



भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

NO: AAC/EMD-II/1001(105)/ 49

Dated 11-03-2021

12

To
M/S. Kripa Electronics (India) Pvt. Ltd.
Unit no. 801/802, 8th FLOOR, A-wing,
Kanakia Wall Street, Andheri Kuria Road,
Chakala, Andheri (E),
Mumbai- 400 093.
Tel. No. 022-68312727, Mail id: sales@keilighting.com

Name of Work : Provision of LED Aporn Flood Lighting of RCS Bays, Cargo Bay C15 to C16 and new Bays C1 to C14 at NSCBI Airport, Kolkata.

Ref : i) Open Tender vide E – Bid No. 2020 _AAI_64435_1
ii) Your e-bid(Financial) opened on 22-02-2021.

Dear Sir,

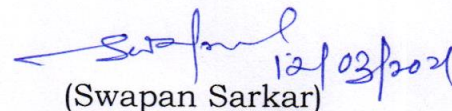
1. Your e-tender for the work mentioned above is hereby accepted on behalf of Chairman, Airports Authority of India, at the item rates quoted by you totaling to **Rs.4,57,99,860/-** (Rupees Four Crore Fifty Seven Lakh Ninety Nine Thousand Eight Hundred and sixty only) excluding GST which is 2.33% (Two Decimal Three Three percent) above the Estimated cost of Rs.4,47,57,021/- (excluding GST).
2. Dy. General Manager (Engg-Elect)-I, AAI, NSCBI Airport, Kolkata shall be the Engineer-in charge of the work and his authorized representative shall be Shri A. Dutta, Asst. General Manager (Engg-Elect.). You are requested to attend the office of Dy. General Manager (Engg-Elect.)-I, AAI, NSCBI Airport, Kolkata-52, within 15 days from the date of issue of this letter to sign and complete the contract agreement. The contract agreement shall be executed on a non-judicial stamp paper of value Rs.100/- (Rupees One hundred only) alongwith Demi paper and the cost of the stamp paper shall be borne by you.
3. Please deposit an amount of **Rs. 45,79,986/-** (Rupees Forty Five Lakh Seventy Nine Thousand Nine Hundred Eighty Six only) towards Security Deposit within 10 days from the date of issue of this letter failing which the same will be deducted as per condition of Clause no.1A at GCC page no.16 of contract document.
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, Child Labour (Prohibition and Regulation) Act 1986, Construction Workers (Regulation of Employment and condition of Service) Act 1996, Building and other Construction Workers Welfare Cess Act 1996 as specified in clause 19 on GCC page no:49 of Tender, minimum wages act. and rules thereof Central and State Governments.

Cont'd page..2

PAGE : 2.

5. You are also directed to contact AGM(E-E) immediately who will arrange to hand over the site to you.
6. Please note that the time allowed for carrying out the work for SITC part shall be **10 (Ten) Months** and same shall be reckoned from the 10th day after the date of issue of this letter and time allowed for carry out the work for Comprehensive Maintenance part shall be 24 (Twenty Four) Months after SITC work.
7. All queries, clarifications etc. raised during e-tendering process and replies there of including all corrigendum issued shall also form part of the agreement.
8. Any further correspondence in connection with the contract should normally be addressed to the Engineer-in-charge.
9. 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,


(Swapan Sarkar)

Dy. General Manager (Engg-Elect.)
For and on behalf of Chairman, AAI.

Encl: Schedule of Quantity.

Copy to:

- 1) The Labour Commissioner, 2nd, MS Building, 5th floor, Nizam palace, 234/4, A.J.C. Bose Road, Kolkata-700 020.
- 2) The Chief Commissioner of Income Tax, P-7, Aayakar Bhavan, Chowringhee sqr, Kolkata-700 069
- 3) The Regional Provident Fund Commissioner, D K Block , Sector-2, Salt lake City, Kolkata-700 091.

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Item Rate BoQ

Tender Inviting Authority: AIRPORTS AUTHORITY OF INDIA

Name of Work: Provision of LED Apron Flood Lighting of RCS Bays, Cargo Bay C15-to C16 & new Bays C1 to C 14 at NSCBI Airport, Kolkata.

Contract No: AAC/AGM(EI)-II/2020-21/NIT-04

Name of the Bidder/ Bidding Firm / Company :	KRIPA ELECTRONICS (INDIA) PVT. LTD.
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PRICE SCHEDULE

(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)

NUMBER #	TEXT #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Item Code / Make	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT Without Taxes in Rs. P	TOTAL AMOUNT In Words
1	2	3	4	5	13	53	55
1	SH : I SITC WORK Design & SITC of Luminaires Designing of Apron Flood Lighting for RCS Bays, Cargo Bay C15 to C16, new Bays C1 to C 14 and GSE Area beside Watch Tower no 1 of Kolkata Airport with LED flood light luminaires considering minimum glare and of less than 45 UGR at different directions for the Pilot situated at a height of 4 to 6 mtrs above ground level at Apron area and Glare Analysis reporting so as to maintain the lux level not less than the requirement of latest ICAO, Annexure - 14 / DGCA CAR at the end of 5th year and restricting the power consumption not more than (i) 1.1 KW +10% per High mast for Illumination of Cargo Bay C15 to C16. (ii) 1.2 KW + 10 % for Illumination of RCS Bays, (iii) 650Watts + 10 % for Illumination of C1 to C 14 bays where numbers and height of the high masts are fixed (as per existing plan and drawings) complete as required and vetting the same in AAI approved lab and as detailed in the Technical Specifications of this tender.	Item 1	1.000	Job	750000.00	750000.00	INR Seven Lakh Fifty Thousand Only
2	Supplying set of LED luminaires with driver set for Apron Flood Lighting for each high mast as per design requirement (ref. item-1) etc. complete as required.	Item 2	37.000	Set	200000.00	7400000.00	INR Seventy Four Lakh Only
3	Supply of LED Flood lighting Luminaire with Driver set complete as required as per the Technical Specifications of the tender document. (i) 180-200 Watts 30 Degree Beam.	Item 3	40.000	Each	24000.00	960000.00	INR Nine Lakh Sixty Thousand Only
4	Supply of LED Flood lighting Luminaire with Driver set complete as required as per the Technical Specifications of the tender document. (i) 180 Watts 10 Degree Beam Angle	Item 4	5.000	Each	24000.00	120000.00	INR One Lakh Twenty Thousand Only
5	Supply of LED Flood lighting Luminaire with Driver set complete as required as per the Technical Specifications of the tender document. (i) 250-270 Watts 30 Degree Beam Angle.	Item 5	40.000	Each	28500.00	1140000.00	INR Eleven Lakh Forty Thousand Only

