



भारतीय विमानपत्तन प्राधिकरण



AIRPORTS AUTHORITY OF INDIA

No. AAM/ENGG/ELEC/AMED-I/902/3/2023-24/ A-11

Date: 07.08.2023

M/s Shanti Enterprises Electricals Pvt. Ltd.,
37, Josier Street, Nungambakkam,
Chennai-600 034.

Name of Work : 1. Replacement of Feeder Pillars at Operational area at Chennai Airport. 2. Replacement of Electrical LT Panels at Admin Building, other ancillary buildings and allied works at Chennai Airport.
Ref : Tender Id- 2023_AAI_156567_1

Dear Sir(s),

1. Your E-tender for the above mentioned work has been accepted by the Competent Authority on behalf of the Chairman, Airports Authority of India, at the item rates quoted by you totaling to ₹ 1,69,80,831.78 (Rupees One Crore Sixty-Nine Lakhs Eighty Thousand Eight Hundred & Thirty-One and Paise Seventy-Eight Only) excluding GST which is 13.97% (Thirteen Decimal Nine Seven Percent) below the Estimated cost of ₹ 1,97,38,428.00 excluding GST put to tender.
2. Joint General Manager (Engg-Elect.), AAI, Chennai Airport, Chennai - 600 016 shall be the Engineer-in-Charge of the work. You are requested to attend to the Office of Joint General Manager (Engg-Elect.), AAI, Chennai Airport by 16.08.2023 to sign and complete the contract agreement. The contract agreement shall be executed on a non-judicial stamp paper of value ₹ 100.00 (Rupees One Hundred only) and the cost of the stamp paper shall be borne by you.
3. Please deposit an amount of ₹16,98,083.00 (Rupees Sixteen Lakhs Ninety-Eight Thousand and Eighty-Three Only) towards Security Deposit within 10 days from the date of issue of this letter, failing which, the same will be deducted as per Clause 1A of Contract Document. Earnest Money Deposit amount will be returned back to your account after deducting equal amount of EMD against Security Deposit from your bill.
4. You are requested to comply with the provision of Contract Labour (Regulation and Abolition) Act 1970 and Contract Labour (Regulation and Abolition) Central Rules 1971 and Minimum Wages Act and Rules there of Central and State Governments.
5. Please note that the time allowed for carrying out the work shall be 06 (Six Months) and the same shall be reckoned from 16.08.2023.



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6. You are also directed to contact Asst. Gen. Manager Engg. (Elect.), Airport Maintenance Electrical Division, Airports Authority of India, Operational Offices, Chennai Airport immediately for the execution of the above mentioned work
7. Any further correspondence in connection with the contract should normally be addressed to the Engineer-in-Charge.
8. Please acknowledge the receipt and return the duplicate copy of this letter enclosed herewith after signing it to the undersigned as a token of acceptance.

Yours faithfully,

(A. Mariappan)

Joint General Manager (Engg.-Elect.),
For and on behalf of the Chairman,
Airports Authority of India.

Encl: Schedule of Work



AIRPORTS AUTHORITY OF INDIA
AMED-I, CHENNAI AIRPORT
CHENNAI

SCHEDULE OF WORK

Name of Work: 1. Replacement of Feeder Pillars at Operational area at Chennai Airport. 2. Replacement of Electrical LT Panels at Admin Building, other ancillary buildings and allied works at Chennai Airport.

Sl.No	Description of Work	Qty.	Unit	Rate	Amount
1.00	Supply, Installation, Testing and Commissioning of MV Switch Board Outdoor Type Main/Sub Feeder Pillar made out of 3mm thick CRCA Sheet Steel for outer Shell (width not less than 450 mm) and 2mm thick CRCA Sheet for inner partition, dust tight, vermin proof, totally enclosed, cubicle type, floor mounting, free standing suitable for operation at 433 V, 3 Phase, 4 Wire, 50 Hz AC System complete with all accessories, interconnection, connection, earthing, painting, provided with bottom base channel of 100 mm ISMC and locking arrangements including excavation for foundation, providing foundation, suitable RCC pedestal up to 900 mm (450 mm BGL and 450 mm AGL), fixing of panel etc., complete as required and comprising of the following: Location: Bay No. 30, Bay No. (101-104), Bay (43-45) & Bay No. (51-57)				
1.01	Two Nos. of 200 A, 50 KA, 4P MCCB with Microprocessor Based Releases (L&T MTX 2.0 / Equivalent) for OC/SC/EF Protection and ROM as INCOMER with resin cast C.T. operated Digital Meter (EM 6400 of Conserve/Equivalent), ON/OFF/TRIP Indication Lamps, Phase Indication Lamps and Mechanical Castle Interlock (2 Lock + 1 Key) as required.				
1.02	Five Nos. of 63 A, 36 KA, 4P MCCB with TM Releases for OC/SC Protection and ROM as Outgoings with ON/OFF/TRIP Indication Lamps as required.				
1.03	Three Nos. of 63 A, 36 KA, 4P MCCB with TM Releases for OC/SC Protection and ROM as Outgoings each having (0-32) Amp Digital Energy Meter and ON/OFF/TRIP Indication Lamps as required.				
1.04	One Set of 400 Amps Al. Bus Bars with at Par Neutral Bus Bars as required.				
1.05	All accessories such as fuses, auxillary contactors, auxillary switches, MCBs etc., as required.				
1.06	All as above 1.01 to 1.05	4.00	Jobs	273363.04	10,93,452.16

