refilling the trench etc. as required.					

S.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
	40 mm	Rmt	500.00			Rs. -
39	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					
	225 mm width X 50 mm depth X 1.6 mm thickness	Meter	125.00			Rs. -
40	Supplying and fixing of following sizes powder coated,perforated, M.S. cable trays bends (horizontal) turning at 900 in same plane with perforation not more than 17.5% rigidly jointed with cable tray etc. complete as required					
a	225 mm width X 50 mm depth X 1.6 mm thick	each	50.00			Rs. -
iii	Lightning Protection and Earthing					
41	Supply, installation, testing and commissioning sphere type air terminal to capture the lightning strike to a preferred point so that the discharge current can be directed via the down condutor to the grounding system and as per direction of Engineer, CGPWD standards	Nos.	6.00			Rs. -
42	Supply and fixing of Roof conductor holder for parapet- Polyamide Conductor holder: With M8 female thread or diameter 7mm, M8 Screw to connect the conductor holder. Weather and temperature resistant from -35 to +90 degree Celsius tested. Conductor holder @ 1 meter distance and as per direction of Engineer, CGPWD standards	Nos.	982.00			Rs. -
43	Supply and fixing of Polyamide roof cable holder for flat roof: DIN 48829 Form B1. Closed form with bottom. Filling weight 1Kg (frost-resistant concrete). Sleeve from polyethylene, black @ 1 meter distance and as per direction of Engineer, CGPWD standards.	Nos	261.00			Rs. -

S.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
44	Supply and fixing off cross connector/T connector: to route vertical down conductor /mesh formation made of stainless steel/hot dipped galvanised iron with necessary screws etc as required. Installed with 4 hexagonal bolts M8*25 with M8 hexagonal nutsnd as per direction of Engineer, CGPWD standards	Nos.	90.00			Rs. -
45	Providing of expansion piece with connector: For equalising temperature related length changes. Necessary on conductors length over 20 meters. For round conductor Rd 8/ALU and as per direction of Engineer, CGPWD standards	Nos.	37.00			Rs. -
46	Connector: For T cross and parallel connectors. Quick installation using hexagonal bolt M10X30 high-grade hot dip galvanised. Conforms to the requirements according to DIN VDE 0185-305 (IS-IEC 62305)(2nos/expansion piece).	Nos.	74.00			Rs. -
47	Supply of down conductor of 70 sq.mm single core insulated flexible copper cable with necessary accessories, etc.This cable is comprised of care fully selected dielectric materials which create capacitive balance and help ensure insulation integrity under high impulse conditions as per direction of Engineer, CGPWD standards	mtr	2200.00			Rs. -
48	Supply and fixing of Galvanised Steel Flat 30X3 mm thickness from earth electrode directly in ground as required. Flat conductor shall be of Hot Dipped & Cross sectional area of 90mm square According to DIN EN 50164-2 (VDE 0185 part 202) Meets the requirement of VDE0185/305(IS-IEC 62305) Zinc coating: 500 g/m square (Approx:70 micron coating) Should be tested and used exclusively for lightning protection earthing system and ring equipotential bonding	mtr	308.00			Rs. -
49	Supply of Test Joint (Folding Clamp) suitable to connect 8mm round conductor and max by 30x3 mm GI strip as specified in drawing and directed by Engineer	Nos.	18.00			Rs. -
50	Supply, installation, testing and commissioning Lightnig counter - To count no of lightning strike & it can record the date and time of the lightning incident also tested as per IEC 62561-6 and as per direction of Engineer, CGPWD standards	Nos.	6.00			Rs. -
51	Supply and fixing of Cross connector for Flat: Suitable for 30mm Galvanised steel strip. Installed with 4 nos of hexagonal plate.and as per direction of Engineer, CGPWD standards	Nos.	57.00			Rs. -

S.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
52	Supply and fixing of flat conductor holder suitable for FL 30. Installed with 2 hexagonal bolts.	Nos.	50.00			Rs. -
53	Supply and fixing of Plastic Corrosion Protection strip: Approx 1.1 mm thick. Width 50mm. Made of petrolatum- coated chemical fibre fabric	Nos.	15.00			Rs. -
54	Providing maintenance free earthing with following size GI pipe including making bore pit of minimum 150mm dia, providing and laying approved make Earthing Electrode of Pipe-in-Pipe technology as per IS 3043-1987 made of corrosion free G.I. Pipes having outer pipe of 80mm dia and inner pipe of 50mm dia and filling with specified qty highly conductive compound around pipe and above that with soft soil in bore pit complete and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. as required:					
a	With 3 metre long GI Pipes and 50 kg back filling compound	set	22.00			Rs. -
iv	Telepone &TV Network					
55	Supplying and drawing 4 pair 0.5 mm FR PVC insulated copper conductor, unarmored telephone cable in the existing surface/ concealed steel/ PVC conduit as required.	mt	800.00			Rs. -
56	SITC of RJ-11 Telephone jack type socket with box and plate complete	each	22.00			Rs. -
57	T.V antenna socket out let	each	16.00			Rs. -
58	Supplying and drawing RG-11 grade co-axial TV cable PVC insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ concealed steel/ PVC conduit as required(FOR TV and CCTV)	mt	1200.00			Rs. -
v	External lighting					
59.00	Supplying and laying following sizes one number PVC insulated/XLPE insulated, PVC sheathed, steel armoured, aluminium conductor power cable of 1.1 KV grade in existing RCC/ HUME/ STONEWARE/ METAL/HDPE pipe as required.					