Sl. No.	Item Description	Item Code / Make	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT Without Taxes in Rs. P	TOTAL AMOUNT In Words
1	2	3	4	5	13	53	55
6	Supply of LED Flood lighting Luminaire with Driver set complete as required as per the Technical Specifications of the tender document. (i) 250 Watts 10 Degree Beam Angle.	Item 6	5.000	Each	28500.00	142500.00	INR One Lakh Forty Two Thousand Five Hundred Only
7	Testing of randomly selected Luminaires as offered in item no. 2 in AAI approved NABL accredited laboratories for LM-79 etc. complete as required and submission of 2 sets of Report including to and from transportation, loading and unloading etc. complete as required.	Item 7	20.000	Each	60000.00	1200000.00	INR Twelve Lakh Only
8	Installation, testing and commissioning of LED luminaires with Driver Set for Apron Flood Lighting on 7 m to 30 mtrs High Mast to maintain the illumination level as per the design (item-1) including wiring (4 sq mm for incoming and 2.5 mm Sq.mm. Cu cable for interconnection, PVC insulated PVC sheathed, ISI marked) connections, interconnection, fixing the fittings, angle setting of fixtures to achieve average lux and Glare as per the design etc. complete as required.	Item 8	37.000	Job	3000.00	111000.00	INR One Lakh Eleven Thousand Only
9	Design and SITC of High Masts Designing and Supplying of following height of hot dip galvanized (internal and external), polygonal, single / double sectional, slip in stress fit high mast made of Steel as per BS/DIN/ASTM, welded as per BS-5135 / AWS and designed to with stand wind speed as per IS-875 complete in all respects including manually cum electrically operated raising and lowering mechanism having double drum double gear winch, gear, motor for lifting, lowering with remote console having operated push button and with 5 mtr length of cord, Stainless steel wire ropes, lantern carriage suitable for LED luminaires as required by the design as explained in item-1 and 2 nos LED type aviation obstruction light, top pulley arrangement (triple), junction Boxes - 02 nos, Lightning finial, providing (2 nos) required length of 1.1 KV grade multicore copper conductor trailing cable (as per IS - 4289, elastomer insulated, natural or synthetic textile material braided). The Lantern Carriage should accommodate 02 nos of Junction Box with Terminal blocks to Terminate and Interconnect the trailing cables and Loop Cables of Luminaires. 20 A multiple socket and top etc. as mentioned in technical specifications, complete as required. (a) 07 mtr. High	Item 9	6.000	Each	320000.00	1920000.00	INR Nineteen Lakh Twenty Thousand Only

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1	2	3	4	5	13	53	55
10	Designing and Supplying of following height of hot dip galvanized (internal and external), polygonal, single / double sectional, slip in stress fit high mast made of Steel as per BS/DIN/ASTM, welded as per BS-5135 / AWS and designed to with stand wind speed as per IS-875 complete in all respects including manually cum electrically operated raising and lowering mechanism having double drum double gear winch, gear, motor for lifting, lowering with remote console having operated push button and with 5 mtr length of cord, Stainless steel wire ropes, lantern carriage suitable for LED luminaires as required by the design as explained in item-1 and 2 nos LED type aviation obstruction light, top pulley arrangement (triple), junction Boxes - 02 nos, Lightning finial, providing (2 nos) required length of 1.1 KV grade multicore copper conductor trailing cable (as per IS - 4289, elastomer insulated, natural or synthetic textile material braided). The Lantern Carriage should accommodate 02 nos of Junction Box with Terminal blocks to Terminate and Interconnect the trailing cables and Loop Cables of Luminaires. 20 A multiple socket and top etc. as mentioned in technical specifications, complete as required. (a) 08 mtr High	Item 10	3.000	Each	320000.00	960000.00	INR Nine Lakh Sixty Thousand Only
11	Designing and Supplying of following height of hot dip galvanized (internal and external), polygonal, single / double sectional, slip in stress fit high mast made of Steel as per BS/DIN/ASTM, welded as per BS-5135 / AWS and designed to with stand wind speed as per IS-875 complete in all respects including manually cum electrically operated raising and lowering mechanism having double drum double gear winch, gear, motor for lifting, lowering with remote console having operated push button and with 5 mtr length of cord, Stainless steel wire ropes, lantern carriage suitable for LED luminaires as required by the design as explained in item-1 and 2 nos LED type aviation obstruction light, top pulley arrangement (triple), junction Boxes - 02 nos, Lightning finial, providing (2 nos) required length of 1.1 KV grade multicore copper conductor trailing cable (as per IS - 4289, elastomer insulated, natural or synthetic textile material braided). The Lantern Carriage should accommodate 02 nos of Junction Box with Terminal blocks to Terminate and Interconnect the trailing cables and Loop Cables of Luminaires. 20 A multiple socket and top etc. as mentioned in technical specifications, complete as required. (a) 09 mtr. High	Item 11	6.000	Each	350000.00	2100000.00	INR Twenty One Lakh Only