Sl.No	Description of Work	Qty.	Unit	Rate	Amount
2.00	Supply, Installation, Testing and Commissioning of MV Switch Board Outdoor Type Main/Sub Feeder Pillar made out of 3mm thick CRCA Sheet Steel for outer Shell (width not less than 450 mm) and 2mm thick CRCA Sheet for inner partition, dust tight, vermin proof, totally enclosed, cubicle type, floor mounting, free standing suitable for operation at 433 V, 3 Phase, 4 Wire, 50 Hz AC System complete with all accessories, interconnection, connection, earthing, painting, provided with bottom base channel of 100 mm ISMC and locking arrangements including excavation for foundation, providing foundation, suitable RCC pedestal up to 900 mm (450 mm BGL and 450 mm AGL), fixing of panel etc., complete as required and comprising of the following: Location : For Bays (81-92) and Bays (93-99)				
2.01	Two Nos. of 400 A, 50 KA, 4P MCCB with Microprocessor Based Releases (L&T MTX 2.0 / Equivalent) for OC/SC/EF Protection and ROM as INCOMER with resin cast C.T. operated Digital Meter (EM 6400 of Conserve/Equivalent), ON/OFF/TRIP Indication Lamps, Phase Indication Lamps and Mechanical Castle Interlock (2 Lock + 1 Key) as required.				
2.02	Seven Nos. of 63 A, 36 KA, 4P MCCB with TM Releases for OC/SC Protection and ROM as Outgoings with ON/OFF/TRIP Indication Lamps as required.				
2.03	Three Nos. of 63 A, 36 KA, 4P MCCB with TM Releases for OC/SC Protection and ROM as Outgoings each having (0-32) Amp Digital Energy Meter and ON/OFF/TRIP Indication Lamps as required.				
2.04	One Set of 600 Amps Al. Bus Bars with at Par Neutral Bus Bars as required.				
2.05	All accessories such as fuses, auxillary contactors, auxillary switches, MCBs etc., as required.				
2.06	All as above 2.01 to 2.05	2.00	Jobs	342138.16	6,84,276.32



Sl.No	Description of Work	Qty.	Unit	Rate	Amount
3.00	Supply, Installation, Testing and Commissioning of MV Switch Board Outdoor Type Main/Sub Feeder Pillar made out of 3mm thick CRCA Sheet Steel for outer Shell (width not less than 450 mm) and 2mm thick CRCA Sheet for inner partition, dust tight, vermin proof, totally enclosed, cubicle type, floor mounting, free standing suitable for operation at 433 V, 3 Phase, 4 Wire, 50 Hz AC System complete with all accessories, interconnection, connection, earthing, painting, provided with bottom base channel of 100 mm ISMC and locking arrangements including excavation for foundation, providing foundation, suitable RCC pedestal up to 900 mm (450 mm BGL and 450 mm AGL), fixing of panel etc., complete as required and comprising of the following: Location : Bay 80				
3.01	Two Nos. of 400 A, 50 KA, 4P MCCB with Microprocessor Based Releases (L&T MTX 2.0 / Equivalent) for OC/SC/EF Protection and ROM as INCOMER with resin cast C.T. operated Digital Meter (EM 6400 of Conserve/Equivalent), ON/OFF/TRIP Indication Lamps, Phase Indication Lamps and Mechanical Castle Interlock (2 Lock + 1 Key) as required.				
3.02	Two Nos. of 250 A, 50 KA, 4P MCCB with Microprocessor Based Releases (L&T MTX 2.0 / Equivalent) for OC/SC/EF Protection and ROM as Outgoings with resin cast C.T. operated Digital Meter (EM 6400 of Conserve/Equivalent), ON/OFF/TRIP Indication Lamps, Phase Indication Lamps as required.				
3.03	Two Nos. of 63 A, 36 KA, 4P MCCB with TM Releases for OC/SC Protection and ROM as Outgoings each having (0-32) Amp Digital Energy Meter and ON/OFF/TRIP Indication Lamps as required.				
3.04	Two Nos. of 63 A, 36 KA, 4P MCCB with TM Releases for OC/SC Protection and ROM as Outgoing with ON/OFF/TRIP Indication Lamps as required.				
3.05	One Set of 600 Amps Al. Bus Bars with at Par Neutral Bus Bars as required.				
3.06	All accessories such as fuses, auxillary contactors, auxillary switches, MCBs etc., as required.				
3.07	All as above 3.01 to 3.06	1.00	Job	340944.07	3,40,944.07



