



आज़ादी का
अमृत महोत्सव

AAI/Engg.(E)/SAP Project/2022-23/W.O.-05/4072-78

भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

दिनांक: 21.03.2023

To,

M/s Surya Roshni Limited
5th Floor, Padma Tower-1,
New Delhi-110008
Email id: sameer.sharma@surya.in

काम का नाम : नई दिल्ली के सफदरजंग हवाई अड्डे पर DGCA, BCAS, AAIB, AERA और AAI के लिए संयुक्त परिचालन कार्यालयों का निर्माण।

उपशीर्षक: विषय-आधारित मुखाकृति रोशनी प्रणाली का प्रावधान।

Name of Work: construction of combined operational offices for DGCA, BCAS, AAIB, AERA and AAI at Safdarjung Airport, New Delhi.

Sub: Provision of theme-based facia illumination system.

Ref: Your Financial e-Bid no. 2022_AAI_138918_1 Opened on 15.03.2023

Dear Sir(s),

1. Your E-Tender (item rate) for the work mentioned above is hereby accepted on behalf of Chairman, Airports Authority of India, amounting to 99,21,428.00 (Rupees Ninety-Nine Lakhs Twenty-One Thousand Four Hundred and Twenty-Eight Only) which is 47.06% (Forty-seven point Zero Six) below the Estimated cost put to tender of 1,87,39,880/- (Rupees One Crores Eighty-Seven Lakhs Thirty-Nine Thousand Eight Hundred and Eighty Only).
2. JGM (Engg. -E), Project Office, Safdarjung Airport, New Delhi, shall be the Engineer-in-Charge of the work. You are requested to attend the office of Jt. Gen. Manager (Engg-E), Project Office, Safdarjung Airport, New Delhi 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) and the cost of the stamp paper shall be borne by you.
3. The earnest money amount 3,74,800/- (Rupees Three Lakhs Seventy-Four Thousand Eight Hundred Only) received along with your bid will be treated and converted as part of security deposit as per conditions at Clause 1 (A) on page no. GCC 18 of the tender. Please deposit 6,17,343/- (Rupees Six Lakhs Seventeen Thousand Three Hundred & Forty-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 condition of Clause no 1(A) at page no. GCC 18 of tender document.
4. You are requested to comply with the provisions of contract labour (regulation and Abolition) Act 1970 and Contract labour (regulation and abolition) Central Rules 1971, Child Labour (Prohibition & Regulation) Act 1986, construction workers (Regulation of Employment and Conditions of Service) Act 1996, Building and other Construction Workers Welfare Cess Act 1996 as specified in Clause-19 on page no. GCC 51 of tender document, minimum wages Act 1948 as specified in Clause- 20, page


Animesh

राजीव गांधी भवन
Rajiv Gandhi Bhawan

सफदरजंग हवाई अड्डा नई दिल्ली- 110003
Safdarjung Airport, New Delhi-110003

दूरभाष : 011-24632950
Phone : 011-24632950

no. GCC 57 of Tender documents, EPF Act 1952 & ESI Act 1948 as specified in clause 20 & 20 (A) on page no. GCC 57 of Tender documents and rules thereof of Central and State Governments.

5. You are also directed to attend O/o Asstt. Gen. Manager (E-E), Project Office, Safdarjung Airport, New Delhi, to take over the site.
6. Please note that the time allowed for carrying out the work shall be 3(three) Months and same shall be reckoned from 10th day after the date of issue of this letter.
7. All correspondence in connection with the contract should normally be addressed to the Engineer-in-Charge.
8. In case of non- compliance of GST provisions and blockage of any input credit, it shall be your responsibility to indemnify AAI.
9. The rates are inclusive of all taxes but excluding of GST. However, GST, as applicable, shall be paid to the contractor for any taxable supply/ services/ construction rendered by the agency to AAI against a valid GST invoices as per terms and conditions of the contract.
10. All input credits will be passed on the AAI by you.
11. Please acknowledge the receipt and return the duly signed duplicate copy of this letter (enclosed) to the undersigned as a token of acceptance.
12. The above referred letters/documents shall form part of the agreement.

