



इरकॉन इन्टरनेशनल लिमिटेड
(भारत सरकार का उपक्रम)
IRCON INTERNATIONAL LIMITED
(A Govt. of India Undertaking)
An integrated Engineering and Construction Company



No. IRCON/ELECT/5037-5038/NCRTC/OT/84/RSS_SNMP/LOA/119

Date: 10/03/2023

To,

M/s MRU Sewak Ram Constructions Pvt. Ltd.

605/14A, Adarsh Mohalla

Maujpur, Delhi - 110053

Tele/Fax no.: - 0120 - 4124942

Mob - 07703939164

E-mail: sewakram.mp@gmail.com

Dear Sir,

Sub: - Construction of RSS Control Building, Equipment Foundations, Approach Road, Boundary Wall, Services & other ancillary works, etc at Shatabadi Nagar (SN) and Modi Puram (MP) RSS (LOT-P19 L2) in connection to Delhi – Ghaziabad - Meerut RRTS corridor of NCRTC. - **Letter of Acceptance (LOA)**

Ref.: 1) NIT No. IRCON/ELECT/5037-5038/NCRTC/RSS CIVIL SNMP/OT/84 Date: 27.01.2023

2) Corrigendum No. 1 dated 07.02.2023

3) Your e-tender submitted on 13.02.2023 and financial e-bid opened on 20.02.2023

1. The competent authority for and on behalf of Ircon International Limited has accepted your offer for a sum of Rs. 12,43,65,642.17 (Rupees Twelve Crore Forty-Three Lakhs Sixty-Five Thousand Six Hundred Forty-Two and Paise Seventeen Only) inclusive of Goods and Services Tax (GST), other taxes, duties, levies etc. (Detailed Bill of Quantities is enclosed as Annexure-A) as per Clause no. 80.0 of Special Conditions of Contract (SCC).
2. You are requested to submit the following within 28 days of issue of this letter but before signing of the Agreement, whichever is earlier:
 - a. Performance guarantee for an amount of Rs. 37,31,000/- (Rupees Thirty-Seven Lacs & Thirty-One Thousand only i.e., 3% of the contract value Rs. 12,43,65,642.17) valid initially up to 03.01.2024 (i.e., stipulated date of completion plus 60 days beyond that) in the form detailed in Clause no.: 8.1 of Special Conditions of Contract (SCC) within 21 days from the date of issue of LOA.
 - b. Detail Programme for execution of Works as per Clause no. 15.1.3 of Special Conditions of Contract.



- c. Signing of Contract Agreement with requisite value of stamp paper as per Clause no.: 12.9 of Special Conditions of Contract.
3. You are requested to attend this office on or before 07.04.2023 for signing of the Contract Agreement (i.e. a date within 28 days of issue of this letter as per Clause no. 12.9 of Special Conditions of Contract).
 4. Taxes, Duties & Levies etc. and insurance shall be applicable as per Clause 80.0 and 9.0 respectively of SCC (Special Conditions of Contract). You will have to submit the necessary insurance policy as per contract condition.
 5. The deduction of retention money shall be recovered from your on-account bills @ 10% of the gross value of each on account bill till the sum total of retention money reaches 5% of the contract value of the work (Clause No. 8.2 of Special Condition of Contract).
 6. The mode of payment, payment terms & Tax Deduction at Source (TDS) shall be made in accordance as per Clause 64.0 of SCC. The Contractor should issue Tax Invoice showing IGST/CGST/SGST/UTGST as applicable.
 7. You are requested to commence the work immediately. The entire work shall be completed within a period of 08 (Eight) months from the date of issue of this LOA. The milestone deliverables shall be as per clause 15.0 of SCC.
 8. Contractor is required to submit the following documents:
 - (i) Qualified Engineers having experience in GIS substation shall be deployed for execution of civil works at RSS.
 - (ii) Details required to be maintained as per Labour Laws shall be maintained at RSS site irrespective of total number of staff at site.
 - (iii) Before start of civil works for RSS, the sub-contractor shall construct temporary site office of approx. 55.742 Sqm. with 2 nos. of Gents toilet, 1 No of Female toilet and pantry, etc., including sanitary & Electrical fixtures, water supply fixtures, Sock pit, provision of A/c. etc., as per direction of engineer in-charge under item no. 1 of BOQ attached in related file.
 - (iv) All material used during construction shall be from the approved list of NCRTC. If any material is not available in the approved list of NCRTC, approval from the Engineer i.e GC shall be taken in advance.
 - (v) Tools and Tackles: list is without mandatory details like working Life Cycle validity, Make/Brand, manufacture year, serial number and Fitness certificates. M/s IRCON shall provide all the required details of each tool and Tackles which shall be in accordance with the requirements given in contract under Section-6D (EMPLOYER's REQUIREMENT ON SAFETY, HEALTH & ENVIRONMENT (SHE)).



9. You will be responsible for all deployed manpower and machineries. Ircon will not be responsible for any violation or mishap on any ground. Further, you will strictly comply with all relevant labor laws, bye laws, regulations and other applicable laws of land.
10. This letter will constitute a legal and binding contract between Ircon International Ltd. & M/s MRU Sewak Ram Constructions Pvt. Ltd. till such time the formal contract agreement is signed.
11. This letter of acceptance is being sent in duplicate. One copy may please be signed, stamped and returned to this office in token of unconditional acceptance.
12. All other terms and conditions contained in the e-Tender documents dated 27.01.2023 shall form part and parcel of the contract.
13. You are requested to contact undersigned for further instructions.

Please acknowledge the receipt,

Thanking You,

Yours Faithfully,
For & on behalf of

Ircon International Limited


(Sanjay Gupta)

Chief General Manager/Electrical



Encl: - Annexure-A (Bill of Quantities/Schedule of Items) - 20 pages



LOA No.: IRCON/ELECT/5037-5038/NCRTC/RSS CIVIL SNMP/OT/84

Date: 09.03.2023

SCHEDULE OF QUANTITIES / BILL OF QUANTITIES (BOQ)

Name of work : Construction of RSS Control Building, Equipment Foundations, Approach Road, Boundary Wall, Services & other ancillary works, etc at Shatabadi Nagar (SN) and Modi Puram (MP) RSS (LOT-P19 L2) in connection to Delhi – Ghaziabad - Meerut RRTS corridor of NCRTC.

Summary Sheet of Bill of Quantities

Sr. No.	Schedule	Description of Schedule	Estimated Cost (In Rs)	Rate quoted by Contractor as percentage above/ below/ at-par-over the estimated rates		Price (In Rs)
				Percentage in Figures	Percentage in Words	In Figures
1	2	3	4	5	6	7
1	A	Construction of RSS Control Building, Equipment Foundations, Approach Road, Boundary Wall, Services & other ancillary works, etc at Shatabadi Nagar (SN) and Modi Puram (MP) RSS (LOT-P19 L2) in connection to Delhi – Ghaziabad - Meerut RRTS corridor of NCRTC.	13,66,65,540.85	9.00	Nine Point Zero Zero	12,43,65,642.17
				Total Price =		12,43,65,642.17

Signature
10.3.23

IRCON INTERNATIONAL LIMITED

Subject :- Construction of RSS Control Building, Equipment Foundations, Approach Road, Boundary Wall, Services & other ancillary works etc at Shatabadi Nagar (SN) and Modipuram (MP) RSS (LOT: P19 L2) in connection to Delhi - Ghaziabad - Meerut RRTS corridor of NCRTC