Sl.No	Description of Work	Qty.	Unit	Rate	Amount
4.00	Supply, Installation, Testing and Commissioning of MV Switch Board Outdoor Type Main/Sub Feeder Pillar made out of 3mm thick CRCA Sheet Steel for outer Shell (width not less than 450 mm) and 2mm thick CRCA Sheet for inner partition, dust tight, vermin proof, totally enclosed, cubicle type, floor mounting, free standing suitable for operation at 433 V, 3 Phase, 4 Wire, 50 Hz AC System complete with all accessories, interconnection, connection, earthing, painting, provided with bottom base channel of 100 mm ISMC and locking arrangements including excavation for foundation, providing foundation, suitable RCC pedestal up to 900 mm (450 mm BGL and 450 mm AGL), fixing of panel etc., complete as required and comprising of the following: Location : Bays (46-50)				
4.01	Two Nos. of 250 A, 50 KA, 4P MCCB with Microprocessor Based Releases (L&T MTX 2.0 / Equivalent) for OC/SC/EF Protection and ROM as INCOMER with resin cast C.T. operated Digital Meter (EM 6400 of Conserve/Equivalent), ON/OFF/TRIP Indication Lamps, Phase Indication Lamps and Mechanical Castle Interlock (2 Lock + 1 Key) as required.				
4.02	Four Nos. of 200 A, 50 KA, 4P MCCB with Microprocessor Based Releases (L&T MTX 2.0 / Equivalent) for OC/SC/EF Protection and ROM as Outgoing with resin cast C.T. operated Digital Meter (EM 6400 of Conserve/Equivalent), ON/OFF/TRIP Indication Lamps and Phase Indication Lamps as required.				
4.03	Four Nos. of 63 A, 36 KA, 4P MCCB with TM Releases for OC/SC Protection and ROM as Outgoings with ON/OFF/TRIP Indication Lamps as required.				
4.04	Two Nos. of 63 A, 36 KA, 4P MCCB with TM Releases for OC/SC Protection and ROM as Outgoings each having (0-32) Amp Digital Energy Meter and ON/OFF/TRIP Indication Lamps as required.				
4.05	One Set of 400 Amps Al. Bus Bars with at Par Neutral Bus Bars as required.				
4.06	All accessories such as fuses, auxillary contactors, auxillary switches, MCBs etc., as required.				
4.07	All as above 4.01 to 4.06	1.00	Job	457884.49	4,57,884.49



Sl.No	Description of Work	Qty.	Unit	Rate	Amount
5.00	Supply, Installation, Testing and Commissioning of MV Switch Board Outdoor Type Main/Sub Feeder Pillar made out of 3mm thick CRCA Sheet Steel for outer Shell (width not less than 450 mm) and 2mm thick CRCA Sheet for inner partition, dust tight, vermin proof, totally enclosed, cubicle type, floor mounting, free standing suitable for operation at 433 V, 3 Phase, 4 Wire, 50 Hz AC System complete with all accessories, interconnection, connection, earthing, painting, provided with bottom base channel of 100 mm ISMC and locking arrangements including excavation for foundation, providing foundation, suitable RCC pedestal up to 900 mm (450 mm BGL and 450 mm AGL), fixing of panel etc., complete as required and comprising of the following: Location : Bays(61-68)-2 Panels				
5.01	Two Nos. of 250 A, 50 KA, 4P MCCB with Microprocessor Based Releases (L&T MTX 2.0 / Equivalent) for OC/SC/EF Protection and ROM as INCOMER with resin cast C.T. operated Digital Meter (EM 6400 of Conzerve/Equivalent), ON/OFF/TRIP Indication Lamps, Phase Indication Lamps and Mechanical Castle Interlock (2 Lock + 1 Key) as required.				
5.02	Five Nos. of 63 A, 36 KA, 4P MCCB with TM Releases for OC/SC Protection and ROM as Outgoings with ON/OFF/TRIP Indication Lamps as required.				
5.03	Two Nos. of 63 A, 36 KA, 4P MCCB with TM Releases for OC/SC Protection and ROM as Outgoings each having (0-32) Amp Digital Energy Meter and ON/OFF/TRIP Indication Lamps as required.				
5.04	One Set of 400 Amps Al. Bus Bars with at Par Neutral Bus Bars as required.				
5.05	All accessories such as fuses, auxillary contactors, auxillary switches, MCBs etc., as required.				
5.06	All as above 5.01 to 5.05	2.00	Jobs	254645.88	5,09,291.76