S.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
a	4x10 Sq.mm	meter	600.00			Rs. -
b	2x6 sq.mm	mtr	600.00			Rs. -
60.00	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	4x10 Sq.mm	Each	60.00			Rs. -
b	2x6 sq.mm	Each	100.00			Rs. -
61.00	Designing and providing suitable RCC foundation in Cement Concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) for 3 mere to 12 metre high GI octagonal pole including steel reinforcement (minimum 90kg per cum), form work, embedding 2 nos 50mm dia PVC pipe for cable entry in each foundation, excavation disposal of surplus soil and curing etc. as required	Cum	10.00			Rs. -
62.00	Supply of swaged steel tubular pole as per IS 2713 with base plate of size 300x300x6mm welded at bottom, necessary hole for cable entry and earthing stud welded at specified height including painting with one coat of red oxide zinc chromate primer and inside built Terminal/ Junction box with accessories, hardwares etc. as required for completeness, as per CSPDCL standards and direction of EIC.					
	7 metre high,	no	20.00			Rs. -
63.00	Erection of GI octagonal/ tubular pole on existing cement concrete foundation having grouted bolts and nuts, aligning in true vertical position as required					
	7 meter high	Each	20.00			Rs. -

S.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
64.00	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.					
	Single Over Hang 1.00 metre Long	Each	20.00			Rs. -
65.00	SSupplying, installation, testing and commissioning of following 230/250 volts LED street light fitting with all accessories like driver, heat sink made of die cast aluminium with IP 66 protection and 5 KV surge protection on pole bracket complete as required and furnishing 2 Yrs Guarantee certificate from manufacturer.					
a	65 watt	Each	20.00			Rs. -
b	45 watt	Each	12.00			Rs. -
c	25 watt	Each	8.00			Rs. -
66.00	Supplying, fixing and cramping suitable size and all type aluminium ferule/ lugs to following size 1.1 KV grade power cable core/ lead, pressed with high pressure cramping tool including connection to switch gear/ MCCB etc as required.					
a	10 sq.mm	Each	200.00			Rs. -
b	6 sq.mm	Each	110.00			Rs. -

S.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
67.00	Supply, drawing and terminating either ends 3 core FR PVC insulated 1.5 sqmm copper cable inside the pole from JB to fixtures with accessories, hardwares etc as required for completeness and as per attached specification, direction of engineer, CGPWD standards and Electrical inspectorate standards.	mtr	200.00			Rs. -
68.00	Supplying, installation, testing and commissioning of following 230/250 volts LED BOLLARD fitting with electronic driver, heat sink, capacitor and all other accessories on existing foundation/ pole bracket complete as required and furnishing 2 Yrs Guarantee certificate from manufacturer					
	9 watt	no	16.00			Rs. -
69.00	Supplying and fixing of 32mm dia x 2 metre long G.I pipe (light) bracket for mounting street light fittings of all types on poles including bending the pipe to the required shape, 2 Nos 40x3mm flat iron clamps with bolts and nuts including wiring with 1.5 sq. mm W.P /PVC wire etc. as required.	Each	20.00			Rs. -
70.00	Design, Fabrication, Supply, Erection, Testing and commissioning of Powder coated, Weather Proof Double door type Feeder pillar fabricated out of 14 guage CRCA sheet steel in cubical, free standing, dust and vermin proof, with reinforcement of suitable size angle iron, channel, T -iron or flats as required. Feeder pillar shall be treated with all anti-corrosive process before painting as per specification. Feeder Pillar shall be suitable for 415V, 3-Phase, Four wire, 50 Hz supply complete with earth bus and lifting hooks as required in case of large panels.Approval shall be taken for each panel before fabrication. (All hardwares like nuts and bolts used shall be Galvanized and Zinc passivated)	Set	2			Rs. -
	Feeder Pillar:					
	INCOMER					
	1No. 63A FP MCCB(35 KA)					
	1No. 63A FP Contactor, AOM switch & Timers for 24 Hrs. setting					
	Metering & Indication					
	1 set of phase indicating lamps					
	BUS-BAR					
	1 Set of 100A TPN Aluminium Bus Bar with colour coded PVC Sleeves					
vi	Supply , Erection , Testing and Commissioning of Elevators					

