



भारतीय विमानपत्तन प्राधिकरण  
AIRPORTS AUTHORITY OF INDIA

संदर्भ सं: भाविप्रा/ बी.जी/ (इंजि-वि)/ सी. डब्ल्यू - 01/2023-24/

Ref. No.: AAI/BG/(ENGG-E)/CW-01/2023-24/1001-1006

Date: 25.05.2023

सेवा में/To

✓ M/s. Kalki Electricals /कल्कि इलेक्ट्रिकल्स,  
#94, 2nd Cross, S.T. Bed Layout,  
दूसरा क्रॉस, एस.टी. बिस्तर लेआउट,  
Koramangala कोरमंगला,  
Bangalore-बैंगलोर-560034

कार्य का नाम/ Name of Work:- कार्य का नाम/ Name of Work:- Installation Of New DVOR And HP  
DME at HAL Airport, Bangalore SH : Other Electrical  
Works/एचएएल एयरपोर्ट, बैंगलूरु में नए डीवीओआर और एचपी डीएमई की  
स्थापना: अन्य विद्युत कार्य

संदर्भ/ Ref:- 1) बोली संख्या /Bid no:- 2023\_AAI\_146753\_1

2) 29.03.2023 को खोला गया ई-निविदा /Your E-Tender opened on: 29.03.2023

महोदय/Dear Sir (s),

- ऊपर उल्लिखित कार्य के लिए आपकी ई-निविदा अध्यक्ष, भारतीय विमानपत्तन प्राधिकरण की ओर से आपके द्वारा उद्धृत मद दरों पर कुल रु. 4557320/- (रुपये चौदह लाख बावन हजार आठ सौ सत्तर) 5261057/- रुपये की अनुमानित लागत से 13.38% के कम है।
- Your e-tender for the work mentioned above is hereby accepted on behalf of the Chairman, Airports Authority of India at the item rates quoted by you totalling to Rs. 4557320/- (Rupees Forty five lakhs fifty-seven thousand three hundred and twenty only) excluding of GST which is 13.38 % Below the estimated cost put to tender of Rs. 5261057/-
- सहायक महाप्रबंधक (अभियांत्रिकी-ई), भाविप्रा, बैंगलूरु हवाई अड्डा कार्य के प्रभारी अभियंता होंगे। आपसे अनुरोध है कि अनुबंध समझौते पर हस्ताक्षर करने और उसे पूरा करने के लिए 10.06.2023 तक सहायक महाप्रबंधक (इंजीनियरिंग-ई), एएआई, बैंगलूरु एयरपोर्ट के कार्यालय में उपस्थित हों। अनुबंध 100.00 रुपये (एक सौ रुपये मात्र) के गैर-न्यायिक स्टॉप पेपर पर निष्पादित किया जाएगा और स्टॉप पेपर की लागत आपके द्वारा वहन की जाएगी।
- The Asstt.General Manager (Engg-E), AAI, Bangalore Airport shall be the Engineer-in-Charge of the work. You are requested to attend the O/o The Asstt.General Manager (Engg-E), AAI, Bangalore Airport, latest by 10.06.2023 to sign and complete the contract agreement. The contract agreement shall be executed on a non-judicial stamp paper of value Rs.100.00 (Rupees One Hundred only) and the cost of the stamp paper shall be borne by you.

२. कृपया इस पत्र के जारी होने की तारीख से 10 दिन पहले या उससे पहले सुरक्षा जमा की शेष राशि के लिए रु. 455732/- जमा करें, ऐसा न करने पर उसकी कटौती की जाएगी निविदा की शर्त के अनुसार। /

Please deposit **Rs.455732/- (Rupees Four lakhs Fifty five Thousand Seven Hundred and thirty two only)**, towards balance of Security Deposit within 10 days from the date of issue of this letter failing which, the same will be deducted as per condition in GCC clause no 1 (a) at page No.21 of contract documents.