AAI GST No. 07AAACA6412D2Z9

Enclosure: Schedule of Quantity.

Yours faithfully,

(आनंद कुमार) 21.3.23

सहायक महाप्रबंधक (अभियांत्रिकी-विद्युत)

(Anand Kumar)

Astt. General Manager (Engg. -E)

कृते एवं अध्यक्ष, भारतीय विमानपत्तन प्राधिकरण की ओर से
For & on behalf of Chairman, Airports Authority of India

Tender Inviting Authority: Airports Authority of India

Name of Work: CONSTRUCTION OF COMBINED OPERATIONAL OFFICES FOR DGCA, BCAS, AAIB, AERA & AAI AT SAFDARJUNG AIRPORT, NEW DELHI

Contract No:

SCHEDULE OF WORK / ITEM(S)

Sl.No	Description of Work / Item(s)	No.of Qty	Units	Estimated Rate	Surya Roshni Limited(GSTN-NA)	
					Rate	Amount
1.00	SITC of Squire/rectangular/Circular shape architectural RGBW LED flood light with housing Die-cast aluminium alloy - ADC12. The luminaire shall be suitable in size and aesthetically good view as approved by EIC. The luminaire shall have electrostatically applied polyester powder coating finish. The luminaire bracket shall be made of cold-rolled steel & shall be so designed that the luminaire can be tilted to ±90°. The bracket shall have locking mechanism to fix & secure the desired tilt angle. The luminaire shall have silicon gasket between optical cover & LED chamber to ensure proper min. IP66 protection. if required the luminaire should have a breather gland. The luminaire shall be equipped with high-power Cree, osram, lumiled or equivalent. The fixture shall have 8° to 10° beam angle and as per site requirement with the approval of Engg. In-charge & the lens shall be made of anti-aging & anti UV-PMMA material. The optical cover shall be made of IK07 and above rated clear tempered glass. The LEDs shall have minimum CRI ≥80 & shall have SDCM≤4. The fixture shall come with power & DMX cable of minimum 500mm length. The fixtures shall be installed with have min. IP67 connectors. The luminaire shall have system wattage not exceeding 150W and system lumen output of not less than 7000 lumens. Fixture shall operating temperature range of -10°C to 50°C. The fixture shall have an integral driver with input voltage for 220-247 VAC, 50/60Hz. The luminaire shall have declared life of 50,000 burning hours at L70 @ 35deg. The luminaire shall have class I insulation. The luminaire shall be compatible with DMX512 controller. The luminaire shall be capable of 8-bit control of RED, Green, Blue & White to produce 16.7million colours. The luminaire shall be capable of digital dimming of 65536 steps. The successful bidder shall submit the following certifications/reports for approval before supply of materials: product data sheets, LM79 report from NABL accredited lab, illuminance diagram, polar curve & LM80 report issued by LED manufacturer. The bidder shall upload the luminaire BIS certificate along with technical bid. The luminaire shall be supplied with necessary connectors for connecting lead/jump cables.	12.00	Nos		67380.00	808560.00
2.00	SITC of Squire/rectangular/Circular shape architectural RGBW LED flood light with housing Die-cast aluminium alloy - ADC12. The luminaire shall be suitable in size and aesthetically good view as approved by EIC. The luminaire shall have electrostatically applied polyester powder coating finish. The luminaire bracket shall be made of cold-rolled steel & shall be so designed that the luminaire can be tilted to ±90°. The bracket shall have locking mechanism to fix & secure the desired tilt angle. The luminaire shall have silicon gasket between optical cover & LED chamber to ensure proper IP66 protection. if required the luminaire should have a breather gland. The luminaire shall be equipped with high-power Cree, osram, lumiled or equivalent. The fixture shall have 15° beam angle and as per site requirement with the approval of Engg. In-charge & the lens shall be made of anti-aging & anti UV-PMMA material. The optical cover shall be made of IK07 or above rated clear tempered glass. The LEDs shall have minimum CRI ≥80 & shall have SDCM≤4. The fixture shall come with power & DMX cable of minimum 500mm length. The fixtures shall be installed with have min. IP67 connectors. The luminaire shall have system wattage not exceeding 150W and system lumen output of not less than 7000 lumens. Fixture shall operating temperature range of -10°C to 50°C. The fixture shall have an integral driver with input voltage for 220-250 VAC, 50/60Hz. The luminaire shall have declared life of 50,000 burning hours at L70 @ 35deg. The luminaire shall have class I insulation. The luminaire shall be compatible with DMX512 controller. The luminaire shall automatically addressable using hand-held addressing device. The luminaire shall be capable of 8-bit control of RED, Green, Blue & White (W=4000K) to produce 16.7million colours. The luminaire shall be capable of digital dimming of 65536 steps. The successful bidder shall submit the following certifications/reports for approval before supply of materials: product data sheets, LM79 report from NABL accredited lab, illuminance diagram, polar curve & LM80 report issued by LED manufacturer. The bidder shall upload the luminaire BIS certificate along with technical bid. The luminaire shall be supplied with necessary connectors for connecting lead/jump cables.	16.00	Nos		67380.00	1078080.00