Sl. No.	Item Description	Item Code / Make	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT Without Taxes in Rs. P	TOTAL AMOUNT In Words
1	2	3	4	5	13	53	55
12	Designing and Supplying of following height of hot dip galvanized (internal and external), polygonal, single / double sectional, slip in stress fit high mast made of Steel as per BS/DIN/ASTM, welded as per BS-5135 / AWS and designed to with stand wind speed as per IS-875 complete in all respects including manually cum electrically operated raising and lowering mechanism having double drum double gear winch, gear, motor for lifting, lowering with remote console having operated push button and with 5 mtr length of cord, Stainless steel wire ropes, lantern carriage suitable for LED luminaires as required by the design as explained in item-1 and 2 nos LED type aviation obstruction light, top pulley arrangement (triple), junction Boxes - 02 nos, Lightning finial, providing (2 nos) required length of 1.1 KV grade multicore copper conductor trailing cable (as per IS - 4289, elastomer insulated, natural or synthetic textile material braided). The Lantern Carriage should accommodate 02 nos of Junction Box with Terminal blocks to Terminate and Interconnect the trailing cables and Loop Cables of Luminaires. 20 A multiple socket and top etc. as mentioned in technical specifications, complete as required. (a) 12 Mtr High	Item 12	11.000	Each	450000.00	4950000.00	INR Forty Nine Lakh Fifty Thousand Only
13	Designing and Supplying of following height of hot dip galvanized (internal and external), polygonal, single / double sectional, slip in stress fit high mast made of Steel as per BS/DIN/ASTM, welded as per BS-5135 / AWS and designed to with stand wind speed as per IS-875 complete in all respects including manually cum electrically operated raising and lowering mechanism having double drum double gear winch, gear, motor for lifting, lowering with remote console having operated push button and with 5 mtr length of cord, Stainless steel wire ropes, lantern carriage with latching suspension suitable for LED luminaires as required by the design as explained in item-1 and 2 nos LED type aviation obstruction light, top pulley arrangement (triple), junction Boxes - 02 nos, Lightning finial, providing (2 nos) required length of 1.1 KV grade multicore copper conductor trailing cable (as per IS - 4289, elastomer insulated, natural or synthetic textile material braided). The Lantern Carriage should accommodate 02 nos of Junction Box with Terminal blocks to Terminate and Interconnect the trailing cables and Loop Cables of Luminaires. 20 A multiple socket and top etc. as mentioned in technical specifications, complete as required. (a) 21 Mtr High	Item 13	1.000	Each	500000.00	500000.00	INR Five Lakh Only

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1	2	3	4	5	13	53	55
14	Designing and Supplying of following height of hot dip galvanized (internal and external), polygonal, single / double sectional, slip in stress fit high mast made of Steel as per BS/DIN/ASTM, welded as per BS-5135 / AWS and designed to with stand wind speed as per IS-875 complete in all respects including manually cum electrically operated raising and lowering mechanism having double drum double gear winch, gear, motor for lifting, lowering with remote console having operated push button and with 5 mtr length of cord, Stainless steel wire ropes, lantern carriage with latching suspension suitable for LED luminaires as required by the design as explained in item-1 and 2 nos LED type aviation obstruction light, top pulley arrangement (triple), junction Boxes - 02 nos, Lightning finial, providing (2 nos) required length of 1.1 KV grade multicore copper conductor trailing cable (as per IS - 4289, elastomer insulated, natural or synthetic textile material braided) . The Lantern Carriage should accommodate 02 nos of Junction Box with Terminal blocks to Terminate and Interconnect the trailing cables and Loop Cables of Luminaires. 20 A multiple socket and top etc. as mentioned in technical specifications, complete as required. (a) 22 Mtr High	Item 14	3.000	Each	500000.00	1500000.00	INR Fifteen Lakh Only
15	Designing and Supplying of following height of hot dip galvanized (internal and external), polygonal, single / double sectional, slip in stress fit high mast made of Steel as per BS/DIN/ASTM, welded as per BS-5135 / AWS and designed to with stand wind speed as per IS-875 complete in all respects including manually cum electrically operated raising and lowering mechanism having double drum double gear winch, gear, motor for lifting, lowering with remote console having operated push button and with 5 mtr length of cord, Stainless steel wire ropes, lantern carriage with latching suspension suitable for LED luminaires as required by the design as explained in item-1 and 2 nos LED type aviation obstruction light, top pulley arrangement (triple), junction Boxes - 02 nos, Lightning finial, providing (2 nos) required length of 1.1 KV grade multicore copper conductor trailing cable (as per IS - 4289, elastomer insulated, natural or synthetic textile material braided) . The Lantern Carriage should accommodate 02 nos of Junction Box with Terminal blocks to Terminate and Interconnect the trailing cables and Loop Cables of Luminaires. 20 A multiple socket and top etc. as mentioned in technical specifications, complete as required. (a) 28 Mtr High	Item 15	1.000	Each	650000.00	650000.00	INR Six Lakh Fifty Thousand Only