Sl.No	Description of Work	Qty.	Unit	Rate	Amount
6.00	Fabrication, SITC of TTA MV Switch Board Essential Panel/Non-Essential made of 14 SWG CRCA Sheet Steel, dust tight, vermin proof, Totally enclosed, cubicle type, floor/wall mounting, free standing, extensible on both sides, suitable for indoor operation at 433 V, 3 Phase, 4 Wire, 50 Hz, AC System complete with all accessories, interconnection, connection, earthing, painting, etc., as required and comprising of the following:				
6.01	One No. of 200 A, 50 KA, 4P MCCBs with Microprocessor Based Releases for OC/SC/EF Protection as INCOMERS with Resin Cast CT operated Digital Meter [EM 6400 of Conzerve/Equivalent], ON/OFF/TRIP Indication Lamps and Phase Indication Lamps as required.				
6.02	Three Nos. of 63 A, 36 KA, 4P MCCB with TM Releases for OC/SC Protection and ROM as Outgoings with ON/OFF/TRIP Indication Lamps as required.				
6.03	Six Nos. of 63 A, 10 KA, 4P MCB as Outgoing as required.				
6.04	One Set of 400 Amps Al. Bus Bars with at Par Neutral BUS BARS as required.				
6.05	All accessories such as fuses, auxillary contactors, auxillary switches, etc. as required.				
6.06	All as above 6.01 to 6.05	1.00	Job	165947.39	1,65,947.39



Sl.No	Description of Work	Qty.	Unit	Rate	Amount
7.00	Supply, Installation, Testing and Commissioning of MV Switch Board Outdoor Type Main/Sub Feeder Pillar made out of 3mm thick CRCA Sheet Steel for outer Shell (width not less than 450 mm) and 2mm thick CRCA Sheet for inner partition, dust tight, vermin proof, totally enclosed, cubicle type, floor mounting, free standing suitable for operation at 433 V, 3 Phase, 4 Wire, 50 Hz AC System complete with all accessories, interconnection, connection, earthing, painting, provided with bottom base channel of 100 mm ISMC and locking arrangements including excavation for foundation, providing foundation, suitable RCC pedestal up to 900 mm (450 mm BGL and 450 mm AGL), fixing of panel etc., complete as required and comprising of the following: (Outside Near Main LT Panel-Gate Side)				
7.01	Two Nos. of 400 A, 50 KA, 4P MCCB with Microprocessor Based Releases (L&T MTX 2.0 / Equivalent) for OC/SC/EF Protection and ROM as INCOMER with resin cast C.T. operated Digital Meter (EM 6400 of Conserve/Equivalent), ON/OFF/TRIP Indication Lamps, Phase Indication Lamps and Mechanical Castle Interlock (2 Lock + 1 Key) as required.				
7.02	Three Nos. of 250 A, 50 KA, 4P MCCB with Microprocessor Based Releases (L&T MTX 2.0 / Equivalent) for OC/SC/EF Protection and ROM as Outgoing with resin cast C.T. operated Digital Meter (EM 6400 of Conserve/Equivalent), ON/OFF/TRIP Indication Lamps and Phase Indication Lamps as required.				
7.03	One No. of 100 A, 36 KA, 4P MCCB with TM Releases for OC/SC Protection and ROM as Outgoings with ON/OFF/TRIP Indication Lamps as required.				
7.04	One Set of 600 Amps Al. Bus Bars with at Par Neutral Bus Bars as required.				
7.05	All accessories such as fuses, auxillary contactors, auxillary switches, MCBs etc., as required.				
7.06	All as above 7.01 to 7.05	1.00	Job	350018.07	3,50,018.07



Sl.No	Description of Work	Qty.	Unit	Rate	Amount
8.00	Supply, Installation, Testing and Commissioning of MV Switch Board Outdoor Type Main/Sub Feeder Pillar made out of 3mm thick CRCA Sheet Steel for outer Shell (width not less than 300 mm) and 2mm thick CRCA Sheet for inner partition, dust tight, vermin proof, totally enclosed, cubicle type, floor mounting, free standing suitable for operation at 433 V, 3 Phase, 4 Wire, 50 Hz AC System complete with all accessories, interconnection, connection, earthing, painting, provided with bottom base channel of 100 mm ISMC and locking arrangements including excavation for foundation, providing foundation, suitable RCC pedestal up to 900 mm (450 mm BGL and 450 mm AGL), fixing of panel etc., complete as required and comprising of the following: (Way to Kitchen-Outside Panel Clubbed with Other Panel nearby)				
8.01	Two Nos. of 200 A, 50 KA, 4P MCCB with Microprocessor Based Releases (L&T MTX 2.0 / Equivalent) for OC/SC/EF Protection and ROM as INCOMER with resin cast C.T. operated Digital Meter (EM 6400 of Conserve/Equivalent), ON/OFF/TRIP Indication Lamps, Phase Indication Lamps and Mechanical Castle Interlock (2 Lock + 1 Key) as required.				
8.02	One No. of 200 A, 50 KA, 4P MCCB with TM Releases for OC/SC Protection and ROM as Outgoings with ON/OFF/TRIP Indication Lamps as required.				
8.03	Three Nos. of 63 A, 36 KA, 4P MCCB with TM Releases for OC/SC Protection and ROM as Outgoings with ON/OFF/TRIP Indication Lamps as required.				
8.04	Four Nos. of 63 A, 10 KA, 4P MCB as Outgoings as required.				
8.05	One Set of 400 Amps Al. Bus Bars with at Par Neutral Bus Bars as required.				
8.06	All accessories such as fuses, auxillary contactors, auxillary switches, MCBs etc., as required.				
8.07	All as above 8.01 to 8.06	1.00	Job	234761.99	2,34,761.99