3.00	SITC of 900-1200mm long rigid architectural RGBW LED Linear light with housing material of Extruded aluminium alloy 6063 grade & die-cast aluminium end caps. The luminaire shall have electrostatically applied polyester powder coating finish. The luminaire width shall be suitable in size and aesthetically good view as approved by EIC. The luminaire's integrated brackets shall be made of extruded aluminium & the same shall be so designed that the luminaire can be tilted $\pm 95^\circ$. The luminaire shall have silicon glue between optical cover & LED chamber to ensure proper min. IP66 protection. The luminaire shall be equipped with high-power Cree, osram, lumiled or equivalent. The fixture shall have $25^\circ \times 40^\circ$ beam angle & the lens shall be made of anti-aging & anti UV-PMMA material. The optical cover shall be made of min. IK06 or above rated clear tempered glass. The LEDs shall have minimum CRI ≥ 80 & shall have SDCM ≤ 4 . The fixture shall come with power & DMX cable of minimum 300mm length. The fixtures shall be installed with have min. IP67 connectors. The luminaire shall have system wattage not exceeding 50W and system lumen output of not less than 1600 lumens. Fixture shall operating temperature range of -10°C to 50°C . The fixture shall have an integral/non integral driver with input voltage for 220-247 VAC, 50/60Hz. The luminaire shall have declared life of 50,000 burning hours at L70 @ 35deg. The luminaire shall have class I insulation. The luminaire shall be compatible with DMX512 controller. The luminaire shall automatically addressable using hand-held addressing device. The luminaire shall be capable of 8-bit control of RED, Green, Blue & White (W=4000K) to produce 16.7million colours. The luminaire shall be capable of digital dimming of 65536 steps. The successful bidder shall submit the following certifications/reports for approval before supply of materials: product data sheets, LM79 report from NABL accredited lab, illuminance diagram, polar curve & LM80 report issued by LED manufacturer. The bidder shall upload the luminaire BIS certificate along with technical bid. The luminaire shall be supplied with necessary connectors for connecting lead/jump cables.	180.00	Nos
4.00	SITC of Linear 900-1200mm length Direct View LED luminaire, exterior rated RGBW (W=4000K) Dynamic Media and Graphic effect up-to 8 pixels per luminaire complete with all accessories. The luminaire width shall be suitable in size and aesthetically good view. The luminaire shall be made of extruded aluminium alloy 6063 grade & shall have anodic oxidised finish. The luminaire colour shall be silverish. The nominal weight of the luminaire shall be 0.8KG ($\pm 10\%$). The luminaire shall be min. IP66 rated. The luminaire mounting brackets shall be made of stainless steel. The luminaire shall be equipped with low power Cree, osram, lumiled or equivalent. The optical cover shall be made of Min. IK06 or above rated milky white / opal polycarbonate material. The LEDs shall have minimum CRI ≥ 80 & shall have SDCM ≤ 4 . The luminaire optical distribution shall be direct view with an angle of $115^\circ \times 145^\circ$ (horizontal & vertical). The luminaire shall have system wattage not exceeding 12W and system lumen output of not less than 300 lumens at RGBNW. The luminaire shall have Input voltage of 24V DC & shall use a non-integral driver of IP20 rating placed inside an IP66 rated box or driver should be min. IP66 rating. The LEDs shall have minimum CRI ≥ 80 & shall have SDCM ≤ 4 . The fixture shall come with power & DMX cable of minimum 100mm length. The fixtures shall be installed with have IP67 connectors or the driver should be min. IP67. Fixture shall operating temperature range of -10°C to 50°C . The luminaire shall have useful life of 50,000 burning hours at L70 @ 35deg. The luminaire shall have class III insulation. The luminaire shall be compatible with DMX512 controller. The luminaire shall automatically addressable using hand-held addressing device. The luminaire shall be capable of 8-bit control of RED, Green, Blue & White (W=4000K) to produce 16.7million colours. The luminaire shall be capable of digital dimming of 65536 steps. The successful bidder shall submit the following certifications/reports for approval before supply of materials: product data sheets, LM79 report from NABL accredited lab, illuminance diagram, polar curve & LM80 report issued by LED manufacturer. The bidder shall upload the luminaire BIS certificate along with technical bid. The luminaire shall be supplied with necessary connectors for connecting lead/jump cables.	180.00	Nos
5.00	SITC of DMX Amplifier complying to DMX512 protocol. The Compact signal amplifier shall support magnetic isolation protection, protects the controllers and ensures that the DMX signal can be normally transmitted to various luminaires, improving the reliability and stability of the entire control system. The DMX controller shall be compact in size & shall be minimum IP65 rated. Amplifier shall support online automatic/manually addressing & should be able to amplify the signal for up to 100m or 32/64 DMX512 luminaires. The amplifier shall be housed in Aluminium casing. The amplifier shall have factory fitter connecting wires with IP67 rated connectors. . The DMX amplifier shall be so designed that it does not by-pass the input volt to avoid any short circuit. The DMX amplifier shall be from the same make/brand/manufacturer as that of façade lighting luminaires or other make consider after EIC approval. The temperature & humidity range shall be -10°C to 50°C and 10 to 90% respectively. On the input side the amplifier shall have 3/4-Pole DMX cable with IP67 connector & a cable for DC Input with IP67 2-Pole connector. The sucessfull bidder shall submit the technical data sheet for approval before supply of material.	10.00	Nos

