



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



No. IRCON/ B-1200026/ELECT/BNDM/HT AND LT WORKS/OT/1

Date: 23.01.2023

M/s. Gayatri Private Limited,
Gayatri House, Opp. Goyal Intercity
Row-House, Drive-In-Road, Thaltej,
Ahmedabad
E-mail: tender@gayatrigroup.org

Letter of Acceptance

(Kind Attn. : Mr. Gaurang Rameshchandra Patel)

Sub: Design, Supply, Installation, Testing and Commissioning all Electrical HT & LT Equipment's Like 33/0.43 KV Transformer, VCB Panels, APFC Panel, Bus Coupler, H Pole GOS, Excavation and Cable Laying, Fixing Route Markers, all Wiring Works and Lighting Works in Connection with Detachment Free Rake Examination facilities at Exchange Yard of Bondamunda, SER.

Ref: (i) Tender no. IRCON/ B-1200026/ELECT/BNDM/HT AND LT WORKS/OT/1 Date: 23.09.2022.
(ii) Your offer ref. (Bid ID 480181 submitted online on 22.10.2022).
(iii) Technical Bid opened on 28.10.2022.
(iv) Financial Bid opened on 19.12.2022.

1. In reference to the tender document and your offer referred above, Ircon International Limited is pleased to accept your offer for "Design, Supply, Installation, Testing and Commissioning all Electrical HT & LT Equipment's Like 33/0.43 KV Transformer, VCB Panels, APFC Panel, Bus Coupler, H Pole GOS, Excavation and Cable Laying, Fixing Route Markers, all Wiring Works and Lighting Works in Connection with Detachment Free Rake Examination facilities at Exchange Yard of Bondamunda, SER" on the following Terms & Conditions:
2. **Total Cost of work inclusive of GST @18%: Rs. 2,48,57,391.36** (Rupees Two Crore Forty-Eight Lakhs Fifty Seven Thousand Three hundred Ninety one and Thirty Six Paise only) inclusive of all taxes on "FIRM" price basis in accordance with tender terms and conditions issued vide ref. (i) above for Design, Supply, Installation, Testing and Commissioning all Electrical HT & LT Equipment's Like 33/0.43 KV Transformer, VCB Panels, APFC Panel, Bus Coupler, H Pole GOS, Excavation and Cable Laying, Fixing Route Markers, all Wiring Works and Lighting Works in Connection with Detachment Free Rake Examination facilities at Exchange Yard of Bondamunda, SER.
3. Detailed Bill of Quantities (BOQ) is enclosed as **Annexure-I** and detailed Schedule of Quantities is as **Annexure-II**.
4. In terms of tender condition clause no. 16.0 of Special Conditions of Contract, the date of issuance of this Letter of acceptance shall be the date of commencement of work.



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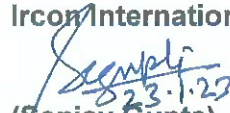


5. **Completion Period:** The work is required to be completed within 6 (Six) months from the date of issue of Letter of Acceptance (LOA).
6. **Payment Terms:** Payment against the order shall be made in accordance with tender clause no. 21 of Special Condition of Contract (SCC).
7. Retention Money shall be deducted as per tender clause no. 11 of SCC and 8.3 of GCC.
8. In terms of tender condition clause no. 11 of SCC and Clause 8.1 (iv) of GCC, a total performance security **Rs. 8,31,936/- (Rupees Eight Lakhs Thirty-One Thousand Nine Hundred and Thirty-Six)** of Performance Security for an amount of 3% of the contract value i.e. Rs. 7,45,722/- (Rupees Seven Lakh Forty-Five Thousand Seven Hundred and Twenty-One Only) Plus additional performance security @ 0.31% of the tender value i.e Rs. 86,214/- (Rupees Eighty Thousand Two Hundred Only) shall be submitted to the office of Chief General Manager (Electrical)/IRCON International Ltd., C-4, District Centre, Saket, New Delhi, within 21 days of issuance of this letter.
9. This letter will constitute a legal and binding contract between Ircon International Limited and M/s. Gayatri Private Limited, till such time the formal contract agreement is signed.
10. You will enter into and execute the contract agreement within 28 days from the date of issue of this letter with Chief General Manager (Electrical)/IRCON International Ltd., C-4, District Centre, Saket, New Delhi-17. You are requested to arrange the stamp papers of requisite value as per the prevailing laws for signing of the agreement in terms of Clause No. 12.5 of the General Conditions of Contract.
11. You are requested to contact immediately to Chief General Manager (Electrical)/IRCON International Ltd., C-4, District Centre, Saket, New Delhi-17, for execution of works under this contract.
12. All other terms and conditions shall be as per the tender document.

