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No.: EL/EOI/2868

Date: 13/02/2025

EXPRESSION OF INTEREST [EOI]

"CSR Work for Allotment of Community Hall cum School at Maheshwari Nagar, Gandhidham: Construction of First Floor-Electrical Work thereof."

(This EOI is issued to elicit Expression of Interest from the parties interested in the work and does not constitute any binding commitment from the Deendayal Port Authority to proceed with the work or invite any or all the parties in the subsequent bidding process. The Open Tenders will be issued subsequently.)

Executive Engineer (Electrical), DPA invites Expression of Interest for the work of "Providing office accommodation port staff at outside cargo jetty area- Electrification work thereof" from the reputed firms from those who have executed similar work in Government / Public Sector and other leading private organizations. The Expression of Interest (EOI) documents containing details of Scope of Work and Technical Specifications are enclosed herewith.

The interested firms are requested to submit their Expression of Interest (EOI) for thesaid work in BOQ format as enclosed at Annexure I. The EOI shall be submitted to the office of the undersigned on or before 19/02/2025. A soft copy of EOI is also acceptable through e-mail Id <u>deepak.hazra@deendayalport.gov.in</u> &

-/sd

Executive Engineer (E) Deendayal Port Authority

SCOPE OF WORK

The Specification is intended to cover the CSR Work for Allotment of Community Hall cum School at Maheshwari Nagar, Gandhidham: Construction of First Floor-Electrical Work thereof. The works will be carried out simultaneously with Civil work, which includes electrical part i.e. Supply, Installation and Commissioning of Load Point panel, Ceiling Fans, LED Lights fittings/ internal concealed/surface wiring, the work shall be executed as per IER & to the satisfaction of the Engineer-in Charge. For installation of equipment, the contractor shall arrange all types of tool & tackles. The contractor shall prepare the proposed wiring diagram before execution of work & same shall be submit to EIC. However, after successfully completion of work same shall be handed over in two sets details auto cad wiring drawing, relevant test certificate of the material used.

TECHNICAL SPECIFICATION

Technical Specification No. 1:

This includes supply at site 1.1 KV grade, Aluminum conductor, XLPE insulated armored cable confirming to IS: 7098 (Part-I) 1985 with up to date amendments and of approved make with ISI mark. The cable shall have marking/embossing at the interval of every meter showing its progressive length. The contractor shall produce the routine test certificate during supply of cable at site. The rate shall inclusive of all taxes (excluded GST), duties, packing, forwarding, insurance, and transportation and unloading at site of work etc.

(a) 4CX 6sq.mm.

Technical Specification No. 2:

- This includes laying of cable size up to size of cable up to 4 core x 6 Sq.mm LT armored aluminum Conductor XLPE Cable of 1.1KV Grade through.
 - i). on wall Through Saddle /Clamps: -This includes lying of single length cable of size 3.5C/4.0 core x 6sq.mm LT armored aluminum Conductor XLPE Cable of 1.1KV Grade (excluding supply of cable) on existing wall/cement structure. The G.I. Saddle set with base & Clamps shall be provided of suitable size (with respect to cable outer diameter) made from Heavy duty G.I. flat 25 x 3 mm with heavy duty G.I. Nut bolts/heavy duty screws for clamping. The base shall be fixed rigidly on wall/cement structure through cemented wooden gutties at 0.50 mtr. Intervals & the cable shall be laid on 3mm thick G.I. saddle base on wall/cement structure and clamped rigidly by G.I. screwing/bolting of clamps. The work includes with all materials and labour as directed by Engineer-in-charge.

Technical Specification No. 3:

The item includes providing & fixing concealed wiring for single phase sub-circuit from the main switch /meter /DBs / MCBs to the switchboard with FRLS, 1100 Voltage grade, single core stranded copper conductor wire of size 2.5 sq. mm. for phase & neutral wire and 1.5 Sq.mm continuous stranded copper conductor wire for earth to be laid through PVC Round Pipe of suitable of Medium Mechanical Strength (MMS) type and other accessories such as Tee, junction box, inspection bends, elbow etc. of approved make. The proper size of grew shall be prepared by contractor on wall/ceiling as case may be & the conduit pipe shall be laid through prepared grove and incase of new construction the pipes shall be laid during reinforcement work. After laying of pipe the grove shall be closed with mixture of cement & sand and to match with existing surface of wall/ceiling. Complete work consists of necessary wiring connections and earth linking at both the ends with all materials and labour as directed by Engineer-in-charge.