23268.00	4188240.00
9003.00	1620540.00
9003.00	90030.00

6.00	SITC of DMX Amplifier complying to DMX512 protocol. The Compact signal amplifier shall support magnetic isolation protection, protects the controllers and ensures that the DMX signal can be normally transmitted to various luminaires, improving the reliability and stability of the entire control system. The DMX controller shall be compact in size & shall be minimum IP65 rated. Amplifier shall support online automatic/manually addressing & should be able to amplify the signal for up to 100m or above or 32/64 DMX512 luminaires. The amplifier shall be housed in Aluminium casing. The amplifier shall have factory fitter connecting wires with IP67 rated connectors. The power consumption of DMX amplifier shall be input voltage of 12-24V from external third-party power supply. The DMX amplifier shall be so designed that it does not by-pass the input volt to avoid any short circuit. The DMX amplifier shall be from the same make/brand/manufacturer as that of façade lighting luminaires or other make consider after EIC approval. The temperature & humidity range shall be -10°C to 50°C and 10 to 90% respectively. On the input & output side the amplifier shall have cable with PI67 3 to 5-Pole DC/DMX connector. The successful bidder shall submit the technical data sheet for approval before supply of material.	5.00	Nos
7.00	SITC of Compact master Content Program Controller (DMX controller) with capability to control minimum 6/8 DMX512 universes, playback scenes and animations stored in its SD card, and it can be used for offline scenes scheduling, setting brightness, white balance and playback speed adjustments. It should be able to amplify the DMX signal in cascaded connection & support automatic playback scheduling. It should support power-on startup and scheduled timing start along with capability of unattended operation and remote scene triggering if needed. The Content Program Controller shall have integrated LCD display & support remote control. It should be housed in aluminium casing. The Input voltage shall be 12VDC & shall have 2 RJ45 ports on Input side. The IEC classification shall be Class III. It should operate on DM512 protocol. The output shall have 6/8 X 3P lockable terminals. The power consumption shall be 8W (±10%). The Content Program Controller shall have one SD card slot for maximum 32GB card & the SD card being used shall be FAT32 format. The Content Program Controller shall come with 220-240V to 12V DC power supply. The IP rating of content program controller shall be IP20 & shall comply to CE certifications. The DMX controller/content program controller shall be from the same make/brand/manufacturer as that of façade lighting luminaires or different make if required will be accepted after approval of Eng. In-charge. The working temperature range shall be -10°C to 50°C. The successful bidder shall submit the technical data sheet for approval before supply of material.	1.00	Nos
8.00	SITC of hand-held addressing device for fast and convenient address writing and testing of DMX512 enabled luminaires/network components. The device should support internal test animation for DMX512 addresses verification. The device should automatically write address. The device should be compact size and touch screen. The device Compatible with multiple types DMX512 chips, Built-in test animation effects, SD card slot to store animation and scenes, supports standard RDM protocol, Supports searching for RDM luminaires and static detection, Color-pick functions, Can be powered by Micro-B type USB power supply. The Addressing Kit made of Extruded Aluminum. The device shall have Input Voltage range 6-24V DC or as per manufacturer Power Supply. The device shall have 5 ports or as manufacturer Terminal on the output side. The temperature & humidity range should be -10°C to 50°C 10 to 90% respectively. or the address writer as per OEM control system after approval of EIC. The successful bidder shall submit the technical data sheet for approval before supply of material.	1.00	Nos