४. आपसे अनुरोध है कि १९७० के अनुबंध श्रम (विनियम और उन्मूलन) अधिनियम और अनुबंध श्रम (विनियमन और उन्मूलन) केंद्रीय नियम १९७१ चिली श्रम (निषेध और विनियमन) अधिनियम १९८६, निर्माण श्रमिक (रोजगार का विनियमन और सेवा की शर्त) के प्रावधानों का पालन करें। अधिनियम १९९६, भवन एवं अन्य निर्माण श्रमिक कल्याण उपकर अधिनियम १९९६ जैसा कि निविदा के जीसीसी के पृष्ठ संख्या ६२ पर खंड संख्या १९ में निर्दिष्ट है और केंद्र और राज्य सरकार न्यूनतम मजदूरी अधिनियम और उसके नियम केंद्र और राज्य सरकार के नियम हैं।
3. 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 & Regulation) Act 1986, Construction Workers (Regulation of A-147 Employment and Condition of Service) Act 1996, Building and other construction Workers Welfare Cess Act 1996 as specified in Clause 19 B on page no. 62 of GCC of tender and rules of Central and State Government
५. आपको निर्देश दिया जाता है आप तुरंत प्रबंधक (इंजि-वि), भा.वि.प्रा, केम्पेगौड़ा अंतरराष्ट्रीय हवाई अड्डा से मिलें वह आपको साइट सौंपने की व्यवस्था करेंगे।
4. You are directed to contact Manager (Engg-E), Airports Authority of India, HAL Bangalore who will arrange to hand over the site to you.
५. कृपया ध्यान दें कि कार्य करने के लिए अनुमत समय चार महीने होगा और इसकी गणना इस पत्र के जारी होने के 10वें दिन से की जाएगी। Please note that the time allowed for carrying out the work shall be **04 Months** and same shall be reckoned from 10th days of issue of this letter.
७. इस ठेके के संबंध में आगे का कोई भी पत्राचार प्रभारी अभियंता, भा.वि.प्रा., केम्पेगौड़ा अंतरराष्ट्रीय हवाई अड्डा, बंगलुरु के पते पर किया जाए। /
5. Any further correspondence in connection with the contract should normally be addressed to Engineer-in-charge, Airports Authority of India, Kempegowda Intl. Airport, Bengaluru.
८. कृपया इस पत्र के पोचपावती को हस्ताक्षर करने के पश्चात स्विकृती के रूप निम्नहस्तोक्षरीत को भेजा जाए।
6. Please acknowledge the receipt and return the duplicate copy of this letter enclosed herewith after signing it to the undersigned as token of acceptance.

धन्यवाद/Thanking You,

भवदीय/Your faithfully,

अनुलग्नक: मात्रा की अनुसूची

Encl: Schedule of Quantities

सहायक महाप्रबंधक (इंजि-वि)/Asstt. General Manager (Engg-E)

भा.वि.प्रा, केम्पेगौड़ा अंतरराष्ट्रीय हवाई अड्डा, बंगलुरु / AAI, Kempegowda Intl. Airport, Bengaluru

कृते तथा ओर से, अध्यक्ष, भा.वि.प्रा/ for and on behalf of Chairman, AAI

प्रतिलिपि/Copy To : आंतरिक/Internal

1. महाप्रबंधक (समन्वय -प्रभारी), सीएनएस, भाविप्रा, बेंगलूर  
General Manager (CIC)/, AAI, B' Lore.
2. संयुक्त महाप्रबंधक(विद्युत -विद्यु -इंजीनियरि) , चेन्नई हवाई अड्डा , चेन्नई Jt.GM (Engg-E),AAI ,  
SR, Chennai
3. उप महाप्रबंधक महाप्रबंधक(वित्त),बेंगलूर, Dy. General Manager (Fin.), AAI, B' Lore.
4. प्रबंधक (इंजीनियरि- विद्युत),भाविप्रा, एचएएल /Manager (Engg-E), AAI, HAL, Bangalore
5. कार्य ओदश फाइल/Work Order File.
6. करार फाइल/Agreement file

**External**

7. Sh. Saravana Moorthy, A.T.C. In-charge, Dy.General Manager (Aerodrome)
8. The Jt.GM(Vig),AAI,Southern Region,Chennai Airport,Chennai.

  
सहायक महाप्रबंधक (अति-वि.)  
Assistant General Manager (Engg-E)  
भारतीय विमानवाहन प्राधिकरण / Airports Authority of India  
बेंगलूर हवाई अड्डा, बेंगलूर / Bangalore Airport, Bangalore - 17



Validate

Print

Help

Item Rate BoQ

Tender Inviting Authority: Asst.General Manager (Engg. - Electrical), AAI, Bangalore