Technical Specification No. 4:

This includes providing & fixing concealed wiring for A.C point with FRLS, 1100 Voltage grade, single core stranded copper conductor wire with IS: of size 4.0 sq. mm. for phase & neutral wire and 2.5 Sq.mm continuous stranded copper conductor wire for earth to be laid through PVC Round Pipe with IS: of size 25 mm Diameter of Medium Mechanical Strength (MMS) type and other accessories such as Tee, junction box, inspection bends, elbow etc. of approved make. The proper size of grove shall be prepared in old construction by contractor on wall/ floor and the conduit pipe shall be laid through prepared grove in such case on the ceiling portion the pipe is to be laid on the false ceiling by clamping properly. But for new construction the pipes shall be laid during reinforcement work. After laying of pipe the grew shall be closed with mixture of cement & sand and to match with existing surface of wall/ceiling.

Technical Specification No. 5:

The item includes providing & fixing concealed wiring for Modular light/tube/bell point from switchboard with FRLS, 1100 Voltage grade, single core stranded copper conductor wire with IS: 694/1990 of size 1.5 sq. mm. for phase & neutral wire and 1.0 Sq.mm continuous stranded copper conductor wire for earth to be laid through PVC Round Pipe of size 20 mm Diameter of Medium Mechanical Strength (MMS) type and other accessories such as Tee, junction box, inspection bends, elbow etc. of approved make. The proper size of grove shall be prepared in old construction by contractor on wall/ floor and the conduit pipe shall be laid through prepared grove in such case on the ceiling portion the pipe is to be laid on the false ceiling by clamping properly. But for new construction the pipes shall be laid during reinforcement work. After laying of pipe the grove shall be closed with mixture of cement & sand and to match with existing surface of wall/ceiling/ floor also in case of false ceiling the pipe shall be properly clamped over the ceiling. The work consists providing & fixing of one Module Bell Push/SP switch 6A x 250V with spark shield ISI mark and to meet specifications of IS & 3 plate Ceiling Rose/Angle Holder made from polycarbonate on suitable size of PVC box with cover. The PVC unbreakable concealed box for required modules shall be embedded properly in the wall and the switches shall be fixed on Modular Plates for required Modules on the embedded box. The complete work consists necessary wiring connections and earth linking at both the ends with all materials and labour as directed by Engineer-in-charge.

Technical Specification No. 6:

The item includes providing & fixing concealed wiring for Modular fan point from switchboard with FRLS, 1100 Voltage grade, single core stranded copper conductor wire of size 1.5 sq. mm. for phase & neutral wire and 1.0 Sq.mm continuous stranded copper conductor wire for earth to be laid through PVC Round Pipe of size 20 mm Diameter of Medium Mechanical Strength (MMS) type and other accessories such as Tee, junction box, inspection bends, elbow etc. of approved make. The proper size of grove shall be prepared in old construction by contractor on wall/ floor and the conduit pipe shall be laid through prepared grove in such case on the ceiling portion the pipe is to be laid on the false ceiling by clamping properly. But for new construction the pipes shall be laid during reinforcement work. After laying of pipe the grove shall be closed with mixture of cement & sand and to match with existing surface of wall/ceiling. The work consists providing & fixing of one module SP switch 6A x 250V with spark shield with ISI mark and to meet specifications of IS, 2 module Step cut electronic fan regulator with rotary steps & 3 plate Ceiling Rose made from polycarbonate on suitable size of PVC box with cover. The PVC unbreakable concealed

box for required modules shall be embedded properly in the wall and the switches shall be fixed on Modular Plates for required Modules on the embedded box. The complete work consists necessary wiring connections and earth linking at both the ends with all materials and labour as directed by Engineer-in-charge.

Technical Specification No.7:

The item includes providing & fixing half Modular point in existing switch board with FRLS, 1100 Voltage grade, single core stranded copper conductor wire with IS of size 1.5 sq. mm. for phase, neutral & earth. The work consists providing & fixing of one module SP switch 6A x 250V with spark shield with ISI mark and to meet specifications of IS, and 2 Module Modular 2 in 1 socket 6A x 250V with shutter made from polycarbonate on existing modular plate (by considering 3 extra modules for half point in point wiring for light/fan/tube/bell point). The complete work consists necessary wiring connections and earth linking with all materials and labour as directed by Engineer-in-charge.