9003.00	45015.00
74790.00	74790.00
117725.00	117725.00

9.00	Supply installation, testing and commissioning of IP 66 LED waterproof projector allowing both image projection and creative light framing – powerful tools that give display lighting designers great creative freedom. The projector should be so designed that its output can be adjusted to precisely match the surroundings or to create a particular effect: literally 'light sculpting'. The projector should have exceptionally high quality of its output including advanced control of light distribution and significantly reduced glare. The projector shall be with Flexible bracket for various installations. The LED projector shall be with COB type LED M Cree + optical lenses dedicated for accurate focus with Integral LED-module (Neutral White 740 : 1 "lumen package". The Lighting Output Ratio (LOR): up to 67%, up to 3750 lm system flux (5590 lm source flux). The projector shall be with Four non-reflecting lenses: beam angle adjustments of 2 x 10° to 2 x 20° (ZoomSpot). Image size (Ø) and Image focus shall be adjustable by moving the lens along the optical axis. Image uniformity shall be adjustable by moving the diaphragm (Ø 50 mm) along the optical axis. The system power shall be 50W tolerance +/-10%. Luminaire efficacy & Correlated Color Temperature (CCT) Up to 68 lm/W source (lenses combination) and NW 740- (4000K) respectively. Operating temperature range of projector shall be -20°C to +35°C NTC control protection. Degree of ingress protection, shock rated protection shall be IP66, IK06 respectively. Nominal Luminaire weight: 18kg. Housing: Aluminum casting, ultra-dark grey RAL 10714 painted, marine salt protected 500 hrs. , RAL colors available. Universal bracket: galvanized steel laser cutting. Front Cover: air tempered flat glass, thermally hardened, 4 mm thick optical lenses set: clear glass with an anti-reflection coating. Driver mains input shall be 220-240 V / 50-60 Hz. Electrical insulation class: Peak 20 A, input voltage 230 V, inrush current Width 275 US input voltage 230 V, measured at 50% peak. Inrush current : Drivers / MCB 16A type B < 26 PCS. Power factor: > 0.9; Surge protection: 2kV; Lifetime / Lumen maintenance Driver: L80 B10: 50000 hours @ TA 25°C. Luminaire windage area (SCx): Projected area in horizontal position: 0.12 m². Luminaire electrical connection/wiring: Mains M20 cable gland that accepts cable diameters from 8 mm to 12 mm / Mains connection: push-in connector, 3- poles. Certification: CE, RoHS, compliant with IEC 598 and EN60598. The projector shall be with Built-in (self-ballasted LED-module).	1.00	Nos
10.00	SITC of 2M long lead cable with IP67 4-Pin connector at one end. The fire rating of the cable shall be UL94-V0. The connector shall be made of PA66. The Pin material should be copper. The operating voltage shall be 60V DC. The cable shall have insulation resistance of ≥ 10MΩ. The working temperature & humidity range shall be -40°C to 50°C & 0~90% respectively	5.00	Nos