Sl. No.	Item Description	Item Code / Make	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT Without Taxes in Rs. P	TOTAL AMOUNT In Words
1	2	3	4	5	13	53	55
16	Designing and Supplying of following height of hot dip galvanized (internal and external), polygonal, single / double sectional, slip in stress fit high mast made of Steel as per BS/DIN/ASTM, welded as per BS-5135 / AWS and designed to with stand wind speed as per IS-875 complete in all respects including manually cum electrically operated raising and lowering mechanism having double drum double gear winch, gear, motor for lifting, lowering with remote console having operated push button and with 5 mtr length of cord, Stainless steel wire ropes, lantern carriage with latching suspension suitable for LED luminaires as required by the design as explained in item-1 and 2 nos LED type aviation obstruction light, top pulley arrangement (triple), junction Boxes - 02 nos, Lightning finial, providing (2 nos) required length of 1.1 KV grade multicore copper conductor trailing cable (as per IS - 4289, elastomer insulated, natural or synthetic textile material braided) . The Lantern Carriage should accommodate 02 nos of Junction Box with Terminal blocks to Terminate and Interconnect the trailing cables and Loop Cables of Luminaires. 20 A multiple socket and top etc. as mentioned in technical specifications, complete as required. (a) 30 Mtr High	Item 16	3.000	Each	650000.00	1950000.00	INR Nineteen Lakh Fifty Thousand Only
17	Carrying out soil test at various locations of NSCBIA by NABL Accredited laboratories which shall include taking the samples, parameters, compilation of field tests and laboratory test results analysing the safe bearing capacity of the particular heights High Masts foundation locations as mentioned in the drawings D1 to D4. (a) For F-Taxi = 02 nos. (b) near Demolished Cargo = 01 no, (c) RCS Bay = 01 no, (d) near WT no1 = 01 no. and submission of 2 sets of each detailed soil testing reports to AAI.	Item 17	5.000	Job	200000.00	1000000.00	INR Ten Lakh Only
18	Providing detailed design and drawings of Foundations with minimum M 20 grade concrete for High Masts upto height of 12 mtrs and minimum M 30 Grade for High Masts above 12 mtrs height at various locations of NSCBI Airport Kolkata by taking into consideration inputs of Soil Testing as mentioned in 6 (i) above including vetting the foundation designs from IIT/NIT/Jadavpur University/IISER, or any Govt. Engineering College (2 sets of each detailed and approved drawings for the each type of foundations to be submitted to AAI).	Item 18	8.000	Job	19000.00	152000.00	INR One Lakh Fifty Two Thousand Only
19	Construction of RCC foundation as per the approved vetted design i/c foundation bolts, nut, washers, template, HDPE pipes for cable entry etc for the high masts as offered in Schedule of Quantity including excavation of the Apron area and filling with grade not less M 20 grade for High Masts upto height of 12 mtrs and M 30 Grade for High Masts above 12 mtrs height at various locations of NSCBI Airport Kolkata, refilling the same as per the design requirement etc., Installation, testing and commissioning of High masts of required height, making connection, numbering, necessary electrical connections and making all around steel barricading with MS square tube of size 100mm x 100mm as per the design approved by EIC and grouting on concrete with anchor fastener, red white painting for protection of high masts, Electrical panel and control panels etc. so as to complete the work as required. (a) 07 mtr. High Mast	Item 19	6.000	Each	70000.00	420000.00	INR Four Lakh Twenty Thousand Only

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1	2	3	4	5	13	53	55
20	Construction of RCC foundation as per the approved vetted design i/c foundation bolts, nut, washers, template, HDPE pipes for cable entry etc for the high masts as offered in Schedule of Quantity including excavation of the Apron area and filling with grade not less M 20 grade for High Masts upto height of 12 mtrs and M 30 Grade for High Masts above 12 mtrs height at various locations of NSCBI Airport Kolkata, refilling the same as per the design requirement etc., Installation, testing and commissioning of High masts of required height, making connection, numbering, necessary electrical connections and making all around steel barricading with MS square tube of size 100mm x 100mm as per the design approved by EIC and grouting on concrete with anchor fastener, red white painting for protection of high masts, Electrical panel and control panels etc. so as to complete the work as required. (a) 08 mtr High Mast	Item 20	3.000	Each	70000.00	210000.00	INR Two Lakh Ten Thousand Only
21	Construction of RCC foundation as per the approved vetted design i/c foundation bolts, nut, washers, template, HDPE pipes for cable entry etc for the high masts as offered in Schedule of Quantity including excavation of the Apron area and filling with grade not less M 20 grade for High Masts upto height of 12 mtrs and M 30 Grade for High Masts above 12 mtrs height at various locations of NSCBI Airport Kolkata, refilling the same as per the design requirement etc., Installation, testing and commissioning of High masts of required height, making connection, numbering, necessary electrical connections and making all around steel barricading with MS square tube of size 100mm x 100mm as per the design approved by EIC and grouting on concrete with anchor fastener, red white painting for protection of high masts, Electrical panel and control panels etc. so as to complete the work as required. (a) 09 mtr. High Mast	Item 21	6.000	Each	70000.00	420000.00	INR Four Lakh Twenty Thousand Only
22	Construction of RCC foundation as per the approved vetted design i/c foundation bolts, nut, washers, template, HDPE pipes for cable entry etc for the high masts as offered in Schedule of Quantity including excavation of the Apron area and filling with grade not less M 20 grade for High Masts upto height of 12 mtrs and M 30 Grade for High Masts above 12 mtrs height at various locations of NSCBI Airport Kolkata, refilling the same as per the design requirement etc., Installation, testing and commissioning of High masts of required height, making connection, numbering, necessary electrical connections and making all around steel barricading with MS square tube of size 100mm x 100mm as per the design approved by EIC and grouting on concrete with anchor fastener, red white painting for protection of high masts, Electrical panel and control panels etc. so as to complete the work as required. (a) 12 Mtr High Mast	Item 22	11.000	Each	100000.00	1100000.00	INR Eleven Lakh Only