Technical Specification No. 8:

The item includes providing & fixing full Modular point in with switch board & socket with FRLS, 1100 Voltage grade, single core stranded copper conductor wire with IS of size 1.5 sq. mm. for phase, neutral & earth. The work consists providing & fixing of one module SP switch 6A x 250V with spark shield with ISI mark and to meet specifications of IS, and 2 Module Modular 2 in 1 socket 6A x 250V with shutter made from polycarbonate on existing modular plate. The complete work consists necessary wiring connections and earth linking with all materials and labour as directed by Engineer-in-charge.

Technical Specification No. 9:

The work consists providing & fixing of 2 module 25A x 250V socket with ISI mark and to meet specifications of IS & 2 module SP switch 25A x 250V with spark shield with ISI mark and to meet specifications of IS, on suitable size of PVC unbreakable concealed box with 4 module modular plate. The PVC unbreakable concealed box shall be embedded properly in the wall and the fuse, switch & Socket shall be fixed on 4-module modular plate and modular plate shall be fixed on the embedded box. The above switch is to be fitted on the outside of the room to control the lighting ckt of individual switchboard from outside, the work also consists necessary wiring connections and earth linking at both the ends with all materials and labour as directed by Engineer-in-charge.

Technical Specification No. 10:

The item includes providing & fixing concealed wiring for Modular Power point with FRLS, 1100 Voltage grade, single core stranded copper conductor wire with IS of size 4.0 sq. mm. for phase & neutral wire and 2.5 Sq.mm continuous stranded copper conductor wire for earth to be laid through PVC Round Pipe with IS of size 25 mm Diameter of Medium Mechanical Strength (MMS) type and other accessories such as Tee, junction box, inspection bends, elbow etc. of approved make. The proper size of grove shall be prepared in old construction by contractor on wall/ floor and the conduit pipe shall be laid through prepared grove in such case on the ceiling portion the pipe is to be laid on the false ceiling by clamping properly. But for new construction the pipes shall be laid during reinforcement work. After laying of pipe the grove shall be closed with mixture of cement & sand and to match with existing surface of wall/ceiling. The work consists providing & fixing of 2 module

16A x 250V socket with shutter with ISI mark and to meet specifications of IS, 1 module SP switch 16A x 250V with spark shield with ISI mark and to meet specifications of IS & 1 module 10/16A fuse unit on suitable size of PVC unbreakable concealed box with 4 module modular plate. The PVC unbreakable concealed box shall be embedded properly in the wall and the fuse, switch & Socket shall be fixed on 4-module modular plate and modular plate shall be fixed on the embedded box. The complete work consists necessary wiring connections and earth linking at both the ends with all materials and labour as directed by Engineer-in-charge.

Technical Specification No. 11:

The item includes providing & fixing concealed wiring for Modular plug point for computers (With 2 module, 4 nos. 2 in 1 socket 6A x 250V & 4 nos. 1 module SP switch 6A x 250V with spark shield) with Flame Retardant, 1100 Voltage grade, single core stranded copper conductor wire with IS of size 2.5 sq. mm. for phase & neutral wire and 1.5 Sq.mm continuous stranded copper conductor wire for earth to be laid through PVC Round Pipe of size 20 mm Diameter of Medium Mechanical Strength (MMS) type and other accessories such as Tee, junction box, inspection bends, elbow etc. of approved make. The proper size of grove shall be prepared in old construction by contractor on wall/ floor and the conduit pipe shall be laid through prepared grove in such case on the ceiling portion the pipe is to be laid on the false ceiling by clamping properly. But for new construction the pipes shall be laid during reinforcement work. After laying of pipe the grew shall be closed with mixture of cement & sand and to match with existing surface of wall/ceiling. The work consists providing & fixing of 2 module, 4nos. 2 in 1 socket 6A x 250V & 4 nos. 1 module SP switch 6A x 250V with spark shield with ISI mark and to meet specifications of IS on suitable size of PVC unbreakable concealed box with 12 module modular plate. The PVC unbreakable concealed box shall be embedded properly in the wall / wooden table and the switches & Sockets shall be fixed on 12-module modular plate and modular plated shall be fixed on the embedded box. The complete work consists necessary wiring connections and earth linking at both the ends with all materials and labour as directed by Engineer-in-charge.

Technical Specification No. 12:

a) 8 Way SPN Distribution Board

This includes supply of 8-way Double Dorr SPN DB as per following specification & make. Protection device type: Main incomer: Moulded case circuit breaker (MCB) - 3P or 4P Outgoing: Miniature circuit breaker (MCB) - 1P/2P Enclosure/Cubicle description: Double door enclosure Enclosure material: CRCA Colour: White (RAL 9003) Environment - IP degree of protection IP43 - IK degree of protection IK09 Standards IS 8623-1 IS 8623-3 IEC 61439-3 Product certifications: NABL Make: L & T/Schneider/Siemens/ABB/Hager. The DB shall be fitted with Busbar, DIN Rail and neutral link. The rates shall be excluding the cost of MCB as directed by Engineer-in-Charge.

b). 6 way SPN Double Door Distribution Board.