Sl.No	Description of Work	Qty.	Unit	Rate	Amount
9.00	Supply, Installation, Testing and Commissioning of MV Switch Board Outdoor Type Main/Sub Feeder Pillar made out of 3mm thick CRCA Sheet Steel for outer Shell (width not less than 300 mm) and 2mm thick CRCA Sheet for inner partition, dust tight, vermin proof, totally enclosed, cubicle type, floor mounting, free standing suitable for operation at 433 V, 3 Phase, 4 Wire, 50 Hz AC System complete with all accessories, interconnection, connection, earthing, painting, provided with bottom base channel of 100 mm ISMC and locking arrangements including excavation for foundation, providing foundation, suitable RCC pedestal up to 900 mm (450 mm BGL and 450 mm AGL), fixing of panel etc., complete as required and comprising of the following: (Near Transit Accomodation & Cargo Pump House)				
9.01	One No. of 250 A, 36 KA, 4P MCCB with Microprocessor Based Releases (L&T MTX 2.0 / Equivalent) for OC/SC/EF Protection and ROM as INCOMER with resin cast C.T. operated Digital Meter (EM 6400 of Conzerve/Equivalent), ON/OFF/TRIP Indication Lamps, Phase Indication Lamps as required.				
9.02	Six Nos. of 100 A, 36 KA, 4P MCCB with TM Releases for OC/SC Protection and ROM as Outgoings with ON/OFF/TRIP Indication Lamps as required.				
9.03	One Set of 400 Amps Al. Bus Bars with at Par Neutral Bus Bars as required.				
9.04	All accessories such as fuses, auxillary contactors, auxillary switches, MCBs etc., as required.				
9.05	All as above 9.01 to 9.04	2.00	Jobs	174532.74	3,49,065.48



Sl.No	Description of Work	Qty.	Unit	Rate	Amount
10.00	Fabrication, SITC of TTA MV Switch Board Essential Panel/Non-Essential made of 14 SWG CRCA Sheet Steel, dust tight, vermin proof, Totally enclosed, cubicle type, floor mounting, free standing, extensible on both sides, suitable for indoor operation at 433 V, 3 Phase, 4 Wire, 50 Hz, AC System complete with all accessories, interconnection, connection, earthing, painting, etc., as required and comprising of the following: (GF LHS AND RHS - NESS and ESS PANELS)				
10.01	Two Nos. of 400 A, 50 KA, 4P MCCBs with Microprocessor Based Releases for OC/SC/EF Protection as INCOMERS with Resin Cast CT operated Digital Meter [EM 6400 of Conserve/Equivalent], ON/OFF/TRIP Indication Lamps and Phase Indication Lamps, Mechanical Interlocking Facility with Incomers as required.				
10.02	Four Nos. of 125 A, 36 KA, 4P MCCB with Thermal Magnetic Releases for Protection as Outgoing, with ON/OFF/TRIP Indication Lamps as required.				
10.03	Six Nos. of 63 A, 36 KA, 4P MCCB with Thermal Magnetic Releases for Protection as Outgoing, with ON/OFF/TRIP Indication Lamps as required.				
10.04	Two Nos. of 63 A, 10 KA, 4P MCB as Outgoing as required.				
10.05	One Set of 600 Amps Al. Bus Bars with at Par Neutral BUS BARS as required.				
10.06	All accessories such as fuses, auxillary contactors, auxillary switches, etc. as required.				
10.07	All as above 10.01 to 10.06	4.00	Jobs	408267.83	16,33,071.32