Sl. No.	Item Description	Item Code / Make	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT Without Taxes in Rs. P	TOTAL AMOUNT In Words
1	2	3	4	5	13	53	55
23	Construction of RCC foundation as per the approved vetted design i/c foundation bolts, nut, washers, template, HDPE pipes for cable entry etc for the high masts as offered in Schedule of Quantity including excavation of the Apron area and filling with grade not less M 20 grade for High Masts upto height of 12 mtrs and M 30 Grade for High Masts above 12 mtrs height at various locations of NSCBI Airport Kolkata, refilling the same as per the design requirement etc., Installation, testing and commissioning of High masts of required height, making connection, numbering, necessary electrical connections and making all around steel barricading with MS square tube of size 100mm x 100mm as per the design approved by EIC and grouting on concrete with anchor fastener, red white painting for protection of high masts, Electrical panel and control panels etc. so as to complete the work as required. (a) 21 Mtr High Mast	Item 23	1.000	Each	200000.00	200000.00	INR Two Lakh Only
24	Construction of RCC foundation as per the approved vetted design i/c foundation bolts, nut, washers, template, HDPE pipes for cable entry etc for the high masts as offered in Schedule of Quantity including excavation of the Apron area and filling with grade not less M 20 grade for High Masts upto height of 12 mtrs and M 30 Grade for High Masts above 12 mtrs height at various locations of NSCBI Airport Kolkata, refilling the same as per the design requirement etc., Installation, testing and commissioning of High masts of required height, making connection, numbering, necessary electrical connections and making all around steel barricading with MS square tube of size 100mm x 100mm as per the design approved by EIC and grouting on concrete with anchor fastener, red white painting for protection of high masts, Electrical panel and control panels etc. so as to complete the work as required. (a) 22 Mtr High Mast	Item 24	3.000	Each	200000.00	600000.00	INR Six Lakh Only
25	Construction of RCC foundation as per the approved vetted design i/c foundation bolts, nut, washers, template, HDPE pipes for cable entry etc for the high masts as offered in Schedule of Quantity including excavation of the Apron area and filling with grade not less M 20 grade for High Masts upto height of 12 mtrs and M 30 Grade for High Masts above 12 mtrs height at various locations of NSCBI Airport Kolkata, refilling the same as per the design requirement etc., Installation, testing and commissioning of High masts of required height, making connection, numbering, necessary electrical connections and making all around steel barricading with MS square tube of size 100mm x 100mm as per the design approved by EIC and grouting on concrete with anchor fastener, red white painting for protection of high masts, Electrical panel and control panels etc. so as to complete the work as required. (a) 28 Mtr High Mast	Item 25	1.000	Each	200000.00	200000.00	INR Two Lakh Only

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1	2	3	4	5	13	53	55
26	Construction of RCC foundation as per the approved vetted design i/c foundation bolts, nut, washers, template, HDPE pipes for cable entry etc for the high masts as offered in Schedule of Quantity including excavation of the Apron area and filling with grade not less M 20 grade for High Masts upto height of 12 mtrs and M 30 Grade for High Masts above 12 mtrs height at various locations of NSCBI Airport Kolkata, refilling the same as per the design requirement etc., Installation, testing and commissioning of High masts of required height, making connection, numbering, necessary electrical connections and making all around steel barricading with MS square tube of size 100mm x 100mm as per the design approved by EIC and grouting on concrete with anchor fastener, red white painting for protection of high masts, Electrical panel and control panels etc. so as to complete the work as required. (a) 30 Mtr High Mast (AAI shall provide 03 nos HM from stores for erection).	Item 26	6.000	Each	200000.00	1200000.00	INR Twelve Lakh Only
27	Dismantling of existing high mast i/c disconnection of the existing circuits, removal of Control panel to High Masts, disconnection of earthing connection, removal of luminaires and carrying the High mast alongwith accessories to the departmental store of AAI from the operational area and Dismantling of existing high mast concrete foundation including foundation bolts, levelling of excavated surface with cement concrete of Grade M 20 etc. and making good the area same as existing apron, complete as required. (a) upto 20 mtr. High Mast	Item 27	2.000	Job	75000.00	150000.00	INR One Lakh Fifty Thousand Only
28	Dismantling of existing high mast i/c disconnection of the existing circuits, removal of Control panel to High Masts, disconnection of earthing connection, removal of luminaires and carrying the High mast alongwith accessories to the departmental store of AAI from the operational area and Dismantling of existing high mast concrete foundation including foundation bolts, levelling of excavated surface with cement concrete of Grade M 20 etc. and making good the area same as existing apron, complete as required. (a) 21 mtr to 30 mtrs High mast	Item 28	2.000	Job	10000.00	20000.00	INR Twenty Thousand Only
29	Dismantling of existing Pole i/c disconnection of the exiting circuits to pole, disconnection of earthing connection, removal of luminaires and carrying the pole alongwith accessories to the departmental store of AAI from the operational area and Dismantling of existing concrete foundation, levelling etc. and making this area good same as existing apron, complete as required. (a) upto 12 Mtr Hight	Item 29	7.000	Job	100000.00	700000.00	INR Seven Lakh Only