This letter is being issued to you in duplicate, one copy of which may please be returned duly stamped and signed as a token of your acceptance.

Thanking you.

Yours faithfully,

For & on behalf of
Ircon International Limited

(Sanjay Gupta)
Chief General Manager/Electrical



Encl.: BOQ and SOR

Copy to: i. CGM/PH, IRCON,
ii. Jt. General Manager /Finance/IRCON.
iii. CGM/works-II



Bill Of Quantity (BoQ) **Annexure-I**

Name of Work :-

Design, Supply, Installation, Testing and Commissioning all Electrical HT & LT Equipment's Like 33/0.43 KV Transformer, VCB Panels, APFC Panel, Bus Coupler, H Pole GOS, Excavation and Cable Laying, Fixing Route Markers, all Wiring Works and Lighting Works in Connection with Detachment Free Rake Examination facilities at Exchange Yard of Bondamunda, SER.

Contract No :- IRCON/B-1200026/ELECT/BNDM/HT AND LT WORKS/OT/1

M/s GAYATRI PRIVATE LIMITED - AHMEDABAD

Name of the Bidder/ Bidding

Firm / Company :

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1.000 Job

2,48,57,391.36

Design, Supply, Installation, Testing and Commissioning all Electrical HT & LT Equipment's Like 33/0.43 KV Transformer, VCB Panels, APFC Panel, Bus Coupler, H Pole GOS, Excavation and Cable Laying, Fixing Route Markers, all Wiring Works and Lighting Works in Connection with Detachment Free Rake Examination facilities at Exchange Yard of Bondamunda, SER.

2,48,57,391.36

Total in Figures

Quoted Rate in Words

INR Two Crore Forty Eight Lakh Fifty Seven Thousand Three Hundred & Ninety One and Paise Thirty Six Only



SUMMARY

(Annexure-II)

Descriptions	Amount
Schedule –E1 – Electrical HT Works	Rs.1,13,62,248.92
Schedule –E2 – Electrical LT Works	Rs.1,22,06,319.00
Total Excluding GST	Rs.2,35,68,567.92
Total Including GST @ 18%	Rs.2,78,10,910.15
Offered Amount (10.62 % below) Including GST @ 18%	Rs. 2,48,57,391.36 (Rupees Two Crore Forty-Eight Lakhs Fifty Seven Thousand Three hundred Ninety one and Thirty Six Paise only) inclusive of GST

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Schedule of Rates

Name of Work:- Design, Supply, Installation, Testing and Commissioning all Electrical HT & LT Equipment's Like 33/0.43 KV Transformer, VCB Panels, APFC Panel, Bus Coupler, H Pole GOS, Excavation and Cable Laying, Fixing Route Markers, all Wiring Works and Lighting Works in Connection with Detachment Free Rake Examination facilities at Exchange Yard of Bondamunda, SER.