Sl. No.	Description of Quantity	Unit	Quantity	Rate (Inclusive of all Taxes)	Amount (Rs.)
Schedule- "A"					
Sub Head No. 1: Preliminary works					
	Providing temporary site office of approx. 55.742 sq.m. with 2 no's of Gents toilet, 1 No of Female toilet and pantry, etc., including sanitary & Electrical fixtures, water supply fixtures, Sock pit, provision of A/c. etc., as per direction of engineer in-charge. Note: 1) The contractor should get approved the site office plan before construction of the site office. 2) The contractor has to provide required Electricity, Water supply, Sanitation and Housekeeping, etc. till completion of work. (The payment shall be made after handing over of site office at the starting of the work, the contractor has to provide utility services and housekeeping services, etc. for 24 hrs X 7 days till completion of work.. In case, non maintenance of above specified utility & housekeeping services, an amount of Rs. 25,000/- per month shall be recovered from the contractor running bills. The site office assets provided shall remain to be the property of the contractor on completion of the work).	Sqm	55.74	10,764.00	600,006.89
1					
2	Providing and erecting 2.00 meter high temporary barricading at site; each panel of size 2.50mx2.00m made of 40x40x8mm angle iron or 50x50x3mm hollow MS tube Posts/horizontal members/ bracings covered with 1.63mm thick MS sheet. The sheet shall be fixed with 30x5mm MS flat by suitable welding/riveting. The panels shall be made so that gap of 50cm above the ground is available making overall height as 2.5m. MS channel ISLC75 @ 5.70 kg/m, 50cm long shall be provided at the bottom having oval shaped holes of size 50x25mm at both ends with 50cm long MS angle 40x40x6mm bracing. Suitable arrangement shall be made to fix the barricading to avoid from overturning by providing 250mm long expansion fasteners at both ends. The work shall be executed as per drawing/direction of Engineer-in-Charge which includes writing and painting, arrangement for traffic diversion such as traffic signals during construction at site for day and night, glow lamps, reflective signs, marking, flags, caution tape as directed by the Engineer-in-Charge. The barricading provided shall be retained in position at site continuously i/c shifting of barricading from one location to another location as many times as required during the execution of the entire work till its completion. Rate include its maintenance for damages, painting, all incidentals, labour materials, equipments and works required to execute the job. The barricading shall not be removed without prior approval of Engineer-in-Charge. (Note :- One time payment shall be made for providing barricading from start of work till completion of work i/c shifting. The barricading provided shall remain to be the Property of the contractor on completion of the work).	Mtr	160.00	2,827.40	452,384.00
Sub Head No. 2: Earth work					
3	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead up to 50 m and lift up to 1.5 m, as directed by Engineer-in charge.				
	All kinds of soil	Cum	1,840.20	205.45	378,069.09
4	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead up to 50 m and lift up to 1.5 m, as directed by Engineer-in charge. 2.7.1 Ordinary rock cum				
	Ordinary Rock	Cum	10.00	412.95	4,129.50
5	Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
	All kinds of soil	Cum	400.00	286.85	114,740.00



Sl. No.	Description of Quantity	Unit	Quantity	Rate (Inclusive of all Taxes)	Amount (Rs.)
6	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m.				-
6.1	All kinds of soil	Mtr	40.00	255.55	10,222.00
6.2	Pipes, cables etc. not exceeding 80 mm dia.	Mtr	25.00	417.35	10,433.75
6.3	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia.	Mtr	125.00	651.55	81,443.75
6.4	Pipes, cables etc. exceeding 300 mm dia but not exceeding 600 mm	cum	1,474.24	253.95	374,384.01
7	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m.	Cum	390.00	2,161.20	842,868.00
8	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.				
9	Excavating, supplying and filling of local earth (including royalty) by mechanical transport also including ramming and watering of the earth in layers not exceeding 20 cm in trenches, plinth, sides of foundation, other areas etc. complete. Note: The contractor has to found suitable filling soil source and the same source should be obtained approval from Client / IRCON by furnishing soil test reports, joint inspection. The quoted rate shall be including lead up to any extent, royalty charges, loading & unloading, filling of soil 15 cms layer by layer, watering, consolidation, compaction with 8 tonne roller, etc., The contractor should produce field test reports for each layer. The MDD should not less than 95%.	Cum	2,500.00	544.30	1,360,750.00
10	Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12mm diameter holes and plugging with cement mortar 1:2 (1 cement : 2 Coarse sand) to match the existing floor. With Chlorpyrifos/Lindane E.C. 20% with 1% concentration Sub Head No.4: Concrete work	Sqm	560.00	256.15	143,444.00
11	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana/Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering and finishing as per direction of the engineer-in-charge; for the following grades of concrete. Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement. All works up to plinth level :				-
12	Concrete of M15 grade with minimum cement content of 240 kg/Cum	Cum	198.75	8,174.75	1,624,764.26
13	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : *1:2:4 (1 cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size)	Cum	10.00	7,385.15	73,851.50
14	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand (zone-III): 4 graded stone aggregate 12.5mm nominal size) Extra for providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacturer's specification.	Sqm	625.00	370.85	231,781.25
15	Providing & applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7kg per square meter on damp proof course after cleaning the surface with brushes and finally with apiece of cloth lightly soaked in kerosene oil.	per 50 kg cement	157.50	57.15	9,001.13
16	Sub Head No.5: Reinforced Cement Concrete work	Sqm	625.00	113.85	71,156.25
16.1	Centering and shuttering including strutting, propping etc. and removal of form for :				-
16.2	Foundations, footings, bases of columns, etc. for mass concrete	Sqm	608.96	307.95	187,529.23
16.3	Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc.	Sqm	1,857.80	689.55	1,243,889.99
16.4	Suspended floors, roofs, landings, balconies, Shelves (Cast in Situ) and access platform	Sqm	1,275.00	766.55	977,351.25
16.5	Lintels, beams, plinth beams, girders, bresssummers and cantilevers	Sqm	1,093.50	698.35	665,230.73
16.6	Columns, Pillars, Piers, Abutments, Posts and Struts	Sqm	1,239.90		997,189.58



Sl. No.	Description of Quantity	Unit	Quantity	Rate (Inclusive of all Taxes)	Amount (Rs.)
16.6	Stairs, (excluding landings) except spiral-staircases	Sqm	79.06	657.75	52,003.36
16.7	Arches, domes, vaults up to 6 m span	Sqm	10.00	1,826.25	18,262.50
16.8	Vertical and horizontal fins individually or forming box louvers band, fascias and eaves boards	Sqm	10.00	1,100.40	11,004.00
16.9	Small lintels not exceeding 1.5 m clear span, moulding as in cornices, window sills, string courses, bands, copings, bed plates, anchor blocks and the like	Sqm	50.00	307.95	15,397.50
16.10	Cornices and mouldings	Sqm	50.00	769.30	38,465.00
16.11	Small surfaces such as cantilever ends, brackets and ends of steps, caps and bases to pilasters and columns and the like	Sqm	50.00	827.15	41,357.50
16.12	Weather shade, Chajjas, corbels etc., including edges	Sqm	100.00	814.95	81,495.00
17	Extra for additional height in centering, shuttering where ever required with adequate bracing, propping etc., including cost of de-shuttering and decentering at all levels, over a height of 3.5 m, for every additional height of 1 metre or part thereof (Plan area to be measured)				-
18	Suspended floors, roofs, landing, beams and balconies (Plan area to be measured) Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete up to plinth & above plinth level	Sqm	3,164.00	319.25	1,010,107.00
	Thermo-Mechanically Treated bars of grade Fe-500 D or more. Note: Adequate chairs and Spacers should be provided wherever necessary as per IS Stranded / Drgs. and no measurement & payment shall be paid on account of chairs and Spacer Bars. Authorised laps only shall be payable as per BBS. (MAKE: SAIL /RINL/ TISCO/JSW)	kg	170,941.28	89.65	15,324,885.41
19	Providing and laying in position ready mixed (Cement concrete manufactured in automatic batching plant (RMC plant) i/c transportation to site in transit mixer) or site batched design mix cement concrete for reinforced concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana / Ordinary Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of the engineer-in-charge; for the following grades of concrete. Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.				-
19.1	All works up to plinth level	cum	667.27	7,997.30	5,336,322.38
19.2	Concrete of M25 grade with minimum cement content of 330 kg /cum	cum	98.80	8,599.35	849,815.78
	All works above plinth level up to floor V level				-
19.3	Concrete of M25 grade with minimum cement content of 330 kg /cum	cum	90.28	10,080.15	909,985.54
19.4	Concrete of M30 grade with minimum cement content of 350 kg /cum	cum	388.00	10,221.70	3,966,019.60
20	Add for using extra cement in the items of design mix over and above the specified cement content therein.	Quintal	248.87	688.45	171,333.24
21	Providing, hoisting and fixing M25/M30 grade precast reinforced cement concrete Boundary wall panels above plinth level, including finishing with neat cement punning on exposed surfaces but excluding the cost of reinforcement and centering, shuttering. Note: The Fibre moulds for panels shall be issued by IRCON at free of cost with Customer approved design and logo.	Cum	63.20	11,754.95	742,854.07
22	Providing and fixing in position 12mm thick bitumen impregnated fibre board conforming to IS: 1838, including cost of primer, sealing compound Grade-A in expansion joints.	Per cm depth per 100 meter	25.00	567.25	14,181.25
	Sub Head No.6: Brick works				-
23	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:				-
	Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	97.80	6,658.25	651,176.85
24	Brick work with non modular fly ash bricks conforming to IS:12894, class designation 10 average compressive strength in super structure above plinth level up to floor V level in :				-