Sl. No.	Item Description	Item Code / Make	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT Without Taxes in Rs. P	TOTAL AMOUNT In Words
1	2	3	4	5	13	53	55
30	Electrical and associated works Supply of weather proof, vermin proof, powder coated, free floor-standing type, fully compartmentalised, double door, outdoor type High Mast Main Panel generally conforming to IP-55 and having SC capacity of 25 KA, fabricated from 2 mm. thick CRCA sheet, treated through seven tank process suitable to accommodate the following along with detachable gland plate (2 mm thick CRCA sheet), the enclosure shall be provided with ventilation louver covered with wire mesh. i) (Incomer): 125A, 415V, Four pole MCCB - 1 no. ii) (Outgoing): a) 63 A, 4P MCCB (C-series) - 01 no.; b) 100 A, 4P MCCB (C-Series) - 01 no. iii) 150 A rating AI - Bus bar, Four pole with Fiber glass insulated support & PVC sleeve etc. iv) R Y B indication lamp (LED) with 3 nos 2 A SP MCB (B-series) = 01 set v) Separate Cable Alley for cable terminations. 02 nos of 100 A 4 Pole terminals. vi) Voltmeter Digital Type - 1 no, Ammeter Digital Type - 1 no.	Item 30	1.000	Each	67100.00	67100.00	INR Sixty Seven Thousand One Hundred Only
31	Supplying of weather proof, vermin proof, powder coated, free floor-standing type, fully compartmentalised, double door, outdoor type High Mast Sub Panel generally conforming to IP-55 and having SC capacity of 25 KA, fabricated from 2 mm. thick CRCA sheet, treated through seven tank process suitable to accommodate the following along with detachable gland plate (2 mm thick CRCA sheet) the enclosure shall be provided with ventilation louver covered with wiremesh. i) (Incomer): 100A, 415V, Four pole MCCB - 2 nos. (ii) (Outgoing): a) 25 A, 4P MCB (C-series) - 06 nos.; (iii) 150 A rating AI - Bus bar, four pole with Fiber glass insulated support & PVC sleeve etc. (iv) R Y B indication lamp (LED) with 3 nos. 2 A SP MCB (B-series) = 01 set (v) Separate Cable Alley for cable terminations. 08 nos of 100 A 4 Pole terminals (vi) 130 A, 4 Pole contactor = 02 nos (for auto changing power supply and vice versa including 09 A Auxiliary contactor-01 no and (ADD-ON BLOCK- NO-NC = 02 nos.); Indication Lamp for showing the selective power supply - 02 nos. (vii) Voltmeter Digital Type - 1 no, Ammeter Digital Type - 1 no.	Item 31	5.000	Each	110000.00	550000.00	INR Five Lakh Fifty Thousand Only

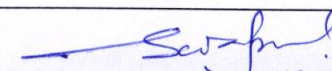
SI. No.	Item Description	Item Code / Make	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT Without Taxes in Rs. P	TOTAL AMOUNT In Words
1	2	3	4	5	13	53	55
32	Supplying of weather proof, vermin proof, powder coated, free floor-standing type, fully compartmentalised, outdoor type High Mast Control Panel generally conforming to IP-55 and having SC capacity of 25 KA, fabricated from 2 mm. thick CRCA sheet, treated through seven tank process suitable to accommodate the following along with detachable gland plate (2 mm thick CRCA sheet), the enclosure shall be provided with ventilation louver covered with wiremesh. i) a) 25A, 415V, Four pole MCB - 1 nos. (Incomer Power supply) b) 16A, 415V, Four pole MCB - 2 nos. (Lifting lowering, lighting/timer) ii) (a) 32A 4 Pole contactor=01 no. 09 A TP contactor = 02 nos. (each for lifting, lowering, lighting/timer); (ADD-ON BLOCK- NO-NC=02 nos.) (b) On delay timer = 01 no; (c) 20 A socket outlet with top= 01 no (for Remote). iii) Auto / Manual toggle switch = 1 No, 100 A 4 Pole terminal: 3 nos. (Incomer Power Supply, Lighting, Lifting Lowering); Circuit Control Fuse: Mini MCB 2 A: 02 nos. (Incomer Power Supply, Lighting). Suitable quantity of Din Rail for mounting iv) Separate cable manager casing capping suitable quantity 1.5 sq mm copper wires for interconnection and 4 sq. mm. copper wires for power lines connection. Indication lamp: ON, OFF, TRIP: - 3 nos.	Item 32	25.000	Each	25000.00	625000.00	INR Six Lakh Twenty Five Thousand Only
33	Supplying of weather proof, vermin proof, powder coated, free floor-standing type, fully compartmentalised, double door, outdoor type High Mast Sub Panel generally conforming to IP-55 and having SC capacity of 25 KA, fabricated from 2 mm. thick CRCA sheet, treated through seven tank process suitable to accommodate the following along with detachable gland plate (2 mm thick CRCA sheet) the enclosure shall be provided with ventilation louver covered with wire mesh, lifting hooks. i) (Incomer) 63A, 415V, Four pole MCCB - 1 no. ii) (Outgoing): a) 32 A, 4P MCB (C-series) - 02 nos; iii) R Y B indication lamp (LED) with 3 nos. 2 A SP MCB (B-series) = 01 set iv) Voltmeter Digital Type -1 no, Ammeter Digital Type - 1 no.	Item 33	2.000	Each	25000.00	50000.00	INR Fifty Thousand Only