Name of Work: : INSTALLATION OF NEW DVOR AND HP DME AT HAL AIRPORT, BANGALORE SH : OTHER ELECTRICAL WORKS

Contract No: -2023\_AAI\_146753\_1

|                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |          |        |                                                                             |                                        |                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------|-----------------------------------------------------------------------------|----------------------------------------|----------------------------------|
| Bidder Name :                                                                                                                                                                                                                                                                                                                 | Kalki Electricals                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |        |                                                                             |                                        |                                  |
| <p align="center"><b>PRICE SCHEDULE</b></p> <p align="center">(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevent columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only )</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |          |        |                                                                             |                                        |                                  |
| NUMBER #                                                                                                                                                                                                                                                                                                                      | TEXT #                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | NUMBER # | TEXT # | NUMBER #                                                                    | NUMBER #                               | TEXT #                           |
| Sl. No.                                                                                                                                                                                                                                                                                                                       | Item Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Quantity | Units  | BASIC RATE In Figures<br>To be entered by the Bidder excluding GST<br>Rs. P | TOTAL AMOUNT<br>excluding GST<br>Rs. P | TOTAL AMOUNT<br>In Words         |
| 1                                                                                                                                                                                                                                                                                                                             | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 4        | 5      | 13                                                                          | 53                                     | 55                               |
| 1                                                                                                                                                                                                                                                                                                                             | SH I : SITC OF LT PANELS, ATS SWITCH & SPDs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |          |        |                                                                             |                                        |                                  |
| 1.1                                                                                                                                                                                                                                                                                                                           | <p>Fabrication, Supply, Installation, Testing and Commissioning of LT Panel of indoor type with enclosure protection class IP 42 of cubical construction, floor mounted type, fabricated out of 2mm thick CRCA sheet, compartmentalised with hinged lockable doors, dust and vermin proof, powder coated of approved shade after 7 tank treatment process, cable alley, interconnection of switchgears with suitable size copper conductor cable, accessories of switchgear like rotary handles, spreader terminals, phase barriers, auxiliary relays/contacts etc, control wiring, protection MCBs, common G.I earth bar of size 25mm X 5 mm at the rear with 2 Nos. earth studs, base channel with supporting legs etc. complete in all respect and as per specification with following switchgears and components suitable for operation on 415V, 3 phase, 50Hz AC Supply etc complete as per specifications and as required. (PTTA TYPE FROM THE LIST OF APPROVED MAKES)</p> <p>INCOMING</p> <p>(i) 10CA, 25kA (ics=100% Icu rating), Four Pole, MCCB with thermal magnetic release having adjustable overload and shortcircuit settings - 02 Nos.</p> <p>(ii) Three phase Digital Multifunction Meter with inbuilt selector switch, three nos of CTs of 100/5A, 15 VA, Class 1.0 etc. - 02 set.</p> <p>(iii) Set of LED type indicating lamps for R,Y,B, ON, OFF &amp; TRIP - 02 set</p> <p>MECHANICAL INTERLOCK</p> <p>Mechanical Interlocking arrangement between incomers with 2 lock and 1 key - 1 set</p> <p>BUSBARS</p> <p>Set of TPN Aluminium Bus Bar of 200A rating - 01 Set</p> <p>OUTGOING</p> <p>(i) 63A, 25kA (ics=100% Icu rating), Four Pole MCCB with thermal magnetic release having adjustable overload and shortcircuit settings - 4 Nos.</p> <p>(ii) 40A, TPN, 'C' curve MCB - 2 No.</p> <p>(iii) 32A, DP, 100mA, RCBO - 2 No.</p> <p>(iv) 20A, DP, 'C' curve MCB - 2 No.</p> <p>(v) Set of LED type indicating lamps for ON &amp; OFF of each MCCB - 04 set</p> | 1        | Each   | 250000.00                                                                   | 250000.00                              | INR Two Lakh Fifty Thousand Only |

1/7

  
 Assistant General Manager (Engg.-E)  
 भारतीय विमानपत्तन प्राधिकरण / Airports Authority of India  
 बंगलूरु हवाई अड्डा, बंगलूरु / Bangalore Airport, Bangalore - 1