This includes supply of 6-way Double Door SPN DB as per following specification & make. Protection device type: Main incomer: Moulded case circuit breaker (MCB) – 2P/3P / 4P Outgoing: Miniature circuit breaker (MCB) - 1P /2P Enclosure/Cubicle description: Double door enclosure Enclosure material: CRCA Colour: White (RAL 9003) Environment - IP degree of protection IP43

- IK degree of protection IK09

Standards IS 8623-1 IS 8623-3 IEC 61439-3

Product certifications: NABL

Make: L & T/Schneider/Siemens/ABB/Hager.

The DB shall be fitted with Busbar, DIN Rail and neutral link.

The work including installation, testing & commissioning above DB on wall by suitable hardware & fasteners and adopted method as per IE rule or as directed by EIC. The works also including with complete necessary wiring, Earthing, linking etc.

Technical Specification No. 13:

This includes supply at site of DIN Rail mounted 'B' Series various rating MCBs, with 10kA Breaking Capacity. The terminals of MCB shall be serrated type. The rates shall be excluded GST, but inclusive are incidental charges, Transportation charges, insurance freight charges etc.

- a) 40 amps. 4 pole MCB, B Curve.
- b) 40 amps. 2 pole DP MCB, B Curve.
- c) 6-10 amps., 1pole SP MCB, B curve.
- d) This includes supply of 40 Amp., 4 Pole RCCB as per following technical specifications as under.
- d1) Poles description: 4 P
- d2) [In] rated current: 63 Amp.
- d3) Network type: AC
- d4) Earth-leakage sensitivity: as per standard.
- d5) Earth-leakage protection time delay: Instantaneous
- d6) Earth-leakage protection class : Type AC
- d7) Network frequency: 50 Hz
- d8) Rated operational voltage : 380...415 V AC, 50 Hz
- d9) Residual current tripping technology: Voltage independent
- d11) Rated conditional short-circuit current: 10 kA
- d12) Rated insulation voltage: 500 V
- d13) Rated impulse withstand voltage: 6 kV
- d14) Surge current: 250 A
- d15) Contact position indicator: Yes
- d16) Control type: Toggle
- d17) Mounting mode: Clip-on
- d18) Mounting support: DIN Rail
- Environment
- Standards: EN/IEC 61008-1
- Product certifications: ISI SNI
- **IP degree of protection**: IP20 conforming to IEC 60529.

Technical Specification No. 14:

This includes fixing & commissioning of supplied various rating MCB in above supplied double door DB on wall / structure. The MCB shall be fixed on DIN Rail provided in existing DB. This includes necessary 3 ϕ / 1 ϕ wiring, connections, distribution & earth linking of DB with all material, labour tools & tackles as directed by Engineer-In-charge.

Technical Specification No. 15:

This includes supply of Round Sleek LED Down Light having Robust Design with Pressure Die-Cast Alu. Housing, ensuring long life as per following technical specification.

- 1) Lumen: 1500 Lm
- 2) System Power: 13 to 15 Watt
- 3) CCT: 6500 K
- 4) CRI >80
- 5) Efficacy of >110 lm/w
- 6) Surge Protection: 2.5 kV
- 7) Input Voltage Range: 130-320 V AC
- 8) Beam Angle 120°
- 9) Optical Cover/Lens Type: Polycarbonate
- 10) Material: Housing: Pressure Die Cast Aluminium

Diffuser: Polycarbonate

Clip: Steel Clip (Spring)

11) Driver: Yes, Included

- 12) Power Factor (Min): 0.95
- 13) Ingress Protection Code: IP 20
- 14) Mech. Impact Protection Code: IK02
- 15) Warrantee: 2 Year

Technical Specification No. 16:

This includes fixing & commissioning of supplied Round Sleek LED Down Light Luminaries (13 to 15 Watt) on existing false ceiling by making & providing necessary cut out of fitting dimensions and required supporting material, facilitate mounting in false ceilings as directed. The fitting shall be fixed rigidly nearby fitting through suitable size of screws/nut bolts/anchor fasteners and connections with 3 core flexible copper cable from nearest source of supply/ceiling rose & necessary connections with all material and labour and as directed by Engineer-In-charge.