Sl. No.	Item Description	Item Code / Make	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT Without Taxes in Rs. P	TOTAL AMOUNT In Words
1	2	3	4	5	13	53	55
34	Supplying of weather proof, vermin proof, powder coated, free floor-standing type, fully compartmentalised, outdoor type High Mast Control Panel generally conforming to IP-55 and having SC capacity of 25 KA, fabricated from 2 mm. thick CRCA sheet, treated through seven tank process suitable to accommodate the following along with detachable gland plate (2 mm thick CRCA sheet), the enclosure shall be provided with ventilation louver covered with wire mesh, lifting hooks. i) (Incomer) 25A, 415V, Four pole MCB - 2 no. (Incomer Power supply) ii) (Outgoing): a) 16A, 4P MCB (C-series) - 02 nos.; Lighting / Timmer and Lifting lowering) iii) (a) 32 A 4Pole contactor=03 nos, 9 A TP contactor = 02 nos. (each for lifting-lowering, lighting/timer); 9 A Auxiliary contactor = 01 no. (for auto changing power supply and vice versa including an ADD-ON BLOCK- NO-NC = 02 nos.) Indication Lamp for showing the selective power supply-02 nos (b) On delay timer = 01 no; (c) 20 A socket outlet with top = 01 no (for Remote). iv) R Y B indication lamp (LED) with 3 nos. 2 A SP MCB (B-series) = 01 set v) Auto / Manual toggle switch = 1 No, 100 A 4 Pole terminal : 4 nos. (02 no Incomer Power Supply, Lighting, Lifting Lowering); Circuit Control Fuse : Mini MCB 2 A: 03 nos. (Incomer supply, Lighting). Suitable quantity of Din Rail for mounting vi) Separate cable manager casing capping suitable quantity 1.5 sq. mm. copper wires for interconnection and 4 sq. mm. copper wires for power lines connection. Indication lamp: ON, OFF, TRIP: - 3 nos.	Item 34	12.000	Each	40000.00	480000.00	INR Four Lakh Eighty Thousand Only
35	Installation, testing and commissioning of High Mast Electrical Panel / Control Panel as offered in item no. 10, 11, 12, 13, 14 including concrete foundation (1:3:6) and brick work of suitable size on three sides. It also includes swapping, recoiling, handling, refilling with sand and brick protection of all incoming and outgoing loop cables etc. complete as required.	Item 35	45.000	Job	15000.00	675000.00	INR Six Lakh Seventy Five Thousand Only
36	Supply of XLPE insulated, PVC sheathed, Aluminium conductor, armoured power cable of following sizes of 1.1 kV grade and conforming to IS 7098 (part1) as required. (a) 3.5C x 120 Sq.mm.	Item 36	1120.000	Metre	400.00	448000.00	INR Four Lakh Forty Eight Thousand Only
37	Supply of XLPE insulated, PVC sheathed, Aluminium conductor, armoured power cable of following sizes of 1.1 kV grade and conforming to IS 7098 (part1) as required. (a) 3.5C x 70 Sq. mm.	Item 37	1800.000	Metre	200.00	360000.00	INR Three Lakh Sixty Thousand Only
38	Supply of XLPE insulated, PVC sheathed, Aluminium conductor, armoured power cable of following sizes of 1.1 kV grade and conforming to IS 7098 (part1) as required. (a) 3.5C x 35 Sq. mm.	Item 38	350.000	Metre	200.00	70000.00	INR Seventy Thousand Only
39	Supply of XLPE insulated, PVC sheathed, Aluminium conductor, armoured power cable of following sizes of 1.1 kV grade and conforming to IS 7098 (part1) as required. (a) 4C x 16 Sq. mm.	Item 39	3100.000	Metre	110.00	341000.00	INR Three Lakh Forty One Thousand Only

Sl. No.	Item Description	Item Code / Make	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT Without Taxes in Rs. P	TOTAL AMOUNT In Words
1	2	3	4	5	13	53	55
40	Supply of permanently lubricated HDPE (High density polyethylene) pipe of 75 mm outer dia along with necessary connectors/couplers/adaptors etc. complete as required and as per the technical specifications.	Item 40	6740.000	Metre	200.00	1348000.00	INR Thirteen Lakh Forty Eight Thousand Only
41	Laying of 75 mm dia permanently lubricated HDPE pipe along with its accessories like coupler, end plugs etc. in following way - (a) below the ground (i/c Road crossing, Cement concrete Apron Area) at a depth of 2 m to 6 m through horizontal directional drilling etc. complete as required.	Item 41	4315.000	Metre	220.00	949300.00	INR Nine Lakh Forty Nine Thousand Three Hundred Only
42	Laying of 75 mm dia permanently lubricated HDPE pipe along with its accessories like coupler, end plugs etc. in following way - (a) On taxiway shoulder/Apron / for electrical work i/c machine cutting of runway / taxiway/Apron/ shoulder surface of suitable width and up to 150 mm depth, refilling and making good the same by concreting finish as per the site requirement.	Item 42	955.000	Metre	420.00	401100.00	INR Four Lakh One Thousand One Hundred Only
43	Laying of 75 mm dia permanently lubricated HDPE pipe along with its accessories like coupler, end plugs etc. in following way - (a) Laying of 75 mm dia OD HDPE pipe , complete with accessories like couplers, bends, tee etc. in the soil for GLF work up to 750 mm deep with excavation, back filling & making good the same as per site requirement.	Item 43	470.000	Metre	270.00	126900.00	INR One Lakh Twenty Six Thousand Nine Hundred Only
44	Laying of 75 mm dia permanently lubricated HDPE pipe along with its accessories like coupler, end plugs etc. in following way - (a) Laying of 75 mm dia OD HDPE pipe , complete with accessories like couplers, bends, tee etc. in the existing cable duct / masonry trench by saddling on the adjoining walls etc. the same as per site requirement.	Item 44	1000.000	Metre	130.00	130000.00	INR One Lakh Thirty Thousand Only
45	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. (a) Upto 35 sq. mm	Item 45	3433.000	Metre	100.00	343300.00	INR Three Lakh Forty Three Thousand Three Hundred Only
46	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. (a) Above 95 sq. mm and upto 185 sq. mm.	Item 46	1792.000	Metre	150.00	268800.00	INR Two Lakh Sixty Eight Thousand Eight Hundred Only
47	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. (a) Above 95 sq. mm and upto 185 sq. mm.	Item 47	1120.000	Metre	200.00	224000.00	INR Two Lakh Twenty Four Thousand Only
48	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. (a) 3.5C x 120 Sq.mm. (45 mm)	Item 48	6.000	Each	350.00	2100.00	INR Two Thousand One Hundred Only
49	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. (a) 3.5C x 70 Sq. mm. (38 mm)	Item 49	16.000	Each	245.00	3920.00	INR Three Thousand Nine Hundred & Twenty Only