Sl. No.	Description of Quantity	Unit	Quantity	Rate (Inclusive of all Taxes)	Amount (Rs.)
25	Cement mortar 1:6 (1 cement : 6 coarse sand) Half brick masonry with non modular fly ash bricks of class designation 10, conforming to IS :12894, in super structure above plinth and up to floor V level. Cement mortar 1:4 (1 cement :4 coarse sand)	Cum	609.71	7,676.30	4,680,286.17
	Sub Head No.7: Metal / wood work and Joinery	Sqm	75.00	969.65	72,723.75
26	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitered and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / panelling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, panelling and dash fasteners to be paid for separately.				
	For fixed portion				
	Powder coated aluminium (minimum thickness of powder coating 50 micron)	Kg	934.43	456.30	435,724.90
27	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately) - Powder coated aluminium (minimum thickness of powder coating 50 micron)	Kg	290.44	564.80	164,038.70
28	Filling the gap in between aluminium/ stone/ wood frame and adjacent RCC/Brick/ Stone/ wood/ Ceramic/ Gypsum work by providing weather/structural non sag elastomeric PU sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete, complying to ASTM C920, DIN 18540-F & ISO 11600 Up to 5 mm depth and 5 mm width	Mtr	300.00	85.25	25,575.00
29	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminium doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge. Pre-laminated particle board with decorative lamination on both sides	Sqm	20.00	951.05	19,021.00
30	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):				
30.1	With toughened glass panes of 6 mm thickness MAKE: SAINT - GOBAIN / AIS / MODI GUARD of approved shade	Sqm	180.00	2,406.80	433,224.00
30.2	With toughened glass panes of 8mm / 10 mm thickness MAKE: SAINT - GOBAIN / AIS / MODI GUARD of approved shade	Sqm	20.00	2,968.74	59,374.80
31	Providing and fixing double glazed hermetically sealed glazing in aluminium windows, ventilators and partition etc. with 6 mm thick clear float glass both side, having 12 mm air gap, including providing EPDM gasket, perforated aluminium spacers, desiccants, sealant (Both primary and secondary sealant) etc. as per specifications, drawings and direction of Engineer-in-charge complete.	Sqm	10.00	4,013.25	40,132.50
32	Providing and fixing anodised aluminium grill (anodised transparent or dyed to required shade according to IS: 1868 with minimum anodic coating of grade AC 15) of approved design/pattern, with approved standard section and fixed to the existing window frame with C.P. brass/ stainless steel screws @ 200 mm centre to centre, including cutting the grill to proper opening size for fixing and operation of handles and fixing approved anodised aluminium standard section around the opening, all complete as per requirement and direction of Engineer-in-charge. (Only weight of grill to be measured for payment).	Kg	10.00	560.85	5,608.50
33	Supplying and fixing rolling shutter, made of required size G.I. laths 1.20 mm thick , interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters, 80x1.20mm GI laths with 1.25 mm thick MS top cover.	Sqm	35.00	5,850.13	204,754.55
34	Extra for providing mechanical device chain and crank operation for operating rolling shutters; Exceeding 16.80 sqm in area	Sqm	35.00	1,108.70	38,804.50



Sl. No.	Description of Quantity	Unit	Quantity	Rate (Inclusive of all Taxes)	Amount (Rs.)
35	Providing, assembling and installing Hollow Metal (Galvanised Steel) Two Hour Fire Rated Doors of approved make & quality, as per IS 3614 Part - II for stability and integrity, BS 476 - Part 20 & 22, IS-3809 ISO 834, NFPA 252, The recommended fire doors shall be tested at CBRI or ARAI for maximum rating of 2 hours with or without vision panel as applicable. Test certificates shall be furnished for vision panels as part of the fire door assembly. Independent glass test certificates shall not be accepted. The manufacturer's test certificate shall cover all doors supplied & shall be as per the tested & approved specimen. Deviation in specification and sheet thickness other than what is mentioned in the test certificates shall not be allowed. Proper label confirming the type of door and the hourly rating shall be mandatory. The door shall be made out of pressed galvanized steel conforming to IS 277 and shall comprise of the following components : Door Frame : Door frame shall be double rebate profile of size 143 x 57 mm made out of minimum 1.60 mm (16 gauge) thick galvanized steel sheet. The frame shall be milled & field assembled with self tabs. All provisions shall be mortised, drilled and tapped for receiving appropriate hardware. Rubber door silencers shall be provided on the striking jamb. The frames shall be provided with back plate bracket and anchor fasteners for installation on the finished plastered masonry wall opening. After installation, the frame shall be grouted with necessary cement & sand slurry for the fire door on the clear masonry opening.				
	Door Shutter : The door shutter shall be 46mm thick fully flush double skin door with vision panels of size as indicated below. The door shutter shall be manufactured from minimum 1.20 mm (18 gauge) thick galvanized steel sheet. The internal construction of the door shall be of rigid reinforcement pads for receiving appropriate hardware. The infill material shall comprise of resin bonded honeycomb Kraft paper with thermal insulation core. The door shutter shall be factory prepared for receiving appropriate approved hardware and provided with necessary reinforcement for hinges, locks, and door closers. The edges shall be interlocked with a bending radius of 1.4mm. For double leaved doors, astragals shall be provided on the meeting stile for both active and inactive leaf. Door Finish : All steel work i.e. door shutter, door frame, door sill etc. shall be finished with three or more coats of thermosetting Polyurethane Aliphatic grade paint of approved make & shade over a coat of stove zinc phosphate primer & etched primer coating including preparation of surface, cleaning etc. complete all as directed by the Engineer. The door shutter and frame shall have passed minimum 250 hours of salt spray test. Door Hardware & Accessories : The rate shall include for self adhesive side rolls, supply and fixing of 3mm thick base plates, all joints of frames including provision for anchor bolt fixing to wall / concrete surface, reinforcement pad for fixing of door closers, factory finished, prepunched cut outs to receive hardware and iron mongery, 3mm thick hinge plates predrilled to receive hinges for screw mounted fixing etc. The rate shall include for providing and fixing intumescent fire / smoke seals mounted on all the grooves / gaps between the shutter / frame on all sides including the bottom / floor seals to the complete satisfaction of the Engineer. The rate shall also include supply and installation of approved door hardware conforming to SS 304 Grade as mentioned below & accessories such as self adhesive side roll (ceramic tape) (Kerfal 2000 or approved equivalent) for required length.				
35.1	Door - Single Leaved Two Hour Fire Rated Door: Hardware: SS Ball Bearing Butt Hinges : 100mm x 75mm x 3mm (4 Nos. per Shutter), Panic Exit Device for Single Leaf Door (1 Nos.), External Trim Bar with Locking Arrangement (1 Nos.); Door Closer with Standard arm silver finish (1 No. per Shutter), Fire Glass: 200 x 300mm (1 Nos. per Shutter), Perimeter Fire / Smoke Seal, Door Stopper (1 Nos. per Shutter).	Sqm.	12.00	18,870.21	226,442.52
35.2	Door - Double Leaved Two Hour Fire Rated Door: Hardware: SS Ball Bearing Butt Hinges : 100mm x 75mm x 3mm (4 Nos. per Shutter), Panic Exit Device for Double Leaf Door (Three Point Locking - 1 Nos.), External Trim Bar with Locking Arrangement (1 Nos.); Door Closer with Standard arm silver finish (1 No. per Shutter), Fire Glass: 200 x 300mm (1 Nos. per Shutter), Perimeter Fire / Smoke Seal, Door Stopper (1 Nos. per Shutter).	Sqm.	6.00	13,897.39	83,384.33
36	Providing and fixing of Non-Fire Rated Plain Metal flush steel door at all levels, Fully flush type of 46 mm thick Pressed Galvanized steel conforming to IS 277. Flush doors conforming to IS 3614 and consists of frame, shutter, infill and finish as detailed below : Door frame shall be Single rebate profile of size 100 x 57 mm with bending radius of 1.4 mm having 1.20mm thick galvanized steel sheet (18 gauge) with steel door shutter of 46 mm thick fully flush, double skin door manufactured out of 0.80 mm thick galvanized steel sheet (22 gauge). The stile edges to be lock seamed with no weld marks. The infill material shall be resin bonded honey comb Kraft paper. The door frames and shutter shall be finished with primer coating, sioved zinc phosphate primer (35 micron DFT) and thermosetting Polyurethane aliphatic grade paint (35 micron DFT) of approved colour.				