Schedule E1(Electrical HT Work)

S. N.	Description	Unit	Rate (In Rs)	Qty.	Amount (In Rs)
1.	Design, drawing, Supply, erection with foundation , testing and commissioning of copper wound 500 KVA energy efficient distribution transformers as per following:	Set	1362802.5	1	1362802.5
	Rated voltage (Line to line):33/0.43kV				
	Type: Oil immersed				
	Method of cooling: ONAN				
	Number of phases: Three. Rated Frequency:50HZ				
	Vector Group:DYN11				
	Service: Outdoor installation				
	Range of taps: +5% to -10% @ 2.5%				
	Percentage impedance:5.0%				
	System fault level:18.1kA for 1sec				
	System Earthing: Solidly earthing				
	Terminal arrangement 33 kV Side:3c x 120 Sq mm 33kV,Al, XLPE cable				
	LT Side: 4c x 630 Sq mm 1.1 kV grade ,Al, XLPE cable				
	The transformers shall be provided with fittings & accessories along with marshalling box without foundation as listed in the Technical Specification.				
	Make: Schneider, ABB, BHEL, and Crompton.				
2.	Design, drawing, Supply, erection (with support structure/foundation), testing and commissioning of Indoor Main 33 KV, 1250 Vacuum Circuit Breaker Panel (33kv switchboard) for Electrical substation with internal copper wiring , supporting structure/foundation, consisting 33 KV 4 nos. VCB , (2 nos. incomer , 2 No. for outgoing) complete with LED, indicating lamp, Digital Voltmeter, Ammeter, KWH, Digital PF meter, Multifunction meter, Frequency Meter, Temp. meter, auxiliary relay, earth fault relay ,Over current Relay , all	Set	4521220.86	1	4521220.86

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	other relay such as for WTI, OTI for metering and protection with CT and PT, digital clock with complete with accessories suitable for SCADA operation.				
3.	Design, drawing, Supply, erection (with support structure/foundation), testing and commissioning of Lead acid maintenance free (VRLA) station battery of 24 V, DC DB with Float charger at 2.7 V/per cell with solid state fully controlled 100AH capacity having suitable output of 15A as per requirement of the system.	Set	282472.15	1	282472.15
4.	Capacitor Panels (APFC Panel)				
	Design, Supply, erection (with support structure/foundation), testing and commissioning of the extensible cubicle indoor mounting, dust & vermin proof, floor mounted, suitable for IP42 sheet steel clad, Capacitor Panel suitable for use on 3 phase 415 V 50 Hz 4 wire system as per specification including all other connected accessories etc. Incoming: 400 A, 415 V, 4 Pole 35 kA MCCB within built thermal magnetic release for short circuit, over current protection with CTs- 1 No. Automatic Power Factor Relay (APFCR) with 4 Pole contactor- 1 No: 600A TPN Copper Bus Bar- 1 Set Outgoing: 50 kVAR Resistor Type Capacitor Bank with 50A Contactor/ MCB for switching ON/OFF complete as required - 4 Set, 25 kVAR Resistor Type Capacitor Bank with 50A Contactor/ MCB for switching ON/OFF complete as required - 2 Set., Indication lamps for On/OFF for both status of capacitor operation -4 set	Set	947313.52	1	947313.52
5.	Design, supply, erection (with support structure), testing and commissioning of cubicle type 14SWG LT panel (Indoor type) with 1200 amps sectionalized electrolytic copper bus bar as per specification. All the (incoming only) ACB are should be provided with LT Tri-vector digital meters with Ammeter, Voltmeter, selector switches and RYB indication lamps. LT panel board should confirm to IS-8263, ACB's and MCCB's should be confirming to IS-2516. The digital type KWH meter with CTs of suitable capacity with RS 485 port for incoming supply and digital type KWH meter with CTs of suitable capacity for each out going feeders including with all other connected accessories etc	Set	2187685.60	1	2187685.60
	Incoming:				
	1250A, 4P, 50 kA 4 pole ACB microprocessor based EDO with microprocessor released with Over current, short circuit, earth fault protection. (Both ACB's should interlock mechanically and electrically) Type - 2 Nos., Change over: 1 X 800 Amps 4 pole on load change over switch, 1 X 800 Amps 4 pole Double Break contact MCCB. (For DG				