Sl. No.	Item Description	Item Code / Make	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT Without Taxes in Rs. P	TOTAL AMOUNT In Words
1	2	3	4	5	13	53	55
50	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. (a) 3.5C x 35 Sq. mm. (32 mm)	Item 50	4.000	Each	245.00	980.00	INR Nine Hundred & Eighty Only
51	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. (a) 4C x 16 Sq. mm. (28 mm)	Item 51	98.000	Each	245.00	24010.00	INR Twenty Four Thousand & Ten Only
52	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 meter long etc. with charcoal/ coke and salt as required.	Item 52	74.000	Job	12000.00	888000.00	INR Eight Lakh Eighty Eight Thousand Only
53	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, connection, fitting, numbering, painting etc. as required.	Item 53	750.000	Metre	440.00	330000.00	INR Three Lakh Thirty Thousand Only
54	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	Item 54	590.000	Metre	115.00	67850.00	INR Sixty Seven Thousand Eight Hundred & Fifty Only
55	SH-II : COMPREHENSIVE MAINTENANCE WORK Job Contract for Comprehensive Maintenance of Apron Flood light system (AFL) as installed with its control, Sub feeder, main feeder panel, by deploying adequate manpower in three shifts on all days throughout the year including Sundays and holidays, preventive maintenance as per PMI schedule, attending complaints/faults/breakdown including taking rectification action and ensuring serviceability/satisfactory working condition, supply and replacement of all defective spares like MCCBs, MCB, contactors, LED fitting with driver, time switch, control cable, connectors, obstruction lights etc. and ensuring serviceability/satisfactory working condition of AFL masts, taking lux level measurement, maintaining all records and documentation etc., as per special conditions of contract and the instruction of Engineer in-charge or his authorised representative, as per requirement of the works. Note : Defect Liability period (DLP) for LED fitting and Driver is 5 Years and for other items it is 2 years. Cost of spare parts shall not be considered during Defect Liability Period. Only expenditure for manpower to be considered. The contractor needs to deploy the following minimum manpower with reliever. 1. Skilled Manpower - 3 Nos. (1 No. in each shift) and 2. Unskilled manpower - 3 Nos. (1 No. in each shift). a) 1st Year (of defect liability period).	Item 55	1.000	Year	2150000.00	2150000.00	INR Twenty One Lakh Fifty Thousand Only

Sl. No.	Item Description	Item Code / Make	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT Without Taxes in Rs. P	TOTAL AMOUNT In Words
1	2	3	4	5	13	53	55
56	Job Contract for Comprehensive Maintenance of Apron Flood light system (AFL) as installed with its control, Sub feeder, main feeder panel, by deploying adequate manpower in three shifts on all days throughout the year including Sundays and holidays, preventive maintenance as per PMI schedule, attending complaints/faults/breakdown including taking rectification action and ensuring serviceability/satisfactory working condition, supply and replacement of all defective spares like MCCBs, MCB, contactors, LED fitting with driver, time switch, control cable, connectors, obstruction lights etc. and ensuring serviceability/satisfactory working condition of AFL masts, taking lux level measurement, maintaining all records and documentation etc., as per special conditions of contract and the instruction of Engineer in-charge or his authorised representative, as per requirement of the works. Note : Defect Liability period (DLP) for LED fitting and Driver is 5 Years and for other items it is 2 years. Cost of spare parts shall not be considered during Defect Liability Period. Only expenditure for manpower to be considered. The contractor needs to deploy the following minimum manpower with reliever. 1. Skilled Manpower - 3 Nos. (1 No. in each shift) and 2. Unskilled manpower - 3 Nos. (1 No. in each shift). a) 2nd Year (of defect liability period).	Item 56	1.000	Year	2150000.00	2150000.00	INR Twenty One Lakh Fifty Thousand Only
Total in Figures						45799860.00	INR Four Crore Fifty Seven Lakh Ninety Nine Thousand Eight Hundred & Sixty Only
Quoted Rate in Words	INR Four Crore Fifty Seven Lakh Ninety Nine Thousand Eight Hundred & Sixty Only						


 Dgm (EE)
 12/3/2021

Signature Not Verified

Digitally signed by ABHIJIT DATTA
 Date: 2021.03.15 13:22:34 IST
 Location: eProcurement System for Central
 PSUs