Sl. No.	Description of Quantity	Unit	Quantity	Rate (Inclusive of all Taxes)	Amount (Rs.)
	Rate shall include for supply and fix 3mm thick base plates, all joints of frames with provision for anchor bolt fixing to wall / RC surface, reinforcement pad for fixing of door closers, factory finish, pre-punched cut outs to receive hardware and iron mongery, 3mm thick hinge plates predrilled to receive hinges for screw mounted fixing, stainless steel double bearing butt hinges of size as per approved design, provision for all necessary fittings & fixtures all complete with approved shop drawings Rate shall also include for grouting the frame with cement mortar / slurry between wall & frame to the required thickness as per manufacturer's specifications.				
	The contractor shall submit shop drawings and samples of sections, fittings & fixtures for approval before taking up the fabrication work.				
	Rate shall include for door hardware of SS 304 Grade of approved make, size, quality & as specified below :				
36.1	Door - Single Leaved HMPS Door. Hardware: SS Ball Bearing Butt Hinges : 100mm x 75mm x 3mm (4 Nos. per Shutter), Mortise Dead Lock with Cylinder (1 Nos.), S.S. "D" Type Handle (19 x 250mm - b/b) (1 Set per Shutter); Door Closer with Standard arm silver finish (1 No. per Shutter), Fire Glass: 200 x 300mm (1 Nos. per Shutter), Door Stopper (1 Nos. per Shutter).	Sqm	6.00	11,952.14	71,712.81
36.2	Door - Double Leaved HMPS Door. Hardware: SS Ball Bearing Butt Hinges : 100mm x 75mm x 3mm (4 Nos. per Shutter), Mortise Dead Lock with Cylinder (1 Nos.), S.S. "D" Type Handle (19 x 250mm - b/b) (1 Set per Shutter); Door Closer with Standard arm silver finish (1 Nos. per Shutter), Non - Fire Glass: 200 x 300mm (1 Nos. per Shutter), Door Stopper (1 Nos. per Shutter), Concealed Flush Tower Bolt (1 Nos.)	Sqm	6.00	14,428.89	86,573.36
37	Providing 40x5 mm flat iron hold fast 40 cm long including fixing to frame with 10 mm diameter bolts, nuts and wooden plugs and embedding in cement concrete block 30x10x15cm 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size).	No	116.00	194.35	22,544.60
38	Providing and fixing IS : 12817 marked stainless steel butt hinges with stainless steel screws etc. complete :				
38.1	125x64x1.90 mm	No	36.00	95.50	3,438.00
38.2	100X58X1.90 mm	No	36.00	86.15	3,101.40
38.3	75x47x1.80 mm	No	36.00	64.20	2,311.20
39	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete :				
39.1	200 X 10 mm	No	25.00	300.55	7,513.75
39.2	150 X 10 mm	No	25.00	232.30	5,807.50
40	Providing and fixing bright finished brass door latch with necessary screws etc. complete :				
40.1	300x16x5 mm	No	25.00	273.20	6,830.00
40.2	250x16x5 mm	No	25.00	259.80	6,495.00
41	Providing and fixing bright finished brass handles with screws etc. complete:				
41.1	125 mm	No	15.00	205.10	3,076.50
41.2	100 mm	No	15.00	189.95	2,849.25
42	Providing and fixing bright finished brass 100 mm mortise latch and lock with 6 levers and a pair of lever handles of approved quality with necessary screws etc. complete.	No	6.00	723.80	4,342.80
43	Providing and fixing bright finished brass 100 mm mortise latch with one dead bolt and a pair of lever handles of approved quality with necessary screws etc. complete.	No	30.00	603.40	18,102.00
44	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight up to 35 kg and door width up to 700 mm), with necessary accessories and screws etc. complete.	No	10.00	1,025.65	10,256.50
45	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight up to 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete.	No	20.00	856.30	17,126.00



Sl. No.	Description of Quantity	Unit	Quantity	Rate (Inclusive of all Taxes)	Amount (Rs.)
	Sub Head No.8: Flooring				
46	Providing and laying in position ready mixed (Cement concrete manufactured in automatic batching plant (RMC plant) i/c transportation to site in transit mixer) or site batched design mix cement concrete for reinforced concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of the engineer-in-charge, for the following grades of concrete. Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.				
	Up to 100mm Thick flooring works above plinth level up to floor V level				
	Concrete of M25 grade with minimum cement content of 330 kg / cum	Cum	37.50	10,080.15	378,005.63
47	Extra for Vacuum De-watering system (VDS) treatment including fixing of channels / side form and setting them to the required level 12/25mm thick expanded polystyrene for expansion / isolation joints to the full thickness of the concrete, de-watering the surplus water using filler pads & vacuum pumps, floating with a disc, power trowelling with blades including all incidental work , etc., complete. The VDS equipment shall be of TREMIX / AUARIUS TECH or equivalent. The channels shall have holes of dia. and internals specified by the engineer and perpendicular at the edges. Rate including cost of all materials (including wastages), labour, hire charges of the machineries with all leads & lifts at all levels complete as per specifications.	Sqm	750.00	78.00	58,500.00
48	Providing and fixing 18 mm thick gang saw cut, mirror polished, pre-moulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.				
	Granite stone slab colour black / Cherry/Ruby red				
	Area of slab over 0.50 sqm	sqm	3.00	4,425.35	13,276.05
49	Extra for providing opening of required size & shape for wash basin/ kitchen sink in kitchen platform, vanity counter and similar location in marble/ Granite/ stone work, including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. Complete.	Each	4.00	808.15	3,232.60
50	Extra for fixing marble /granite stone, over and above corresponding basic item, in facia and drops of width up to 150 mm with epoxy resin based adhesive, including cleaning etc. complete	Mtr	10.00	475.55	4,755.50
51	Providing edge moulding to 18 mm thick marble stone counters, Vanities etc., including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge				
	Granite work	Mtr	150.00	418.85	62,827.50
52	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joints with white cement and matching pigments etc., complete	sqm	149.54	1,416.65	211,851.86
53	Size of Tile 600x600 mm Providing and laying vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3 kg/sqm including grouting the joint with white cement & matching pigments etc. complete				
	Size of Tile 600x600 mm	sqm	20.00	1,486.50	29,730.00
54	Providing and laying rectified Glazed Ceramic floor tiles of size / Vitrified tiles 300x300 mm or more (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick Cement Mortar 1:4 (1 Cement : 4 Coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including pointing the joints with white cement and matching pigments etc., complete.	sqm	17.75	1,416.65	25,142.70



Sl. No.	Description of Quantity	Unit	Quantity	Rate (Inclusive of all Taxes)	Amount (Rs.)
55	Providing and fixing 1st quality ceramic glazed / Vitrified tiles wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps 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 pigment of matching shade complete	sqm	109.34	1,466.50	160,339.78
56	Providing and fixing 10 mm thick acid and/or alkali resistant tiles of approved make and colour using acid and/or alkali resisting mortar bedding, and joints filled with acid and/or alkali resisting cement as per IS : 4457, complete as per the direction of Engineer-in-Charge.				
56.1	In flooring on a bed of 10 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand)	Sqm	95.04	1,515.45	144,032.31
56.2	Acid and alkali resistant tile	Sqm	70.00	1,637.71	114,639.70
57	In dado/skirting on 12 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand)				
57	Acid and alkali resistant tile	sqm	750.00	198.40	148,800.00
58	Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete. - On Concrete surface	sqm	50.00	570.75	28,537.50
59	Cement plaster skirting up to 30cm height, with cement mortar 1:3 (1 cement : 3 coarse sand), finished with a floating coat of neat cement. - 18 mm thick				
59	Providing and laying Polished Granite stone flooring / Skirting in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with thickness as per dfg. stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge				
	Note: Thickness of granite for Tread in staircase - 30mm, Risers - 20mm, Flooring - 20mm, Skirting - 18mm shall be provided.				
	Granite stone slab colour black / Cherry/Ruby red / Tan Brown / Grey or Equivalent	sqm	149.74	3,908.80	585,302.54
	Sub Head No.9 : Finishing				
60	12 mm cement plaster of mix :				
	1:6 (1 cement: 6 fine sand)	Sqm	1,601.10	282.00	451,510.20
61	15 mm cement plaster on the rough side of single or half brick wall of mix :				
	1:6 (1 cement: 6 fine sand)	Sqm	1,601.10	339.10	542,933.01
62	6 mm cement plaster of mix :				
	1:3 (1 cement : 3 fine sand)	Sqm	1,647.42	253.05	416,878.37
63	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement : 5 coarse sand) finished with a top layer 6 mm thick cement plaster 1:6 (1 cement : 6 fine sand) :	Sqm	1,050.00	442.75	464,887.50
64	Add for plaster drip course / groove in plastered surface or moulding to RCC projections.	Rmt	200.00	64.70	12,940.00
65	Providing and Fixing of 150mm thick Chicken Wire mesh between Joint of Brick work and RCC Work, Electrical conduits chasings / Plumbing chasings and wherever necessary as per direction of Engineer In-charge.	Sqm	200.00	249.72	49,944.00
66	Extra for plastering exterior walls of height more than 10 m from ground level for every additional height of 3 m or part thereof.	Sqm	500.00	72.80	36,400.00
67	Painting with acid proof paint of approved brand and manufacture of required colour to give an even shade : Two or more coats on new work				
	Two or more coats on new work	Sqm	75.00	139.25	10,443.75
68	Finishing walls with 100% Premium acrylic emulsion paint having VOC less than 50 gm/litre and UV resistance as per IS 15489:2004, Alkali & fungal resistance, dirt resistance exterior paint of required shade (Company Depot Tinted) with silicon additives				
	New work (Two or more coats applied @ 1.43 litre/10 sqm. Over and including priming coat of exterior primer applied @ 0.90 litre/10 sqm.	Sqm	3,248.52	154.45	501,733.14