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	Bus coupler: 1 No 1250 A 415 V 50 KA, 4 Pole ACB draw out complete with electrically & mechanically interlocked.				
	Outgoings:				
	400 A, 4Pole 50 kA MCCB -4Nos.				
	250 A, 415 V 4 Pole 36 kA MCCB -4 Nos.				
	200 A, 415 V 4 Pole 36 kA MCCB -4Nos.				
	125 A, 415 V 4 Pole 25 kA MCCB s -4Nos.				
6.	Supply, erection (Laying with sand cushioning, bricks etc) , testing & commissioning of 3 core 120 Sq. mm 33 kV Grade XLPE insulated PVC sheathed, Al armoured cable as per IS: 7098 complete as per spec. as required.	mtr.	1858.00	600	1114800
7.	Supply, Erection, Testing and Commissioning of 33 KV Heat shrink outdoor end termination jointing kit for Al XLPE 3C X 120 mm sq. Cable	Set	34182	3	102546
8.	Supply, Erection, Testing and Commissioning of 33 KV Heat shrinkable straight through jointing kit for Al XLPE 3C 120 mm sq. Cable complete with all accessories.	set	56325	1	56325
9.	Supply, Erection, Testing and Commissioning of 33 KV Heat shrinkable indoor termination jointing kit for Al XLPE 3C X120 mm sq. Cable complete with all accessories.	Set	25983	3	77949
10.	Supply, erection, testing & commissioning of earthing with copper earth plate 600mmX600mmX3mm thick including accessories, and providing masonry enclosures with cover plate having locking arrangement and watering pipe of 2.7 meter long etc. charcoal/coke and salt as required.	no.	11794	4	47176
11.	Supply & fixing of Fire Extinguisher (4 Liter) for B Class Fire in sub-stations as per IE Rules and conformity to Fire regulations as required.	Set	3497.28	4	13989.12
12.	Supply & fixing of i. shock treatment chart duly framed (Bilingual Hindi & English	Set	43415.46	1	43415.46
	ii. Tool Box:1Set make Tapariya, Jhalani,etc.with following items:				
	a. Open Jaw spanner -12 Nos. 6/7, 8/9,10/11, 12/13, 14/15, 16/17, 18/19, 20/22, 21/23, 24/27, 25/28, 30/32)				
	b. ring spanner-12 nos.6/7, 8/9,10/11, 12/13, 14/15, 16/17, 18/19, 20/22, 21/23, 24/27, 25/28, 30/32)				
	c. Ball Hammer-01 nos.				
	d. Hexa frame- 01 nos.				

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	e. C. Plier 210mm-01 nos.				
	f. Chiesel 22 x 200mm-01 nos.				
	g. Screw driver 200mm-01 nos.				
	h. Round File 200mm-01 nos.				
	i. Flat file 150mm-01 nos.				
	j. Ratchet socket spanner (Ratchet-01 Nos. ,Handle-03 ,Socket-01 Nos)-01 set }				
	iii. Key Board: 1 Set				
	iv. First Aid Box: 1 Set				
	v. Fire /Sand Buckets set : 1Set with stand				
	vi Pair of Insulated rubber hand gloves: 3Set				
	vii. Set Earthing rods: 1 Set				
	viii. HT and LT Danger Board: 1 Set				
13.	Supply & laying insulating rubber mat (Non skid type) of size 25mm thick, 2X1 Meter as per IS complete as required.	no.	3134.02	5	15670.10
14.	Design, drawing and fixing of Substation layout chart board made of GI sheet and rigid frame and fixing.	no.	808.04	1	808.04
15.	Supply & Fixing of 6 mm thick MS chequered plate including the MS angle support on the trench of the sub-station equipment complete as required	Kg	115.42	1750	201985
16.	Design, drawing, Supply, erection, testing and commissioning of Fire detection & Alarm System for unit substation each set consisting of Smoke detectors 4 nos, Normal Beam Heat detectors 4 nos, Manual call point response - 1 no, Audio visual alarm 1 no, Control Module 1 no, Fire Alarm Control Panel with Display- 1 no, Loop interface board(signaling line Circuit) - 1 no, Fire Alarm Repeater/ annunciator panel - 1 no, Response Indicator - 1 no, Ethernet bridge (If the PLC Panel's ethernet bridge can be utilised, it need not be separate) with all connected accessories like wiring, cabling, clamping with supporting structure/ foundation etc.	Set	203914.57	1	203914.57
17.	Supply ,erection ,testing and commissioning of PVC insulated copper conductor 10 core 2.5 Sq.mm armored control cabling/ wiring in open duct/ pipes/ on surface/in ground etc. as required for complete controls/ audio visual annunciation/ trip system / watering system etc. for above.	mtr	293.9	25	7347.5
	H Pole GOS Assembly for HT (33 KV 3Ph.):				
18	Design, drawing, Supply, erection, testing and commissioning of 4 Pole structure by 04 nos. of RSJ poles 100X116-11 meters. Long with nut , bolt, washer, insulator, all connected works, supporting	set	141749.46	1	141749.46