Technical Specification No. 17:

Supply at site energy efficient LED 10 watt LED surface mounted bulk head light fixture, having lumen/watt is 900. As per the approved make list. The Rates are inclusive all taxes, but excluded GST.

Technical Specification No. 18:

This includes fixing and commissioning of supplied LED 10 Watt bulk head light fixture on wall/ceiling at suitable height on cemented wooden gutties as directed and connection with 3 core flexible copper cable from nearest source of supply & necessary connections & earth linking with all material and labour and as directed by Engineer-In- Charge.

Technical Specification No. 19:

This item includes supply at site 1200 mm sweep Ceiling Fan fitted with heavy duty grease filled double ball bearing that ensures noiseless performance and long lasting smoother life of fan suitable for single phase 230 Volts A.C., 50Hz. The fan should be 5 star ISI mark. The Fan blades shall be aerodynamically balanced to ensure maximum air delivery at lower power consumption & the blades shall be made of 'heavy gauge' aluminum sheet so as to

retain the blade's angel over a longer period. The Fan motor shall be made of superior grade copper wire and impregnated in special varnish for long life operation. The motor shall be totally enclosed and low-loss-silicon steel stampings ensure minimum power consumption with high optimum output. The Fan shall be coated with a special anticorrosive enamel paint that makes them rust free and ensures a classic appearance and longer life. The supplied fan shall confirm to IS specifications. The fan shall be supplied along with all accessories such as down rod 600 mm length, PVC Bobbin, Stainless Steel Nut Bolt with cotter pin, capacitor etc. of approved make and as per IS specification as directed by Engineer in Charge. The rates shall be inclusive of all the taxes (excluding GST), insurance, transportation, unloading at site as directed by Engineer in-Charge.

Technical Specification No. 20:

This includes fixing & commissioning of supplied ceiling fan with all accessories in existing hook including necessary wiring and connection from nearest point / Ceiling rose through PVC flexible copper conductor wire and earth linking etc. The rotary step cut electronic regulator shall be fixed and screwed rigidly on switch board including wiring and connection etc. with all material and labour as directed by Engineer-in-charge.

Technical Specification No. 21:

This includes supply of exhaust fan of size 300 mm with capacitor start and run type motor, continuously rated, totally enclosed fitted with heavy duty grease filled double ball bearing that ensures noiseless performance and long lasting smoother life of fan suitable for single phase 220/250 Volts A.C. 50HZ. The impeller shall be used in an Exhaust Fan is of the propeller type & both hub and impeller shall be dynamically balanced, frames and arms mounted on rubber bushings, to avoid vibrations.

Technical Specification No. 22:

This includes fixing & commissioning of supplied exhaust fan as per direction of EIC on exhaust hole so that discharge of exhaust air can be done easily. However, if exhaust hole is not provided, it is to be done by contractor. The grouting of the fan is to be done by suitable size of anchor fastener bolts, and by providing metallic mesh/louvers as directed to other side so that birds can be restricted in the passage. This includes connections with 3 core flexible copper cable from nearest source of supply & necessary connections & earth linking with all material and labour and as directed by Engineer-In-Charge.

Technical Specification No. 23:

This item includes preparation of maintenance free earth station by providing 50mm diameter, 3 meter, 80-micron hot dipped GI chemical electrode with back fill compound including accessories & masonry work. A cement concrete (ratio 1:4:8) chamber of at least 500 mm \times 500 mm \times 500mm \times 500mm (thickness of wall) shall be prepared and a cover of suitable size shall be provided for the chamber. The work shall be carried out to entire satisfaction of Engineer in-Charge. This work includes all material, labour, tools & tackles as directed by Engineer in-Charge.

Technical Specification No. 24:

The works include providing & fixing the 8 SWG GI wire, from earth station to equipment / Main DB or as per site requirement by providing & fixing suitable Dia Medium duty PVC conduit pipe in concealed/surface manner. The complete work consists necessary wiring connections and earth linking at both the ends with all materials and labour as directed by Engineer-in-charge.