Sl.No	Description of Work	Qty.	Unit	Rate	Amount
11.00	Fabrication, SITC of TTA MV Switch Board Essential Panel/Non-Essential made of 14 SWG CRCA Sheet Steel, dust tight, vermin proof, Totally enclosed, cubicle type, floor/wall mounting, free standing, extensible on both sides, suitable for indoor operation at 433 V, 3 Phase, 4 Wire, 50 Hz, AC System complete with all accessories, interconnection, connection, earthing, painting, etc., as required and comprising of the following:				
11.01	One No. of 125 A, 36 KA, 4P MCCBs with Microprocessor Based Releases for OC/SC/EF Protection as INCOMER with Resin Cast CT operated Digital Meter [EM 6400 of Conzerve/Equivalent], ON/OFF/TRIP Indication Lamps and Phase Indication Lamps as required.				
11.02	Two Nos. of 63 A, 36 KA, 4P MCCB with Thermal Magnetic Releases for Protection as Outgoing, with ON/OFF/TRIP Indication Lamps as required.				
11.03	Four Nos. of 63 A, 10 KA, 4P MCB as Outgoing as required.				
11.04	One Set of 200 Amps Al. Bus Bars with at Par Neutral BUS BARS as required.				
11.05	All accessories such as fuses, auxillary contactors, auxillary switches, etc. as required.				
11.06	All as above 11.01 to 11.05	12.00	Jobs	148330.43	17,79,965.16
12.00	Fabrication, SITC of TTA MV Switch Board Essential Panel/Non-Essential made of 14 SWG CRCA Sheet Steel, dust tight, vermin proof, Totally enclosed, cubicle type, floor/wall mounting, free standing, extensible on both sides, suitable for indoor operation at 433 V, 3 Phase, 4 Wire, 50 Hz, AC System complete with all accessories, interconnection, connection, earthing, painting, etc., as required and comprising of the following:				
12.01	One No. of 125 A, 36 KA, 4P MCCBs with Microprocessor Based Releases for OC/SC/EF Protection as INCOMERS with Resin Cast CT operated Digital Meter [EM 6400 of Conzerve/Equivalent], ON/OFF/TRIP Indication Lamps and Phase Indication Lamps as required.				
12.02	Twelve Nos. of 63 A, 10 KA, 4P MCB as Outgoing as required.				
12.03	One Set of 200 Amps Al. Bus Bars with at Par Neutral BUS BARS as required.				
12.04	All accessories such as fuses, auxillary contactors, auxillary switches, etc. as required.				
12.05	All as above 12.01 to 12.04	1.00	Job	144089.59	1,44,089.59



Sl.No	Description of Work	Qty.	Unit	Rate	Amount
13.00	Supply, Installation, Testing and Commissioning of MV Switch Board Outdoor Type Main/Sub Feeder Pillar made out of 3mm thick CRCA Sheet Steel for outer Shell (width not less than 450 mm) and 2mm thick CRCA Sheet for inner partition, dust tight, vermin proof, totally enclosed, cubicle type, floor mounting, free standing suitable for operation at 433 V, 3 Phase, 4 Wire, 50 Hz AC System complete with all accessories, interconnection, connection, earthing, painting, provided with bottom base channel of 100 mm ISMC and locking arrangements including excavation for foundation, providing foundation, suitable RCC pedestal up to 900 mm (450 mm BGL and 450 mm AGL), fixing of panel etc., complete as required and comprising of the following: (Outside-FS-Near Compound Wall)				
13.01	Two Nos. of 250 A, 50 KA, 4P MCCB with Microprocessor Based Releases (L&T MTX 2.0 / Equivalent) for OC/SC/EF Protection and ROM as INCOMER with resin cast C.T. operated Digital Meter (EM 6400 of Conserve/Equivalent), ON/OFF/TRIP Indication Lamps, Phase Indication Lamps and Mechanical Castle Interlock (2 Lock + 1 Key) as required.				
13.02	One No. of 125 A, 50 KA, 4P MCCB with Microprocessor Based Releases (L&T MTX 2.0 / Equivalent) for OC/SC/EF Protection and ROM as Outgoing with resin cast C.T. operated Digital Meter (EM 6400 of Conserve/Equivalent), ON/OFF/TRIP Indication Lamps and Phase Indication Lamps as required.				
13.03	Two Nos. of 63 A, 36 KA, 4P MCCB with TM Releases for OC/SC Protection and ROM as Outgoings with ON/OFF/TRIP Indication Lamps as required.				
13.04	Four Nos. of 63 A, 10 KA, 4P MCB as Outgoing as required.				
13.05	One Set of 300 Amps Al. Bus Bars with at Par Neutral Bus Bars as required.				
13.06	All accessories such as fuses, auxillary contactors, auxillary switches, MCBs etc., as required.				
13.07	All as above 13.01 to 13.06	1.00	Job	247467.59	2,47,467.59