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	structure, pit/foundation, accessories etc.				
19	Design, drawing, Supply, erection, testing and commissioning of HT 33KV isolating arrangement with 800 A capacity AB switch vertical mounting type of approved make fixed on 4 pole structure with gang operated rod including all connected accessories etc.	set	11146.20	2	22292.40
20	Design, drawing, Supply, erection, testing and commissioning of 33 kv drop out fuse of approved make and operated rod 4 pole structure including all connected accessories for this GOS etc	set	5393.32	2	10786.64
	Total of Schedule E1 (Rs.)				11362248.92

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Schedule E2 (Electrical LT Work)

S. N.	Description	Unit	Rate (In Rs)	Qty.	Amount (In Rs)
	Wiring Work				
1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.	Point	990	260	257400
2	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 steel conduit as required. (Cost of conduit included).				
(i)	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	Meter	229	200	45800
(ii)	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	Meter	263	200	52600
(iii)	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	Meter	356	200	71200
(iv)	2 X 10 sq. mm + 1 X 6 sq. mm earth wire	Meter	426	200	85200
(v)	4 X 4 sq. mm + 2 X 4 sq. mm earth wire	Meter	406	800	324800
3	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.(Cost of conduit included).				
(i)	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	Meter	167	200	33400
(ii)	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	Meter	200	500	100000
(iii)	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	Meter	249	80	19920
(iv)	2 X 10 sq. mm + 1 X 6 sq. mm earth wire	Meter	328	50	16400
4	Supplying and fixing of following sizes of steel conduit along with accessories in surface/recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required.				
(i)	25 mm	Meter	165	100	16500
(ii)	32mm	Meter	203	100	20300
(iii)	40mm	Meter	292	200	58400
	Cable, Cable Tray, Cable trench, Root marker etc				
5	Supply, laying (As per TS), testing and commissioning of XLPE insulated PVC sheathed armoured underground aluminium cable of graded 1.1KV for working voltage upto 1100 volts conforming to IS 7098				