11.00	SITC of 2M long jump cable with IP67 4-Pin connector at one end. The fire rating of the cable shall be UL94-V0. The connector shall be made of PA66. The Pin material should be copper. The operating voltage shall be 60V DC. cable shall have insulation resistance of ≥ 10MΩ. The working temperature & humidity range shall be -40°C to 50°C & 0~90% respectively.	1.00	Nos
12.00	SITC of 2M long lead cable with IP67 5-Pin connector at one end. The fire rating of the cable shall be UL94-V0. The connector shall be made of PA66. The Pin material should be copper. The cable shall have insulation resistance of ≥ 10MΩ. The working temperature & humidity range shall be -40°C to 50°C & 0~90% respectively.	2.00	Nos
13.00	SITC of 2M long jump cable with IP67 5-Pin connector at one end. The fire rating of the cable shall be UL94-V0. The connector shall be made of PA66. The Pin material should be copper. The operating voltage shall be 60V DC. The cable shall have insulation resistance of ≥ 10MΩ. The working temperature & humidity range shall be -40°C to 50°C & 0~90% respectively.	10.00	Nos
14.00	Supply, installation, testing and commissioning of the following 1100 volts grade, copper conductor FRLS PVC Insulated Sheathed Flexible Cable as per IS694 and latest amendment and as per other relevant standards and tender specification		
14.01	3C X 2.5 sqmm	2500.00	Mtr
14.02	3C X 4 sqmm	1500.00	Mtr
15.00	Supplying and fixing of following sizes of PVC flexible conduits along with all accessories including fixing nipples, couplings and fixing hardware, including painting, cutting the wall etc as required.		
15.01	40 mm	1500.00	Mtr

200825.00	200825.00
1233.00	6165.00
956.00	956.00
956.00	1912.00
956.00	9560.00
235.00	587500.00
319.00	478500.00
152.00	228000.00

16.00	Design, supply, installation, testing and commissioning including loading, unloading at site of following capacity of Double Conversion UPS system with vector controlled IGBT technology with built-in Static and Manual Bypass Switches and Galvanic Isolation Transformer. UPS systems to work in parallel mode. The incoming & outgoing supplies shall be suitable of 415V, 3 phase, 4-wire, 50Hz supply complete in all respects including all labour and material as per the relevant standards and technical specifications of tender and directions of Engineer In-charge. The UPS system shall comprise of following but not limited to : 30 minutes battery backup at load using Sealed Lead Acid Maintenance Free batteries . Base frames for UPS and battery Racks & powder coated MS/ GI Racks for housing batteries, battery to battery inter-links, . Providing and laying of Battery to UPS cable of required size for each UPS including all other wiring, cabling, etc. required.		
16.01	20 KVA UPS as described above	1.00	Nos.

Total in Figures

385030.00	385030.00

9921428.00