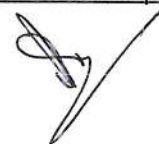


Sl.No	Description of Work	Qty.	Unit	Rate	Amount
14.00	Supply, Installation, Testing and Commissioning of MV Switch Board Outdoor Type Main/Sub Feeder Pillar made out of 3mm thick CRCA Sheet Steel for outer Shell (width not less than 250 mm) and 2mm thick CRCA Sheet for inner partition, dust tight, vermin proof, totally enclosed, cubicle type, floor mounting, free standing suitable for operation at 433 V, 3 Phase, 4 Wire, 50 Hz AC System complete with all accessories, interconnection, connection, earthing, painting, provided with bottom base channel of 100 mm ISMC and locking arrangements including excavation for foundation, providing foundation, suitable RCC pedestal up to 900 mm (450 mm BGL and 450 mm AGL), fixing of panel etc., complete as required and comprising of the following: Location: Near to Admin Compound wall				
14.01	One No. of 100 A, 36 KA, 4P MCCB with Microprocessor Based Releases (L&T MTX 2.0 / Equivalent) for OC/SC/EF Protection and ROM as INCOMER with ON/OFF/TRIP Indication Lamps and Phase Indication Lamps as required.				
14.02	03 Nos. of 20 A, 10 KA, DP MCB along with contactors, timers as Outgoings as required.				
14.03	02 Nos. of 40 A, 10 KVA 4P MCB as Outgoing as required.				
14.04	One Set of 160 Amps AL Bus Bars with at Par Neutral Bus Bars as required.				
14.05	All accessories such as fuses, auxillary contactors, auxillary switches, MCBs etc., as required.				
14.06	All as above 14.01 to 14.05	1.00	Job	75335.77	75,335.77
15.00	Dismantling of Existing Panel from Site and transporting the same to Store of Engineer-In-Charge including disconnection and dismantling of Cables from Panel, Dismantling of Foundation including disposal of the debris, Levelling etc., as required.	16.00	Jobs	8351.00	1,33,616.00
16.00	Dismantling of Existing Panel from Site and transporting the same to Store of Engineer-In-Charge including disconnection and dismantling of Cables from Panel, etc., as required.	19.00	Jobs	5567.00	1,05,773.00
17.00	Supply of XLPE insulated and PVC sheathed aluminium conductor armoured power cable of 1.1 KV grade conforming to IS 7098 (Part-I) 1988 as amended upto date and of following size as required.				

Sl.No	Description of Work	Qty.	Unit	Rate	Amount
17.01	4C X 16 Sq.mm	200.00	Mtrs	128.98	25,796.00
17.02	4C X 25 Sq.mm	2000.00	Mtrs	152.74	3,05,480.00
17.03	3.5 C X 120 Sq.mm	2800.00	Mtrs	495.57	13,87,596.00
18.00	Laying of one number PVC insulated and PVC sheathed/ XLPE power cable of 1.1 KV grade of following size in the existing RCC/ HUME/ METAL/HDPE pipe as required.				
18.01	Upto 35 sq. mm	1700.00	Mtrs	56.00	95,200.00
18.02	Above 35 sq. mm and upto 95 sq. mm	200.00	Mtrs	89.00	17,800.00
18.03	Above 95 sq. mm and upto 185 sq. mm	2450.00	Mtrs	111.00	2,71,950.00
18.04	Above 185 sq. mm and upto 400 sq. mm	3150.00	Mtrs	134.00	4,22,100.00
19.00	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface as required.				
19.01	Upto 35 sq. mm (clamped with 1mm thick saddle)	200.00	Mtrs	78.00	15,600.00
19.02	Above 95 sq. mm and upto 185 sq. mm (clamped with 25x3mm MS flat clamp)	200.00	Mtrs	167.00	33,400.00
20.00	Laying of 110 mm dia OD HDPE Pipe along with all accessoreis like sockets, bends, coupler etc, complete with fitting cutting, jointing etc. direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required. (HDPE pipe will be supplied by AAI)	2500.00	Mtrs	278.00	6,95,000.00
21.00	Supplying and making straight through joint with heat shrinkable kit including ferrules and other jointing materials for following size of PVC insulated and PVC sheathed /XLPE aluminium conductor cable of 1.1 KV grade as required.				
21.01	4X16 Sq.mm	20.00	Set	2920.82	58,416.40
21.02	4x25 Sq.mm	5.00	Set	3247.82	16,239.10
21.03	3½ X 95 Sq. mm	5.00	Set	4357.73	21,788.65
21.04	3½ X 120 Sq. mm	10.00	Set	5906.63	59,066.30
21.05	3½ X 300 Sq. mm	10.00	Set	7144.54	71,445.40
21.06	3½ X 400 Sq. mm	5.00	Set	9231.36	46,156.80
22.00	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.				