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	with upto date amendment as detailed given below (with making end termination with brass compression gland and lug as required).				
(i)	4 core 630 sq mm Aluminium Conductor	Meter	4996	50	249800
(ii)	4 core 240 sq mm Aluminium Conductor	Meter	2036	800	1628800
(iii)	4 core 150 sq mm Aluminium Conductor	Meter	1787	300	536100
(iv)	4 core 70sq mm Aluminium Conductor	Meter	726	500	363000
(v)	4 core 25 sq mm Aluminium Conductor	Meter	272	500	136000
(vi)	4 core 16 sq mm Aluminium Conductor	Meter	237	1800	426600
6	Excavation of Cable trench in soil of size 450mm X 1250mm and back filling to original arrangement etc.	Meter	355	930	330150
7	Horizontal drilling of bores for laying of LT/HT cable in road and track	Meter	2575	10	25750
8	Supplying and fixing cable route marker with 10 cm X 10 cm X 5 mm thick G.I. plate with inscription there on, bolted /welded to 35 mm X 35 mm X 6 mm angle iron, 80 cm long and fixing the same in ground as required.	Each	383	25	9575
9	Supplying and installing of 300 mm widthX50 mm deep X 1.6mm of perforated painted with powder coating M.S. cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts& nuts, painting suspenders etc. as required.	Meter	621	100	62100
	Lighting work				
10	Supply, erection at the existing truss, testing and commissioning of High bay industrial indoor luminaire LED 145W Green Bay Gen II Similar to Philips cat no. BY400V LED145S SY110 PSU S2 FG WH with all mounting accessories, etc. as required. Make shall be as per T.S.	Nos.	21441	100	2144100
11	Supply, erection, testing & commissioning of 60 W, LED based Roadway Light Fitting complete with lamp (Crompton model no. LSTP-60-CDL or equivalent). Make shall be as per T.S.	Nos.	2638	4	10552
12	Supply, erection, testing and commissioning of LED Tube Light, 18 W, T5 fitting complete with lamp and accessories. Havells Model no. REGALBATTENT8UPT01x22WDSBSWH for batten and TITANIANE01213TBSSTL18WLED865SPC for tube light or equivalent. Make shall be as per T.S.	Nos.	1110	100	111000
13	Supply, installation, testing & commissioning of Surface/ Recessed mounted LED Based 40 watt, luminaries fitting 2x2 feet complete. Fixture shall be Crompton model no LCTAR3N-40-CDL or equivalent. Make shall be as per T.S.	Nos.	13513	5	67565
14	Supply, erection, testing and commissioning of LED mirror light, Make- Philips, Model no. 30973 or similar. Make- Philips, Bajaj.	Nos.	2661	2	5322
15	Supply, installation, testing & commissioning of LED Based 40 watt, truss mounted luminaries fitting complete. Luminaries should be IP 65 protection; with Heat resistant glass & mounting arrangement etc. fixture shall be Crompton model no LWVLT-40-CDL or equivalent. Make shall be as per T.S.	Nos.	3000	12	36000



16	Supply, erection, testing and commissioning of LED Tube Light, 2X18 W, T5 fitting complete with lamp and accessories. Havells Model no. REGALBATTENT8UPT02x22WDSBSWH for batten and TITANIANE01213TBSSTL18WLED865SPC for tube light or similar. Make shall be as per technical specification.	Nos.	2140	20	42800
17	Supply, erection, testing & commissioning of industrial bulk head luminaries of 10 W LED M/s. Havells model No. LHEOAOP7UZ6W010 lamp of 6000K with all other connected accessories etc. or equivalent model of approved list.	Nos.	2100	10	21000
18	Supply, erection, testing and commissioning of LED type Light (Crompton model no. LPTO-40CDL or equivalent) for Gate/Mini pole light. Make shall be as per T.S.	Each	13513	2	27026
Lightning work					
19	Providing and fixing of lightning conductor finial, made of 25 mm dia 300 mm long, G.I. tube, having single prong at top, with 85 mm dia 6 mm thick G.I. base plate including holes etc. complete as required.	Each	448	4	1792
20	Fixing of lightning conductor finial (single prong) with base plate including holes etc. complete as required.	Each	280	4	1120
21	Jointing copper / G.I. tape (with another copper/ G I tape, base of the finial or any other metallic object) by riveting / nut bolting/ sweating and soldering etc as required.	Each	93	8	744
22	Providing and fixing G.I. tape 20 mm X 3 mm thick on parapet or surface of wall for lightning conductor complete as required.(For horizontal run)	Meter	104	470	48880
23	Providing & fixing the GI tape 20mmX3mm thick on parapet or surface of wall for lightening conductor (vertical run) as required.	Meter	163	50	8150
24	Supply, erection and Commissioning of G.I. Pipe bracket for outdoor various light fitting 20/40 mm medium 'B' class GI pipe with suitable 40 x 6 mm M.S Clamp, Nuts, and bolts for bracket fitting.	Nos.	1014	4	4056
Distribution board/Feeder Pillar/Junction Box					
25	Supply, erection, testing and commissioning of main LT panel complete with 400Amps TPN MCCB ,35KA-1 No., 400Amps, 3-phase changeover switch-1 No., 200 Amps MCCB,35KA-2 No., 100Amps,TPN MCCB ,35KA-5 No., 63 Amps TPN MCB -4, 32 Amps TPN MCB- 4 Nos. Digital A/M 0 to 600Amps, with CT Digital V/M 0-600V, Digital clock-1 No.,3PH,KWH meter-400A with CT-1set, Selector switch for A/M &V/M, freq. meter -1No, P/F meter-1No. The panel should made from 2mm/14SWG CRCA sheet powder coated indoor floor mounted with required size of copper Bus Bar, insulator, measuring instrument, including all connecting material, foundation etc as required.	each	388645	4	1554580
26	Supply, erection, testing and Commissioning of 4 way (4 + 12), Double door, 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, foundation etc. as required. (But without MCB/RCCB/Isolator)	Nos.	3068	8	24544