Sd/-Executive Engineer (E) Deendayal Port Authority_

Seal & Sign of Contractor

Schedule-B

Name of Work: – CSR Work for Allotment of Community Hall cum School at Maheshwari Nagar, Gandhidham: Construction of First Floor-<u>Electrical Work thereof</u>

			1		
Sr. No.	Description	Qty.	Unit	Rate	Amount
1	Supply at site 4 Core, LT armored aluminium conductor XLPE cable of 1.1KV grade of the following type & size as per Technical Specification No. 1 a). 4 Core 6 sq.mm.	50	m		
2	Lying Single / Double length of LT armoured aluminium conductor XLPE cable of 1.1kV grade 4CX 6 Sq.mm through various route as per Tech Spec.02.				
	I) Through Saddle Clamp.	50	m		
3	Providing & fixing following concealed wiring for single phase FRLS sub-circuit from the main switch /meter. DBs / MCBs to the switch board with 2X2.5 sq.mm copper conductor to be used as phase & neutral & earth wire as a earthing as per Tech. Spec. No:-3	150	m		
4	Providing & fixing following concealed wiring for single phase FRLS sub-circuit from the main switch /meter. DBs /MCBs to the Switch board with 2X 4 sq.mm copper conductor to be used as phase & neutral & cooper wire as a earthing as per Tech. Spec. No:-4	150	m		
5	Providing and Fixing concealed wiring for light/tube/bulk head/exhaust modular point with FRLS PVC insulated single core standard 1.5 Sq.mm copper conductor wire as per Technical Specification :- 5	125	No.		
6	Providing and Fixing concealed wiring for Fan modular point with FRLS PVC insulated single core standard 1.5 Sq.mm. copper conductor wire & twin module step cut electronic fan regulator as case may be as per Technical Specification No.6	35	No.		
7	Providing and fixing concealed wiring for3X 5/6 A X250 Volt half point as per Technical Specification no:-07	25	No.		
8	Providing and fixing of concealed wiring for 3 x 5 Pin 6A X 240 Volt Modular full Plug Point as per Technical Specification No. 8	25	No.		
9	Providing and fixing concealed wiring for 25A x 250V modular switch & socket for AC Ckt. as per Technical no.9	35	No.		
10	Providing and fixing concealed wiring for 15/16A X250Volt Power point as per Technical Specification no. 10	04	No.		

NOTE	: The rates should be inclusive of all taxes, duties, fees, cess etc. a	and all inci	dental charg	jes; but exc Sd/-	
•	rds Rupees		only)	• -	
	Total Amount in INR				
24	Providing & connecting 8 SWG GI earthing wire for earth station to equipment as per Technical specification No. 24	500	m.		
23	Preparation earthing station, chemical treated back filled compound earthing system with Pipe-In-Pipe 25- 30 mm Dia GI type 3m Depth, Maintenance free as per Technical Specification No. 30.	02	No.		
22	Fixing of 300 mm Sweep exhaust fan as per technical specification no. 22	18	No.		
21	Supply of 300 mm Sweep exhaust fan as per technical specification no. 21	18	No.		
20	Installation of 1200 mm Sweep ceiling Fan as per Technical Specification No. 20	35	No.		
19	Supply of 1200 mm Sweep ceiling Fan as per Technical Specification No. 19	35	No.		
18	Fixing of surface 10 Watt Mounted Bulk head as per technical specification No. 18	30	No.		
17	Supply of surface 10 Watt Mounted Bulk head as per technical specification No. 17	30	No.		
16	Fixing of 13-15 Watt LED Down Light as per Technical Specification No. 16	80	No.		
15	Supply of 13-15 Watt LED Down Light as per Technical Specification No. 15.	80	No.		
14	Fixing of various rating MCBs / RCCB on supplied distribution Box as per Tech. Specification No. 14.	83	Nos.		
	d). 40 amps. RCCB.	1	No.		
15	c). 6-10 amp SP MCB, B Curve.	60	No.		
	b). 40 Amp. DP MCB, B curve.	20	No.		
13	Supply of Following type of MCCB Din Rail mounted, as per Tech. Spec. No:13. a). 40 amps. 4 pole MCB, B Curve.	2	No.		
	b) 6 Way SPN Double Door Distribution.	6	Nos.		
12	as per Tech. spec. No: -12 a) 8 Way TPN Double Door Distribution.	2	Nos.		
	Supply, installation, Testing & commissioning of following type distribution board along complete with				
11	Providing and fixing concealed wiring for 3 x 5/6A X250 Volt plug point with 3nos SP switches for computer as per Technical Specification No. 11	40	No.		