Sl. No.	Description of Quantity	Unit	Quantity	Rate (Inclusive of all Taxes)	Amount (Rs.)
69	Providing and fixing of Granules exterior finish with approved make "HERITAGE" and approved pattern, including preparation of surface, architectural groove, necessary scaffolding, etc. as per direction of engineer.	Sqm	1,250.00	515.30	644,119.73
70	Finishing walls with water proofing cement paint of required shade :				-
	New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including priming coat of exterior primer applied @ 2.20kg/10 sqm	Sqm	900.00	97.60	87,840.00
71	Stone work (machine cut edges) for wall lining etc. (veneer work) up to 10 metre height, backing filled with a grout of average 12 mm thick cement mortar 1:3 (1 cement : 3 coarse sand) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade : (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately)				-
	Red sand stone - exposed face fine dressed with rough backing.				-
	30 mm Thick	Sqm	150.00	4,229.85	634,477.50
72	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	Sqm	3,248.52	214.30	696,156.76
73	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade : Two or more coats on new work	Sqm	250.00	131.45	32,862.50
	Sub Head No.10: Steel Items				-
74	Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	kg	8,602.00	93.05	800,416.10
75	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required				-
	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	kg	3,000.00	142.30	426,900.00
76	Supply and fixing of rail of 90lbs on in line, level over transformer foundations welded with MS angle and angle cleats on existing MS insert plates as per drawing and direction of the Engineer - in - charge all complete.	Kgs	4,000.00	93.68	374,720.00
77	Supply fabrication , erection and Fixing Structural Steel girder required for installation of EOT crane fixed with connecting plates including cutting , hoisting, fixing in position at corbel level , applying a priming coat of approved steel primer . as per direction of the Engineer - in - charge all complete.	Kgs	5,000.00	104.12	520,600.00
78	Providing and fixing Galvanised foundation bolt including nuts and washers complete as per direction of Engineer - in - Charge.	Kgs	250.00	162.99	40,747.50
79	Supply placing fixing of insert plates made of MS plates of thickness 10 mm to 32 mm as per drawing and site requirement in bottom of slabs , floor, corbel level and on equipment foundation including levelling to match the required level in position and welding the same with the existing structure/ reinforcement steel as shown in drawing all complete.	Kgs	750.00	102.25	76,687.50
80	Filling and grouting the insert plates and equipment structure base plate with non shrink grout GP2 (FOSROC) as per drawing/required at site. Cost includes all operations i.e. cleaning of surface , packing all around the plate to restrict out flow of grout with mortar as required all complete.	Sqm	90.00	2,814.27	253,284.30
81	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	Kg	657.00	612.25	402,248.25
	Sub Head No.11: Water proofing				-
82	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like consisting of: (i) 1st course of applying cement slurry @ 4.4 kg/sqm mixed with water proofing compound conforming to IS 2645 in recommended proportions including rounding off junction of vertical and horizontal surface. (ii) 1st course of 20 mm cement plaster 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface. (iii) 1st course of applying blown or residual bitumen applied hot at 1.7 kg, per sqm of area. (iv) 1st course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 kg/ sqm).	Sqm	100.00	774.25	77,425.00



Sl. No.	Description of Quantity	Unit	Quantity	Rate (Inclusive of all Taxes)	Amount (Rs.)
83	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: (a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls up to 300 mm height including cleaning the surface before treatment. (b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls up to 300 mm height including rounding of junctions of walls and slabs. (c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge. (d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement : 4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep. (e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer-in-Charge : -With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	Sqm	600.00	1,522.95	913,770.00
84	Providing and applying fibre reinforced elastomeric liquid water proofing membrane with resilient acrylic polymers having Sun Reflectivity Index (SRI) of 105 on top of concrete roof in three coats @10.76 litre/ 10 sqm. One coat of self-priming of elastomeric waterproofing liquid (dilution with water in the ratio of 3:1) and two coats of undiluted elastomeric waterproofing liquid (dry film thickness of complete application/system not less than 500 microns). The operation shall be carried out after scrapping and properly cleaning the surface to remove loose particles with wire brushes, complete in all respect as per the direction of Engineer-in-Charge.	Sqm	596.00	474.15	282,593.40
	Sub Head No.12 : Sanitary Installations				-
85	Supply and fixing of Type - B SWR PVC (6.00 Kgs/Sqm) soil and waste pipes jointed with rubber ring with good quality lubricant for shafts and for sunken slab or under slab with solvent cement as per IS - 13502-1992 for pipes and IS 14735 for fittings, inclusive of all necessary specials like bends, tees, offsets, junctions, etc., laid under floor/under ceiling on walls with suitable clamps and specials curing, necessary chasing, jointing and restoring to original conditions, testing etc. including cost of materials, labour, HOM of machinery & equipments with all lead and lifts, loading and unloading charges, transportation cost and conveyance of all materials, all other incidental charges etc. complete for successful completion of work as per specifications, and as directed by Engineer-in-Charge. (Specials at junction of lateral pipe and vertical stack must have access door for inspection)				-
85.1	40 mm OD SWR Pipe	Mtr	10.00	113.00	1,130.00
85.2	75 mm OD SWR Pipe	Mtr	75.00	380.00	28,500.00
85.3	110 mm OD SWR Pipe	Mtr	596.00	556.00	331,376.00
86	Providing and fixing white vitreous china extended wall mounting water closet of size 780x370x690 mm of approved shape including providing & fixing white vitreous china cistern with dual flush fitting, of flushing capacity 3 litre/ 6 litre (adjustable to 4 litre/ 8 litres), including seat cover, and cistern fittings, nuts, bolts and gasket etc complete.				-
	Make & Model: HIDWARE - Enigma / Parry ware - Cradif	Each	3.00	13,036.55	39,109.65
87	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I. brackets, 40 mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :				-
	W.C. pan with ISI marked white solid plastic seat and lid	Each	1.00	5,239.93	5,239.93
	Make: Parryware, Hindware, Jaquar, Cera				



Sl. No.	Description of Quantity	Unit	Quantity	Rate (Inclusive of all Taxes)	Amount (Rs.)
88	Providing and fixing white vitreous china battery based infrared sensor operated urinal of approx. size 610 x 390 x 370 mm having pre & post flushing with water (250 ml & 500 ml consumption), having water inlet from back side, including fixing to wall with suitable brackets all as per manufacturers specification and direction of Engineer-in-charge. Make & Model: Hindware - Senso Art / Parry ware - Integrated N	Each	2.00	7,004.45	14,008.90
89	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm and 340x410x265 mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :	Each	1.00	5,268.85	5,268.85
90	One urinal basin with 5 litre white P.V.C. automatic flushing cistern Make: Hindware / parry ware or equivalent Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require: (Make: Parryware, Hindware, Jaquar)	Each	1.00	3,392.85	3,392.85
90.1	White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps	Each	1.00	3,392.85	3,392.85
90.2	White Vitreous China Flat back wash basin size 450x300 mm with single 15mm C.P. brass pillar tap	Each	3.00	2,370.20	7,110.60
91	Providing and fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of pipes and fittings. (Make: Parryware, Hindware, Jaquar, Cera)	Each	4.00	1,500.05	6,000.20
92	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink 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 : Kitchen sink with drain board				-
93	510x1040 mm bowl depth 250 mm Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.	Each	2.00	6,008.45	12,016.90
94	Semi rigid pipe 32 mm dia Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing :	Each	2.00	90.95	181.90
94.1	Circular shape 450 mm dia	Each	1.00	1,248.60	1,248.60
94.2	Rectangular shape 1500x450 mm	Each	2.00	1,817.20	3,634.40
95	Providing and fixing toilet paper holder :	Each	2.00	680.80	1,361.60
95.1	C.P. brass	Each	2.00	463.00	926.00
95.2	Vitreous china	Each	2.00		
96	Providing and fixing stone slab with table rubbad, edges rounded and polished, of size 75x50 cm deep and 1.8 cm thick, fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6 mm nominal size) as per direction of Engineer-in-charge and finished smooth.	sqm	3.60	3,542.85	12,754.26
97	Granite Stone of approved shade Providing and fixing PTMT liquid soap container 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour, weighing not less than 105 gms.	Each	5.00	146.30	731.50
98	Providing & fixing chrome plated brass battery based infrared sensor operated pillar cock, having foam flow technology. 15 mm nominal bore	Each	6.00	8,050.50	48,303.00
99	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fittings arrangement of approved quality and colour. 600 mm long towel rail with total length of 645 mm, width 78 mm and effective height of 88 mm, weighing not less than 190 gms	Each	3.00	600.35	1,801.05