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27	Supply, erection, testing & commissioning of 3P, 100A DB pillar mounted O/D type, Power coated made from 2.0 mm/14SWG CRCA sheet complete with 3 Ph, TPN MCB 63A- 2 nos. and 5 pin 63A 3 ph socket-1 no., LED indicator I/C & O/G O/L's for pre-cooling, welding with required size of copper Bus Bar, insulator, measuring instrument, selector switch as required including all connecting material, foundation etc as required.	Nos.	14350	20	287000
28	Supply, erection, testing & Commissioning of Metal clad plug & socket (5 pin) Board with 32A, 440V, (3P + E) MCB, with encloser, foundation etc as required.	Nos.	1686	10	16860
29	Supply, erection, testing & Commissioning of 3 phase, 4/6-way Vertical D/Door D.B. Complete with 125-A MCCB TPN-1 No. (for I/C), 63A TPN MCB-5 No., (for O/G) with copper busbar, foundation etc as required .	Each	56779	2	113558
30	Supply, erection, testing & Commissioning of 3 phase, 4-way D/Door D.B. Indoor/Outdoor type For area lighting and shop lighting Complete with 63-A MCB TPN-1 No., 32A SP MCB-6 No., 16/20A SP MCB-6 No., Timer, selector switch, foundation etc as required.	Set	14350	25	358750
Earthing Work					
31	Earthing with G.I earth pipe 4.5 mt. long 40mm dia including accessories and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. including providing salt and charcoal for pipe earth electrode as required.	Set	5308	20	106160
32	Providing & fixing hot dip galvanized iron strip from main equipment and earth pit with 50mm x 6mm strip complete as required.	Meter	262	100	26200
33	Providing and fixing 25 mm X 5 mm copper strip on surface or in recess for connections etc. as required.	Meter	1844	50	92200
34	Providing and laying earth connections from earth electrode with 4.00 mm. Dia copper wire in 15 mm. dia. GI pipes from earth electrode as required.	Meter	257	50	12850
35	Providing and fixing 4mm dia. copper wire on surface or in recess for loop earthing etc as required.	Meter	108	150	16200
Ceiling Fan/Exhaust Fan/Air Circulating fan					
36	Supply, erection, testing and commissioning of air circulator wall mounting brackets fan blade 600 mm sweep similar to Crompton price catalogue no AC600WALL-1 with fixing up at suitable height with foundation bolt and clamp as per requirement. Make shall be as per T.S.	Nos.	11988	60	719280
37	Supply, erection, testing & commissioning of 1400mm sweep ceiling fan low voltage Havells model no SS-390 or equivalent with electronic regulator. Make shall be as per T.S.	Each	2780	40	111200
38	Supply, installation, testing & commissioning of Exhaust Fan suitable for 230V, 50Hz supply. Supply of 380 mm sweep, 1400 rpm, A.C. Exhaust fan of Model Supreme DLX HD of Bajaj make or Equivalent. Make shall be as per TS.	Nos.	4583	10	45830
39	Supply, installation, testing & commissioning of 400mm sweep size wall mounted fan suitable for 230V, 50 Hz, built in regulator with other connected accessories. Model Bajaj-Neo Spectrum or equivalent. Make shall	Nos.	3850	8	30800