Seal & Sign of Contractor Executive Engineer (E) Deendayal Port Authority_

	Approved Make List for Electrical Items				
Sr. No.	Description	Recommended Makes			
1	НТ VCB	SIEMENS / CROMPTON GREAVES/ABB/Schneider			
1(a)	HV Gas Insulated Breakers	SIEMENS /Schneider/ABB			
2	POWER TRANSFORMERS	VOLTAMP/CROMPTON GREAVES /BHARAT BIJLEE/ BHEL/ SIEMENS/ ABB/ Schneider/T&R			
3	DISTRIBUTION TRANSFORMERS	EMCO/KIRLOSKAR/PATSON/VOLTAMP/ ABB / Schneider / T&R			
4	RESIN CAST TRANSFORMERS				
	A) RESIN CAST IMPREGNATED	VOLTAMP / KIRLOSKAR / EMCO			
	B) DRY CAST	VOLTAMP/KIRLOSKAR/EMCO			
5	HT XLPE CABLES	POLYCAB/TORRENT/RPG ASIAN/ /GLOSTER/ UNISTAR/ UNISTAR/KEI/FINOLEX/HAVELS			
6	LT XLPE CABLES	POLYCAB/TORRENT/RPG ASIAN/ / RALLISON/PRIMECAB/ HAVELLS/ UNISTAR/AVOCAB / ADCAB			
7	LT ACB	SIEMENS/L&T/SCHNEIDER/C&S			
8	PROTECTION RELAYS	AREVA/L&T/SIEMENS/ABB/C&S			
9	LT PANEL	CPRI APPROVED			
10	CHANGE OVER SWITCH	SIEMENS/L&T/ABB/C&S/SCHNIDER/ LEGRAND / INDOASIAN			
11	SFU FOR MAIN LT DISTRIBUTION PANELS	SIEMENS/L&T/ABB/C&S			
12	SFU FOR DISTRIBUTION PANELS & FEEDER PILLERS	SIEMENS/L&T/ABB/C&S/ SCHNEIDER/ LEGRAND/ INDOASIAN/HAVELLS			
13	MCCB FOR MAIN LT DISTRIBUTION PANELS	SIEMENS/L&T/ABB			
14	MCCB FOR DISTRIBUTION PANELS AND FEEDER PILLERS	SIEMENS/L&T/ABB/C&S/ SCHNIDER/ LEGRAND/ INDOASIAN/HAVELLS			
15	MCB/ELCB/RCCB/ RCCBO FOR MAIN LT DISTRIBUTION PANELS	SIEMENS/HAGER L&T/ABB			
16	MCB FOR DISTRIBUTION PANELS AND FEEDER PILLERS	SIEMENS/L&T/ABB/C&S/ SCHNEIDER/ LEGRAND/ INDOASIAN/ HAVELLS/ STANDARD			

Approved Make List for Electrical Items

17	MCB DISTRIBUTION BOARD	STANDARD / HENSEL/LEGRAND / INDOASIAN / HAVELLS
18	MULTI FUNCTION DIGITAL METER FOR MAIN LT DISTRIBUTION PANELS/DIGITAL KWH METERS	L&T/ENERCON/SECURE/L&G/ RISHABH
19	ANALOG VOLT/AMPARE METER FOR DISTRIBUTION PANELS AND FEEDER PILLERS	RISHABH/AE/ENERCON/L&T
20	SLECTOR SWITCH FOR VOLTMETER/AMPARE METER	L&T/SIEMENS/C&S
21	POWER CONTACTOR & OVER LOAD RELAYS	L&T/SIEMENS/ABB
22	QUARTZ TIME CLOCK SWITCH	L&T/INDOASIAN/SIEMENS
23	PVC WIRE WITH COPPER CONDUCTOR	RR KABEL / KEI / POLYCAB/MILEX/GUJCAB/ STANDARD / FINOLEX / ANCHOR
24	FLUSH TYPE SWITCHES, SOCKETS, HOLDERS AND CEILING ROSES & ELECTRONIC REGULATORS	ANCHOR/MK/NORTHWEST/VINAY /PANAMA / HAVELLS
25	DOOR BELLS/CALL BELLS	ANCHOR/LEGEND/MK/NORTHWEST
26	MODULAR SWITCHES, SOCKETS, PLATES & BOXES	ANCHOR / MK / NORTHWEST / LEGRAND /HAVELLs / INDOASIAN / SIMENS.
27	PVC CONDUIT/OVAL CONDUIT & CASSING CAPPING AND ACCESSORIES	PRECISION/VULCAN/FINOLEX/ GARWARE/ RESTOPLAST/ SWASTIK / BPI
28	GLS LAMPS & FLUORESCENT LAMPS	PHILIPS / BAJAJ / WIPRO / CROMPTON GREAVES / OSRAM / SURYA ROSHNI / GE
29	HPSV, HPMV & METAL HELIDE LAMPS	PHILIPS / BAJAJ / WIPRO / CROMPTON GREAVES / OSRAM / SURYA ROSHNI / GE
30	IGNITORS FOR HPSV, METAL HELIDE LAMPS	PHILIPS / BAJAJ / WIPRO / CROMPTON GREAVES / OSRAM / SURYA ROSHNI / GE
31	LUMINARIES	PHILIPS / BAJAJ / WIPRO / CROMPTON GREAVES / OSRAM / SURYA ROSHNI / GE/C&S