S.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
71.00	Supply, installation , testing and commissioning of 13 passenger lift with duplex & triplex operation as required, elevators for operation on 415 V, 3 Phase, 50 Hz AC supply, having AC variable voltage and variable frequency type traction control, electro magnetic brake system, simple operation, operating panel with luminous buttons, over load warning indicator, battery operated alarm bell, CFL type emergency light, intercom suitable for hook upto Society EPBAX, infrared rays sensing door protection for suitable height, reverse phase relay on controller, fireman's switch at ground phase relay on controller, phase relay on controller, fireman's switch at ground floor, digital car position indicator in car and at all positions indicator in car at all floors with UP/DOWN directions, light fixtures, ventilation fan etc. complete with all accessories including automatic rescue device and having following other features. Including all steel civil and electrical work required for installation of elevator in the exisi 270V (nominal rated voltage – 240V) with minimum 3KV surge protection, Power factor greater than 0.95 and total harmonic distortion (THD) of less than 10% should be integral to the luminaire. Driver output voltage shall be less than SELV limits for safe DC operation and maintenance. The driver should be fully designed and manufactured in India for easy availability and service 58x1.9 mm complete. (for W.C. and bathroom do	Each	2			Rs. -
	MACHINE LOCATION : IN LIFT MACHINE ROOM					
	CAR SIZE : MOST SUITABLE TO THE AVAILABLE PIT SIZE. AND SHOULD NOT BE LESS THAN IS SPECIFIED					
	CAR SIZE : MOST SUITABLE TO THE AVAILABLE PIT SIZE. AND SHOULD NOT BE LESS THAN IS SPECIFIED					
	CAR ENCLOSURE/PANEL : HAIRLINE FINISH,					
	STAINLESS STEEL					
	CAR INTERIOR : STAINLESS STEEL PANNELS WITH HAIL LINE FINISH ON ALL SIDE.					
	CAR FLOOR : SINGLE PIECE OF MARBLE FOR EACH.					
	FLOORING : 25 MM RECESS IN PLATFORM					
	HOISTWAY/CAR DOORS : AUTOMATIC CENTRE					
	OPENING STAINLESS STEEL DOORS IN HAIR					
	LINE FINISH					
	COP BUTTON TYPE : MICRO ACTION ILLUMINATED HALL BUTTONS WITH DIRECTION ARROWS					
	HALL BUTTONS COMBINED WITH HALL					
	POSITION INDICATORS AT ALL FLOORS : MICRO ACTION BUTTONS ROUND RING ILLUMINATED WITH DIRECTION ARROWS AND DIGITAL INDICATORS.					
	Description of Lifts					
	ALL FIXTURES & FACEPLATE : IN STAINLESS STEEL HAIRLINE FINISH WITH AVAILABLE PIT SIZE.					
	Shaft Size Variation - +/- 75 mm					
	For the below mentioned stops, speed and passanger details					
	Stop/Floors = 6 stop (G+5)					
Speed = 1.00 Mtr/sec.						
Passenger/Weight = 13 P/884 KG						
Shaft Size = 2500 x 1900						
Door Size = 900						
vii	D.G set					
72.00	Supply of silent type Diesel Generating Set alongwith having prime power of 100 KVA, 3 Phase, 50HZ, 415 Volt at 1500 RPM and consisting of the followings					
a	Engine :-water cooled diesel engine of suitable BHP for rated alternator at 1500 rpm, turbo charged, direct injection type, 4 stroke, 4/6 cylinder including specified size fuel tank of approved design and shape duly calibrated and painted with one coat of primer and two coats of synthetic enameled paint of approved colour, residential type silencer with exhaust MS pipe (upto 2 metre beyond silenser) duly wrapped with asbestos rope of legging of specified quality and specification.					
b	Alternator: rated at 100 KVA, 415 volts at 1500 RPM, suitable for 50 Hz 3-Phase system, AC Supply with 0.8 lagging power factor					

S.No.	Description of Item	Unit	Quantity	Rate INR	Rate in Words INR	Amount INR
c	AMF Panel :Cubical, compartmentalized, AMF panel board with all suitable size power and control contactors, switches,meters and other accessories, internal wiring, connection,inter-connection etc. for trouble free smooth functioning of DG Set with power pack of 12V/24 DC as required.	Each	1			Rs. -
d	Base Plate : Common base plate of required size for mounting of engine alternator set fabricated from MS channel and vibration damping arrangement with cushy foot mounting i/c painting etc. as required					
e	Acoustic and weather proof enclosure with arrangement for fresh air intake for cooling of engine and alternator, extraction, discharging hot air in to the atmosphere as per pecifications					
f	Fuel -level information :Fuel tank shall be install with remote sensing unit for fuel tank level					
g	2 year warranty and Quartly visit the D.G set for 2 year					
	Sub Total of Electrical Works					Rs. -