Sl. No.	Description of Quantity	Unit	Quantity	Rate (Inclusive of all Taxes)	Amount (Rs.)
	Sub Head No.13: Water supply				
100	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plan & brass threaded fittings, including 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.				-
100.1	Internal work - Exposed on wall				
100.2	20 mm nominal outer dia Pipes	Mtr	20.00	325.10	6,502.00
100.3	25 mm nominal outer dia Pipes	Mtr	35.00	408.55	14,299.25
	32 mm nominal outer dia Pipes	Mtr	130.00	500.95	65,123.50
101	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plan & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. Concealed work, including cutting chases and making good the walls etc.				-
101.1	15 mm nominal outer dia Pipes	Mtr	25.00	441.15	11,028.75
101.2	20 mm nominal outer dia Pipes	Mtr	50.00	513.75	25,687.50
101.3	25 mm nominal outer dia Pipes	Mtr	25.00	626.05	15,651.25
102	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. External work				-
	25 mm dia nominal bore	Mtr	20.00	417.95	8,359.00
103	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :				-
103.1	25 mm nominal bore	Each	5.00	532.35	2,661.75
103.2	20 mm nominal bore	Each	5.00	461.75	2,308.75
104	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :				-
	25 mm nominal bore	Each	10.00	399.15	3,991.50
105	Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet :				-
	150 mm diameter	Each	5.00	190.10	950.50
106	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work) :				-
106.1	15 mm nominal bore	Each	2.00	262.30	524.60
106.2	20 mm nominal bore	Each	3.00	289.05	867.15
106.3	25 mm nominal bore	Each	4.00	369.35	1,477.40
107	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.				-
	Circular tank 3 in no (1000~1000~500)	Per litre	2,500.00	9.70	24,250.00
108	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931 :				-
	15 mm nominal bore	Each	3.00	434.20	1,302.60
109	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 680 gms.				-
	15 mm nominal bore	Each	3.00	708.40	2,125.20
110	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931.				-
	15 mm nominal bore	Each	6.00	594.75	3,568.50
111	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931				-
	15 mm nominal bore	Each	6.00	500.35	3,002.10
112	Providing and fixing PPR Unions				-
112.1	PPR Union 20mm	Each	5.00	295.75	1,478.75
112.2	PPR Union 25mm	Each	5.00	362.65	1,813.25
113	Fixing water meter and stop cock in G.I. pipe line including cutting and threading the pipe and making long screws etc. complete (cost of water meter and stop cock to be paid separately).	Each	2.00	670.00	1,340.00



Sl. No.	Description of Quantity	Unit	Quantity	Rate (Inclusive of all Taxes)	Amount (Rs.)
	Sub Head No.14: Drainage				
114	Providing and fixing on wall face unplasticized Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.				-
114.1	75 mm diameter	Mtr.	100.00	213.00	21,300.00
114.2	110 mm diameter	Mtr.	500.00	319.75	159,875.00
115	Constructing brick masonry circular type manhole 0.91 m internal dia at bottom and 0.56m dia at top in cement mortar 1:4 (1 cement: 4 coarse sand), inside cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size), and making necessary channel in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement, all complete as per standard design :				-
	0.91 m deep with S.F.R.C. cover and frame (heavy duty, HD-20 grade designation) 560 mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182 kg., fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including centering, shuttering all complete. (Excavation, foot rests and 12mm thick cement plaster at the external surface shall be paid for separately) :				-
	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	2.00	11,886.45	23,772.90
116	Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design :				
	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	10.00	5,589.45	55,894.50
	Sub Head No.15: Road Work				
117	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead up to 50 m and lift up to 1.5 m, as directed by Engineer-in charge.				-
	All kinds of soil	Cum	250.00	205.45	51,362.50
118	Cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size) in pavements, laid to required slope and camber in panels as required including consolidation finishing and tamping complete	Cum	20.00	7,399.20	147,984.00
	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:				-
119	Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	46.00	6,658.25	306,279.50
	12 mm cement plaster of mix : 1:6 (1 cement: 6 fine sand)	Sqm	250.00	282.00	70,500.00
120	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earth with lead up to 50 metres.	Sqm	600.00	180.50	108,300.00
121	Providing, laying, spreading and compacting graded stone aggregate (size range 53 mm to 0.075 mm) to wet mix macadam (WMM) specification including premixing the material with water at OMC in for all leads & lifts, laying in uniform layers with mechanical paver finisher in sub- base / base course on well prepared surface and compacting with vibratory roller of 8 to 10 tonne capacity to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge.	Cum	150.00	2,803.65	420,547.50
122	Providing and laying design mix cement concrete of M-25/30 grade, in roads/ taxi tracks/ runways, using cement content as per design mix, using coarse sand and graded stone aggregate of 40 mm nominal size in appropriate proportions as per approved & specified design criteria, providing dowel bars with sleeve/ tie bars wherever required, laying at site, spreading and compacting mechanically by using needle and surface vibrators, levelling to required slope/ camber, finishing with required texture, including steel form work with sturdy M.S. channel sections, curing, making provision for contraction/expansion, construction & longitudinal joints (10 mm wide x 50 mm deep) by groove cutting machine, providing and filling joints with approved joint filler and sealants, complete all as per direction of Engineer-in-charge (Item of joint fillers, sealants, dowel bars with sleeve/ tie bars to be paid separately).				-
	Note:- Cement content considered in M-30 is @ 340 kg/cum. Excess/less cement used as per design mix is payable/ recoverable separately.				
	Cement concrete manufactured in automatic batching plant (RMC plant) for transportation to site in transit mixer	Cum	120.00	10,006.65	1,200,798.00



Sl. No.	Description of Quantity	Unit	Quantity	Rate (Inclusive of all Taxes)	Amount (Rs.)
123	Providing and fixing pre-moulded joint filler in expansion joints of RCC roads / CC pavements after making the joints dust free with high pressure air jet cleaners, all complete as per direction of the Engineer-in-Charge. (Pre-moulded joint fillers shall be made of bitumen hot sealing compound impregnated fibre board having impregnation more than 35%, conforming to IS:1838 for fibre board and IS: 1834 for hot sealing bitumen compound grade A.)	per cm depth per cm width per metre length	2,500.00	4.70	11,750.00
124	Providing and filling in position rubberized bitumen hot sealing compound for sealing of expansion joints in roads / pavements all complete as per direction of the Engineer-in-Charge. - Using grade 'A' sealing compound conforming to IS: 1834.	per cm depth per cm width per metre length	2,500.00	7.50	18,750.00
125	Providing and applying 2.5 mm thick road marking strips (retro-reflective) of specified shade/ colour using hot thermoplastic material by fully/ semi automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour, T&P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and accordance with applicable specifications.	Sqm	25.00	623.80	15,595.00
Sub Head No.: 16 Miscellaneous Works					
126	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation, levelling & dressing & finishing the top smooth.	Sqm	100.00	681.65	68,165.00
127	Brick edging 7cm wide 17.4 cm deep to plinth protection with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 including grouting with cement mortar 1:4 (1 cement : 4 fine sand).	Mtr	200.00	55.80	11,160.00
128	Providing and laying in position specified grade of reinforced cement concrete in kitchen platform and shelves excluding the cost of centering, shuttering, finishing and reinforcement - 1:1.5:3 (1 cement : 1.5 coarse sand (zone-III): 3 graded stone aggregate 20 mm nominal size	Cum	2.00	8,364.20	16,728.40
129	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M-30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with line sand etc. all complete as per the direction of Engineer-in-charge.	Sqm	30.00	951.00	28,530.00
130	Fencing with angle iron post placed at required distance embedded in cement concrete blocks, every 15th post, last but one end post and corner post shall be struted on both sides and end post on one side only and provided with horizontal lines and two diagonals interwoven with horizontal wires, of barbed wire weighing 9.38 kg per 100 m (minimum), between the two posts fitted and fixed with G.I. staples, turn buckles etc. complete. (Cost of posts, struts, earth work and concrete work to be paid for separately). Payment to be made per metre cost of total length of barbed wire used, - With G.I. barbed wire	Mtr	1,000.00	19.60	19,600.00
131	Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre operable length (total length 90 m), having 50 no's rounds per 6 metre length, up to 3 m height of wall with existing angle iron 'Y' shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately)	Mtr	175.00	303.65	53,138.75
132	Providing and fixing G.I. chain link fabric fencing of required width in mesh size 50x50 mm including strengthening with 2 mm dia wire or nuts, bolts and washers as required complete as per the direction of Engineer-in-charge.				
	Made of G.I. wire of dia 4 mm	Sqm	100.00	859.50	85,950.00