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	be as per TS.				
	Switch/Socket/MCB/Junction Box				
40	Supply, fabrication, modification, painting, erection & testing of 3 phase Copper Bus Bar mounted J.B. suitable for 300A capacity Metal Enclosure Box.	Each	5076	1	5076
41	Supply, erection, testing and commissioning of MS water Tight Junction Boxes on Wall/poles complete with suitable cable Terminal Block. (As per Railway Drg.)	Each	831	100	83100
42	Supply, fixing , testing & commissioning of 63A four pole C series MCB	Nos.	2777	2	5554
43	Supply, fixing , testing & commissioning of 40A double pole C series MCB	Nos.	2095	2	4190
44	Supply, fixing , testing & commissioning of 32A double pole C series MCB	Nos.	556	2	1112
45	Supply fixing , testing & commissioning of 25A double pole C series MCB	Nos.	556	6	3336
46	Supply fixing , testing & commissioning of 20A double pole C series MCB	Nos.	556	6	3336
47	Supply fixing , testing & commissioning of 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.				
(i)	Single Pole	Each	199	48	9552
(ii)	Triple pole and neutral	Each	1092	6	6552
48	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required	Each	401	65	26065
49	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	Each	495	18	8910
50	Supplying and fixing 3 pin 5/6 amps modular socket outlet & 5/6A switch modular type on existing modular plate, switch box including connection, testing and commissioning etc. as required.	Each	196	70	13720
51	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	1232	5	6160
52	Supply, erection, testing & commissioning of 32A / 3 Phase industrial Plug & Socket with 32A TPN MCCB and loop in loop out 4 way connector. The rate quoted shall include the cost of enclosure and erection on site including supporting and earthing arrangement	Each	14350	2	28700
	PVC/GI/RCC/HDPE Pipe				
53	Supply and erection of GI pipe 150mm Diameter of 'B' class.	Meter	1687	10	16870
54	Supplying and fixing of following sizes of Medium class PVC conduit along with accessories in surface/recess				

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	including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required.				
(i)	25 mm	Meter	90	100	9000
(ii)	32mm	Meter	92	60	5520
(iii)	40mm	Meter	130	20	2600
55	Providing, laying and fixing following of 50 mm diameter GI pipe (medium class) in ground complete with G.I. fittings including trenching (75 cm deep) and re-filling etc as required	Meter	536	30	16080
56	Fabrication, supplying and erection 50 mm dia GI pipe of approved shape for gate light completed as required.	Each	1169	2	2338
	Miscellaneous Item				
57	Supply, erection, testing & commissioning of Call Bell suitable for 230V AC Supply.	Each	92	2	184
58	Supply, erection, testing & commissioning of 5 star, 1.5 Ton Inverter A.C. (Hitachi model no. RSB518HBEA or equivalent) with iron stand and 5 KVA voltage stabilizer (voltage range 150V to 285V) of copper winding. Make of A.C. & voltage stabilizer shall be as per T.S.	Nos.	50235	2	100470
59	Design Engineering, supply, Installation, Testing & Commissioning of 750mm dia Solar Light Pipes with all accessories for lighting as per tender specification.	Each	46599	20	931980
	Total of Schedule E2 (Rs.)				12206319

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Signature Not Verified

Digitally signed by JAYAKRISHNAN CHANDRAS
Date: 2023.05.09 12:31:49 IST
Location: eProcurement System for Central PSUs