31a	LED LUMINARIES	Philips /Bajaj/Wipro/CG/Surya/Pyrotech/Syska/Nessa/C&S
		having surge Protection \geq 10KV for fittings & internal Surge
		Protection for Driver of≥4KV, LED Chip only
		OSRAM/CREE/Philips Lumileds/Citizen/ with LM-79,80
		CERTIFICATION
32	CEILING FANS	BAJAJ/ORIENT/USHA/CROMPTON GREAVES / ALMONARD/GEC
33	WALL MOUNTING FANS	BAJAJ/ORIENT/USHA/CROMPTON GREAVES / ALMONARD/GEC
34	EXHUAST FANS	BAJAJ/ORIENT/USHA/CROMPTON GREAVES / ALMONARD/GEC
35	HEAVY DUTY INDUSTRIAL WALL MOUNTING FANS	BAJAJ/ORIENT/USHA/CROMPTON GREAVES / ALMONARD/GEC or its equivalent
36	WATER COOLER	VOLTAS/SHRIRAM USHA/BLUE STAR
37	AIR CONDITIONERS	VOLTAS/CARRIER/BLUESTAR/USHA/ HITACHI/LG/ SAMSUNG/ONIDA
38	REFRIGERATORS	VOLTAS / CARRIER / BLUESTAR / USHA / HITACHI / LG / SAMSUNG / WHIRLPOOL
39	VOLTAGE STABILIZER	VEELINE / CAPRI
40	INVERTERS	SUKAM / MICROTEK
41	D.G. SETS	
	A) ENGINE	CUMMINS/GREAVES/KIRLOSKAR/ CATERPILLAR /ASHOK LEYLAND /VOLVO
	B) ALTERNATOR	STAMFORD/CROMPTON GREAVES /JYOTI/ KIRLOSKAR ELECTRIC
42	ELECTRIC MOTOR	ALSTOM/CROMPTON GREAVES /SIEMENS/ KIRLOSKAR/ABB
43	WATER PUMPS	SWASTIK / KSB
44	WATER GEYSER	BAJAJ/USHA / CROMPTON GREAVES / SPHEREHOT / RACOLD
45	LUGS & CABLE GLANDS	DOWELLS / JAINSON / BRACO
	1	

writing.

Seal & Sign of Contractor Sd/-Executive Engineer (E) Deendayal Port Authority_

SPECIAL CONDITION FOR ELECTRICAL PART

1. Valid Electrical Contractor License:

The Contractor shall have valid Electrical Contractor's license for carrying out Electrical work of the nature involved in this tender obtained from Chief Electrical Inspector, Government of Gujarat. The Contractor shall submit certificate and copy of the license in lieu of the same for consideration.

2. Approval by the Engineer-in-Charge or his nominee:

The Contractor shall submit the makes of material, equipment, specifications and drawings for proposed Work to the Engineer-in-Charge or his nominee, who is to approve them subject to compliance with the Technical specifications and drawings. The Engineer-in-Charge or his nominee's approval shall not alter the Contractor's responsibility for the work. All drawings prepared by the contractor for the work if any, are subject to prior approval by the Engineer in Charge or his nominee before procurement/execution.

3. The guarantee period shall be for a period of one year from the date of handing over of entire electrical work, however for LED Light fittings warranty shall be inforce for a period of two years from the date of handover the project.

4. Payment Terms:

- All payments shall be made in Indian rupees unless specifically mentioned.
- (1) Payment of 70% of item rate (subject to deductions as per tender conditions) will be released after receipt of material at site in good condition, after obtaining insurance cover as per tender condition (If TPI appointed then after inspection & certification of the same by Third Party Inspection Agency) and after inspection & acceptance of material by DPA.
- (2) Payment of 20% of item rate (subject to deductions as per tender conditions) after completion of erection, installation, testing and commissioning etc. and 90% of item rate for item covers only laying/fixing/removal etc. (If TPI appointed then after inspection & certification of the same by Third Party Inspection Agency).
- (3) Payment of 10% of item rate (subject to deductions as per tender conditions) will be released after successful completion of whole work (If TPI appointed then after inspection & certification of the same by Third Party Inspection Agency) and handing over to DPA.

Executive Engineer (E) Deendayal Port Authority