Sl. No.	Description of Quantity	Unit	Quantity	Rate (Inclusive of all Taxes)	Amount (Rs.)
133	Providing and Fixing 15 mm thick densified tegular edged eco friendly light weight calcium silicate false ceiling tiles of approved texture of size 595 x 595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanised steel sections (galvanising @ 120 grams per sqm including both side) consisting of main "T" runner suitably spaced at joints to get required length and of size 24x38 mm made from 0.33 mm thick (minimum) sheet, spaced 1200 mm centre to centre, and cross "T" of size 24x28 mm made out of 0.33 mm (Minimum) sheet, 1200 mm long spaced between main "T" at 600 mm centre to centre to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24 x28 mm made of 0.33 mm thick (Minimum) sheet to be inter locked at middle of the 1200x 600 mm panel to form grid of size 600x600 mm, resting on periphery walls /partitions on a Perimeter wall angle pre-coated steel of size 24x24x3000 mm made of 0.40 mm thick (minimum) sheet with the help of rawl plugs at 450 mm centre to centre with 25 mm long dry wall screws @ 230mm interval and laying 15 mm thick densified edges calcium silicate ceiling tiles of approved texture in the grid, including, cutting/ making opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc., wherever required. Main "T" runners to be suspended from ceiling using G.I. slotted cleats of size 25x35x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm G.I. adjustable rods with galvanised steel level clips of size 85 x 30 x 0.8 mm, spaced at 1200 mm centre to centre along main "T", bottom exposed with 24 mm of all T sections shall be pre-painted with polyester baked paint, for all heights, as per specifications, drawings and as directed by Engineer-in-Charge.	Sqm	150.00	1,718.70	257,805.00
134	Providing and fixing removable raised/false access flooring with system and its components of approved make for different plenum height with possible height adjustment up to 50 mm, comprising of modular load bearing floor panels supported on G.I. rectangular stinger frame work and G.I. Pedestal etc. all complete, as per the architectural drawings, as specified and as directed by Engineer-in-charge consisting of: (a) Providing at required spacing to form modular framework, pedestals made out of GI tube of thickness minimum 2 mm and 25 mm outer diameter, fully welded on to the G.I. Base plate of size 100mm x 100mm x 3mm at the bottom of the pedestal tube, G.I. pedestal head of size 75mmx75mmx3.5 mm welded with GI fully threaded stud 16mm outer diameter with two GI Check nuts screwed on the stud for level adjustment up to 50mm, locking and stabilizing the pedestal head in position at the required level. The pedestals shall be fixed to the subfloor (base) through base plate using epoxy based adhesive of approved make or the machine screw with rawl plug. (b) Stringers system in all steel construction hot dipped galvanized of rectangular size 570x20x30x0.80mm thick having holes at both ends for securing the stringers on to the pedestal head using fully threaded screws ensuring maximum lateral stability in all directions, the grid formed by the pedestal and stinger assembly shall receive the floor panel, this system shall provide adequate solid, rigid support for access floor panel, the system shall provide a minimum clear uninterrupted clearance between the bottom of the floor for electrical conduits and wiring etc. all complete as per the architectural drawings, as specified and as directed by the Engineer-in-charge. (c) Providing and fixing Access Floor panel of 600x600x32 mm medium grade Filled Steel anti static high pressure Lamination of 800H grade (FS800H). Access Floor panel shall be steel welded construction with an enclosed bottom pan with uniform pattern of 64 hemispherical cones. The top and bottom plates of Steel Gauges: top 0.6 mm and bottom 0.7 mm fused spot welded together (minimum 64 welds in each dome and 20 welds along each flange). The panel should be Corrosist epoxy coated for lifetime rust protection and cavity formed by the top and bottom plate is filled with Pyrogrip non-combustible Portland cementitious core mixed with lightweight foaming compound. The access floor shall be factory finished with Anti-static High Pressure laminate with Non Warp technology up to 1mm thickness for superior adhesion and Surface flatness within 0.75mm. The panel is to withstand a Concentrated Load of 363 kgs applied on area 25mm x 25mm without collapse in the centre of the panel which is placed on four steel blocks. The panel will withstand and Uniformly Distributed Load (UDL) minimum 1250 kg/sqm and an impact load of 50kg all complete as per the approved manufacturers specification and as per the direction of Engineer-in-charge. All specification must be printed on the side of the panel to ensure the quality of the product.	Sqm	125.00	5,407.15	675,893.75



Sl. No.	Description of Quantity	Unit	Quantity	Rate (Inclusive of all Taxes)	Amount (Rs.)
135	Providing and fixing sliding gate required size as per drg. with wicket gate. The gate frame shall be made of medium duty MS Tube / Dowel angle conforming to relevant IS with welded joints. The gates shall be fabricated with welded joints to achieve rigid connection. The gate frames shall be painted with one coat of approved steel primer and two coats of synthetic enamel paints, supported by two ISMC Box type columns exclusive of light fitting inclusive of conduit fitting, the rate is inclusive of all activities & one coat of red oxide primer & two coats enamel paint (shade as approved by NCRTC) & two coats of paint for ISMC Columns shade as approved by GC/NCRTC (weight of the Gate is approx. 1.0 MT). The gate shall be motorised operated Supply, installation, Testing and commissioning of Motor for the Main Gate) and its accessories safety sensors, bottom wheel for sliding gate, nylon roller, installation charges with two year warranty etc, complete in all respect as per the design and drawing and to the satire to centre with 25 mm long dry wall screws @ 230mm interval and laying 15 mm t	No	1.00	220,000.00	220,000.00
136	Supplying & laying for 90-63 mm Stone aggregates Transformer pit slabs and other area wherever necessary as per direction of engineer - in charge.	Cum	86.00	1,937.60	166,633.60
137	Supplying & laying for 20mm Stone aggregates Transformer pit slabs and other area wherever necessary as per direction of engineer - in charge.	Cum	200.00	1,837.25	367,450.00
138	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910, on 12 mm dia steel bar conforming to IS: 1786, having minimum cross section as 23 mmx25 mm and over all minimum length 263 mm and width as 165 mm 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 manufacturer'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	50.00	487.10	24,355.00
139	Drilling Borewell of 6 1/2"/17" using superfat rig including men and Material with any kind of rock up to a reaching of Good water yield depth of Min 600 and Max 1000 feet including 2.5mm thick MS casing, MS collar, MA cap of ISI Mark and supply and Erection of submersible pump and motor of 5.0/7.5 HP/45 Stage of ISI mark, Supply and fixing of 50 mm dia GI pipe (TATA Make), pump assembly, carrying out Chemical test, approved make CI panel box 1 HP to 7.5 HP to be fixed in metal box with all accessories like supply ,transportation, Fixing and connecting PVC Insulated Cable, electrification and earthing etc complete as per the instructions of Engineer In charge.(necessary Test report & pump, motor warranty card to be furnished as required by Engineer)	No	1.00	310,000.00	310,000.00
140	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :	Meter	150.00	493.10	73,965.00
141	Supplying, filling, spreading & levelling gravels of size range 5 mm to 10 mm, in the recharge pit, over the existing layer of boulders, in required thickness, for all leads & lifts, all complete as per direction of Engineer-in-charge.	Cum	10.00	1,309.00	13,090.00
142	Supplying, filling, spreading & levelling coarse sand of size range 1.5 mm to 2 mm in recharge pit, in required thickness over gravel layer, for all leads & lifts, all complete as per direction of Engineer -in charge.	Cum	20.00	1,309.00	26,180.00
143	Fixing water meter and stop cock in G.I. pipe line including cutting and threading the pipe and making long screws etc. complete (cost of water meter and stop cock to be paid separately).	Each	6.00	670.15	4,020.90
144	Supply water meter (including testing charges) 80mm	Each	6.00	2,030.00	12,180.00
145	Providing and fixing of factory made cable trench covers of M25 grade of concrete with reinforcement of FE 500 of 8mm dia @ 250 c/c in short direction & 3 No's of 10mm dia. longitudinal direction, including providing lifting hooks 16mm dia. M.S bar, the peripheral of cover slab should be provided with flat MS sheet of size 75mm X 3mm edge beading, 10mm hole for draining of water, etc. as per drawing and direction of engineer in charge for following sizes.				
145.1	Cover slab size length from 1200mm to 1600 (L) X 300mm (W) X 75mm (Thick)	Each	325.00	2,062.39	670,276.43
145.2	Cover slab size from 600mm to 1200mm (L) X 300mm (W) X 75mm (Thick)	Each	60.00	1,788.01	107,280.51
146	Supplying, filling, spreading & levelling of stone aggregate of 20 mm size in transformer yard in required thickness as per drawing & direction of engineer-in-charge.	Cum	75.00	1,720.71	129,053.52
147	Supply, filling, spreading & levelling of pebble stone of size 60 to 90 mm in transformer pits in required thickness for all leads & lifts, all complete as per drawing & direction of engineer-in-charge.	MT	136.00	5,321.87	723,774.43
148	Providing & applying Antiweed treatment in equipment yard before laying gravel as per specification and direction of Engineer-in-charge	Sqm	500.00	182.97	91,484.09