Sl.No	Description of Work	Qty.	Unit	Rate	Amount
22.01	3½ X 400 sq. mm (82mm)	10.00	Set	2018.04	20,180.40
22.02	3½ X 300 sq. mm (70 mm)	15.00	Set	1504.42	22,566.30
22.03	3½ X 150 sq. mm (50mm)	1.00	Set	841.79	841.79
22.04	3½ X 120 sq. mm (45mm)	25.00	Set	760.40	19,010.00
22.05	3½ X 95 sq. mm (45mm)	30.00	Set	619.14	18,574.20
22.06	3½ X 70 sq. mm (38mm)	10.00	Set	527.67	5,276.70
22.07	3½ X 50 sq. mm (35mm)	25.00	Set	504.59	12,614.75
22.08	3½ X 35 sq. mm (32mm)	40.00	Set	363.19	14,527.60
22.09	3½ X 25 sq. mm (28mm)	130.00	Set	356.27	46,315.10
22.10	4 X 16 sq. mm (28mm)	115.00	Set	303.34	34,884.10
22.11	4 X 10 sq. mm (25mm)	15.00	Set	300.57	4,508.55
23.00	Supply and Laying of 100 mm dia size C class GI pipe for taxiway/runway/Road crossing at a depth of 150 mm i/c cutting the Apron/ PQC /bituminous surface, re-filling with cement concrete mixture of ratio 1:2:4 and making good the surface matching with original finish etc., as required and as per the instruction of Engineer-in-charge.	1800.00	Mtrs	1507.07	27,12,726.00
24.00	Supply and Laying of 100 mm dia size C class GI pipe on surface and providing 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) concrete of thickness 150mm above and all around the pipe required as per the instruction of Engineer-in-charge.	300.00	Mtrs	1396.07	4,18,821.00
25.00	Supply and Laying of 50 mm dia size C class GI pipe for apron/taxiway/runway/Road crossing at a depth of 150 mm i/c cutting the Apron/ PQC /bituminous surface, re-filling with cement concrete mixture of ratio 1:2:4 and making good the surface matching with original finish etc., as required and as per the instruction of Engineer-in-charge.	500.00	Mtrs	771.18	3,85,590.00
26.00	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.	32.00	Each	13028.32	4,16,906.24
27.00	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	8.00	Each	17006.43	1,36,051.44



Sl.No	Description of Work	Qty.	Unit	Rate	Amount
28.00	Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)	100.00	Mtrs	301.34	30,134.00
29.00	Providing and fixing 25 mm X 5 mm G.I. strip in 40 mm dia G.I. pipe from earth electrode including connection with G.I. nut, bolt, spring, washer excavation and re-filling etc. as required.	220.00	Mtrs	795.96	1,75,111.20
30.00	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	300.00	Mtrs	223.34	67,002.00
31.00	Supply & fixing of nominal 2.0 mm thick (Width 1 Mtr) PVC synthetic, electric insulated mats conforming to IS 15652-2006 having Dielectric strength of 30 KV, no adverse effect of mineral oil, high insulation resistance (Minimum 1,00,000 M Ω on wet condition with 5 KV meggar) etc., as required.	180.00	Sq.Mtrs	918.84	1,65,391.20
32.00	Providing Civil Works as required as detailed below:				
32.01	Cement concrete in 1:2:4 (1 cement: 3 coarse sand: 6 graded stone aggregate 20mm nominal size)	10.00	Cum	10578.00	1,05,780.00
32.02	Brick work with bricks of class designation 60 in foundation and plinth in 1:6 (1 cement: 6 coarse sand)	10.00	Cum	8351.00	83,510.00
32.03	Cement plaster 12mm thick of mixture 1:6	10.00	Sq.Mtrs	1113.00	11,130.00
33.00	Fabrication & Supply of MS Rectangular Transformer Housing Box of size 750x330x300 mm, made out of 8mm thick MS sheet on four sides and bottom, 10mm thick MS sheet for top cover with 8 Nos. M-10 size threaded hole, 1 No. 25mm dia drain hole at the bottom and suitable holes to enable entry of 40/50/63/90mm dia GI/HDPE pipe and secondary leads, (2 Nos. partition plates of 200mm high inside the box made of 8mm thick MS Sheet) with rubber gaskets for top cover, two nos. cadmium plated earthing bolts with nuts etc. including painting with one coat of red oxide paint and two coats of black enamel paint finish etc. as required.	10.00	Nos	16971.44	1,69,714.40



Sl.No	Description of Work	Qty.	Unit	Rate	Amount
34.00	Installation of MS Transformer housing box of size not less than 750mm X 330 mm X 300 mm in runway/taxiway shoulder by cutting of bitumen/concrete area including providing 75mm thick cement concrete 1:2:4 all around and bottom of the transformer housing box with required slope to level of runway/taxiway all around the housing box with the bitumen surface and plastering of exposed surface with cement mortar 1:4 of thickness 12 mm over the concrete surface including painting top of MS box and lettering & numbering in a base of suitable colour with one coat of zinc chromate primer and two coats of poly urethane paint etc. after installation complete as required.	10.00	Nos	5567.00	55,670.00

Total ₹ 1,69,80,831.78

Rupees One Crore Sixty-Nine Lakhs Eighty Thousand Eight Hundred & Thirty-One and Paise Seventy-Eight Only

Note: GST extra as applicable



A. Mariappan

Joint General Manager (Engg.-Elect.)