Sl. No.	Description of Quantity	Unit	Quantity	Rate (Inclusive of all Taxes)	Amount (Rs.)
149	Execution of item(s) of works which is not covered in said BOQ; as per DSR 2021 for Civil works & DSR2018 for electrical works, specifications & rate given in "Government of India, Central Public Works Department (CPWD), by Director General CPWD, Nirman Bhawan, New Delhi-110011"	LS			1,500,000.00
	Sub Head No.: 17 Electrical Works				-
	Note:				
	All materials should be ISI marked & approved by GC/NRTC/IRCON.				
	Conduit actual measurement shall be considered for payment after the clearing of all openings through steel wire.				
	CONDUIT Tentative MAKE- Indeana, AKG or approved by GC-NRTC-IRCON				
	MCB Tentative make- Legrand, Schneider, L&T or approved by GC-NRTC-IRCON				
	Switch & Sockets Make- Legrand, Schneider, NorthWest or approved by GC-NRTC-IRCON				
	Wire- Polycab, Finolex, Havells or approved by GC-NRTC-IRCON				
150	Supply & Fixing of Heavy Duty FRLS PVC Conduit (2mm thick) along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required. (Ref DAR -1.21, 1.21.1)				
150.1	20 mm conduit (Heavy-2 mm thick)	Meter	517.00	138.18	71,439.06
150.2	25 mm conduit (Heavy-2 mm thick)	Meter	2,902.00	164.06	476,102.12
150.3	32 mm conduit (Heavy-2 mm thick)	Meter	685.00	227.58	155,892.30
	Wiring.				
151	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.				
151.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire (FDA)	Metre	100.00	146.00	14,600.00
151.2	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire (Light circuit)	Metre	2,500.00	167.00	417,500.00
151.3	2 X 4 sq. mm + 1 X 4 sq. mm earth wire (Power Circuit)	Metre	600.00	200.00	120,000.00
151.4	2 X 6 sq. mm + 1 X 6 sq. mm earth wire (AC Circuit)	Metre	500.00	249.00	124,500.00
152	Supply, laying, erecting, testing & commissioning of HDPE pipes of PE 63 grade as per IS : 14333-1996 specification laid to proper slope with necessary specials such as bends, medium tees, neat welding the joints, etc., complete & neat welding the joints etc., including cost of materials, labour, H.O.M of machinery & equipments with all lead and lifts, loading and unloading charges, transportation cost and conveyance of all materials, all other incidental charges etc. complete for successful completion of work as per specifications, and as directed by Engineer -in- Charge.				-
152.1	120 mm Dia pressure @ 6 Kg/Sqcm	Mtr	20.00	240.00	4,800.00
152.2	160 mm Dia pressure @ 6 Kg/Sqcm	Mtr	250.00	358.00	89,500.00
152.3	200 mm Dia pressure @ 6 Kg/Sqcm	Mtr	200.00	498.00	99,600.00
	Switch socket & Other Wiring Accessories.				
153	Supplying and fixing following size/ modules, GI box along with modular base & cover plate for modular switches in recess etc. as required.				
153.1	1 or 2 Module (75mmX75mm)	Each	10.00	243.00	2,430.00
153.2	3 Module (100mmX75mm)	Each	50.00	267.00	13,350.00
153.3	4 Module (125mmX75mm)	Each	40.00	287.00	11,480.00
153.4	6 Module (200mmX75mm)	Each	25.00	333.00	8,325.00
153.5	8 Module (125mmX125mm)	Each	25.00	383.00	9,575.00
153.6	12 Module (200mmX150mm)	Each	10.00	434.00	4,340.00
154	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
154.1	5/6 A switch	Each	250.00	85.00	21,250.00
154.2	2 way 5/6 A switch	Each	10.00	123.00	1,230.00
154.3	15/16 A switch	Each	25.00	132.00	3,300.00
154.4	3 pin 5/6 A socket outlet	Each	25.00	111.00	2,775.00
154.5	6 pin 15/16 A socket outlet Each (Near Indoor AC Unit)	Each	25.00	175.00	4,375.00
155	Supplying and fixing two module stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	Each	10.00	342.00	3,420.00



Sl. No.	Description of Quantity	Unit	Quantity	Rate (Inclusive of all Taxes)	Amount (Rs.)
156	Supplying and fixing 3 pin, 5 A ceiling rose on the existing junction box/ wooden block including connections etc. as required.	Each	50.00	65.00	3,250.00
157	Supplying and fixing extra down rod of 10 cm length G.I. pipe, 15 mm dia, heavy gauge including painting etc. as required. (Note : More than 5 cm length shall be rounded to the nearest 10 cm and 5 cm or less shall be ignored)	Each	10.00	33.00	330.00
158	Numbering of ceiling fan/ exhaust fan/ fluorescent fittings as required.	Each	50.00	48.00	2,400.00
159	Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	Each	10.00	168.00	1,680.00
160	Supplying and fixing 20 A, 240 V, SPN Industrial type socket outlet, with 2 pole and earth, metal enclosed plug top along with 20 A "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	Each	6.00	1,232.00	7,392.00
Distribution Boards					
161.0	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				-
162.0	12 way, Double door Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)	Each	4.00	2,053.00	8,212.00
	8 way (4 + 24), Double door				-
163.0	Supplying and fixing of following ways surface/ recess mounting, vertical type, 415 V, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 A tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCBs (but without MCBs and Incomer) as required. (Note : Vertical type MCB TPDB is normally used where 3 phase outlets are required.)	Each	4.00	4,601.00	18,404.00
164.0	12 way (4 + 36), Double door Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.	Each	4.00	9,828.00	39,312.00
164.1	Single pole	Each	100.00	199.00	19,900.00
164.2	Single pole and neutral	Each	100.00	544.00	54,400.00
164.3	Triple pole and neutral	Each	5.00	1,092.00	5,460.00
165.0	Supplying and fixing of following ways surface/ recess mounting, vertical type, 415 V, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 A tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCBs (but without MCBs and Incomer) as required. (Note : Vertical type MCB TPDB is normally used where 3 phase outlets are required.)				-
165.1	4 way (4 + 12), Double door	Each	2.00	5,651.00	11,302.00
165.2	8 way (4 + 24), Double door	Each	2.00	7,744.00	15,488.00
165.3	12 way (4 + 36), Double door	Each	2.00	9,828.00	19,656.00



Sl. No.	Description of Quantity	Unit	Quantity	Rate (Inclusive of all Taxes)	Amount (Rs.)
166.0	Supplying and fixing following rating, four pole, 415 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				-
167.0	Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB) having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.	Each	6.00	839.00	5,034.00
168.0	63 A Single pole, blanking plate	Each	6.00	2,777.00	16,662.00
	Light & Fixtures	Each	50.00	5.00	250.00
169	Supply Installation Testing and commissioning of pre wired Fluorescent / LED fittings / compact fluorescently fittings of approved make PHILIPS complete with all accessories directly on wall/ceiling including connection with 2.5 sqmm FRLS PVC insulated copper Conductor and earthing etc as required.				-
169.1	AMS Room - PHILIPS Model No : BN308CLED40S-6500L120PSU (wall Hung)	Each	13.00	2,497.50	32,467.47
169.2	Storage Area - PHILIPS Model No : BN100CLED20S-6500L120PSU GR S4 (wall Hung)	Each	8.00	1,478.24	11,825.90
169.3	Cable Cellar - PHILIPS Model No : BN100CLED20S-6500L120PSU GR S4 (wall Hung)	Each	12.00	1,478.24	17,738.85
169.4	Stair Case - PHILIPS Model No : SM251CLED20S-6500L120PSU GR S4 WH (Circular)	Each	12.00	1,857.35	22,288.23
169.5	Battery Room - PHILIPS Model No : WT201CLED44S-6500L120PSU S2	Each	6.00	2,932.55	17,595.29
169.6	Toilet - PHILIPS Model No : SM250CLED12S-6500L120PSU WH	Each	9.00	1,192.35	10,731.13
169.7	CRP Panel Room - PHILIPS Model No : RC380BCLED42S-6500 G6L60W60PSU OD	Each	6.00	2,932.55	17,595.29
169.8	Office cum Meeting Room - PHILIPS Model No : RC380BCLED42S-6500 G6L60W60PSU OD	Each	6.00	2,932.55	17,595.29
169.9	Control Room - PHILIPS Model No : RC380BCLED42S-6500 G6L60W60PSU OD	Each	12.00	2,932.55	35,190.57
169.10	Bulk Head - PHILIPS Model No : WT202WLED10S-CWPSU S2PC	Each	13.00	1,540.39	20,025.04
169.11	Mirror Light - PHILIPS Model No : BN021LED12S6500PSU GR	Each	2.00	577.06	1,154.13
169.12	GIS Hall - PHILIPS Model No : BY 515 P LED 2006S-5700 NB PSU GR	Each	8.00	9,582.60	76,660.78
	GRAND TOTAL AMOUNT FOR EACH RECEIVING SUB-STATION (RSS)				68,332,770.42
A	Shatabdi Nagar RSS				68,332,770.42
B	Modi Puram RSS				68,332,770.42
	Total Amount of (Shatabdi Nagar RSS & Modi Puram RSS)				136,665,540.85



Signature Not Verified

Digitally signed by JAYAKRISHNAN CHANDRAS
Date: 2023.05.18 15:19:08 IST
Location: eProcurement System for Central PSUs