| Sl. No. | Item Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Quantity | Units | BASIC RATE In Figures<br>To be entered by the<br>Bidder excluding GST<br>Rs. P | TOTAL AMOUNT<br>excluding GST<br>Rs. P | TOTAL AMOUNT<br>In Words              |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|--------------------------------------------------------------------------------|----------------------------------------|---------------------------------------|
| 2       | Supply, Installation, Testing and Commissioning of 125A, Four Pole, Automatic transfer Switch with motorised changeover (With provision for two incomers and one outgoing) conforming to IS / IEC 60947 for automatic transfer of power supply from one incoming source to another incase of power supply failure with provision for time delay etc complete along with sheet steel enclosure, suitable arrangement for wall mounting, required accessories etc complete as required.. | 1        | Each  | 56000.00                                                                       | 56000.00                               | INR Fifty Six Thousand Only           |
| 2.1     | Supply, Installation, Testing and Commissioning of following type/class surge protection device in suitable sheet steel enclosure suitable for mounting on wall/above LT Panel as per site requirements.                                                                                                                                                                                                                                                                               |          |       |                                                                                |                                        |                                       |
| 2.2     | 80kA, Class B+C suitable for three phase with neutral (415V, 50 Hz) AC system                                                                                                                                                                                                                                                                                                                                                                                                          | 2        | Each  | 8000.00                                                                        | 16000.00                               | INR Sixteen Thousand Only             |
| 2.3     | 50kA, Class B suitable for single phase with neutral (230V, 50 Hz) AC system                                                                                                                                                                                                                                                                                                                                                                                                           | 2        | Each  | 4000.00                                                                        | 8000.00                                | INR Eight Thousand Only               |
| 2.4     | 40kA, Class C suitable for single phase with neutral (230V, 50 Hz) AC system                                                                                                                                                                                                                                                                                                                                                                                                           | 2        | Each  | 2000.00                                                                        | 4000.00                                | INR Four Thousand Only                |
| 3       | <b>SH II : CABLE LAYING WORKS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |       |                                                                                |                                        |                                       |
| 3.01    | Supply of following size of XLPE insulated and PVC sheathed aluminium conductor armoured power cable of 1.1 KV grade confirming to IS 7098 Part I-1988 with upto date amendment as required:- <b>3.5C x 95 sq. mm</b>                                                                                                                                                                                                                                                                  | 170      | Mtr   | 800.00                                                                         | 136000.00                              | INR One Lakh Thirty Six Thousand Only |
| 3.02    | Supplying and laying of following size of DWC HDPE pipe, ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and 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. <b>63 mm dia (OD)</b>                                                                     | 160      | Mtr   | 150.00                                                                         | 24000.00                               | INR Twenty Four Thousand Only         |
| 3.03    | 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/DWC/HDPE pipe as required. <b>Above 35 sq. mm and upto 95 sq. mm</b>                                                                                                                                                                                                                                                                         | 160      | Mtr   | 40.00                                                                          | 6400.00                                | INR Six Thousand Four Hundred Only    |

2/7

  
 Assistant General Manager (Engg-EE)  
 भारतीय विमानपत्तन प्राधिकरण / Airports Authority of India  
 बंगलूरु हवाई अड्डा, बंगलूरु / Bangalore Airport, Bangalore - 1



| Sl. No. | Item Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Quantity | Units | BASIC RATE In Figures<br>To be entered by the Bidder excluding GST<br>Rs. P | TOTAL AMOUNT<br>excluding GST<br>Rs. P | TOTAL AMOUNT<br>In Words                               |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|-----------------------------------------------------------------------------|----------------------------------------|--------------------------------------------------------|
| 3.04    | 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. <b>Above 35 sq. mm and upto 95 sq. mm (clamped with 25x3mm MS flat clamp)</b>                                                                                                                                                                                                                                                                                       | 10       | Mtr   | 100.00                                                                      | 1000.00                                | INR One Thousand Only                                  |
| 3.05    | 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. <b>3.5C x 95 sqmm</b>                                                                                                                                                                                                                                                                                        | 2        | Each  | 500.00                                                                      | 1000.00                                | INR One Thousand Only                                  |
| 3.06    | Supply of following size of PLB-HDPE (Permanently lubricated High Density Polyethylene) pipe/duct conforming to relevant IS/Telecom specification with latest amendments as required. <b>50mm dia (OD)</b>                                                                                                                                                                                                                                                                                                           | 8550     | Mtr   | 88.00                                                                       | 752400.00                              | INR Seven Lakh Fifty Two Thousand Four Hundred Only    |
| 3.07    | Laying of following size of PLB-HDPE (Permanently lubricated High Density Polyethylene) pipe/duct <b>direct in ground</b> (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required. <b>50mm dia (OD)</b>                                                                                                                                                                                                            | 7350     | Mtr   | 100.00                                                                      | 735000.00                              | INR Seven Lakh Thirty Five Thousand Only               |
| 3.08    | Laying of following size of PLB-HDPE (Permanently lubricated High Density Polyethylene) pipe/duct <b>under hard /concrete/bituminous surface</b> (75 cm below ground level) along with required accessories like socket, bend, couplers etc. including groove cutting, dismantling the hard surface, excavation and refilling the trench, filling the groove/top surface with 150mm thick cement concrete of 1:3:6 grade etc complete with fitting, cutting and jointing, complete as required. <b>50mm dia (OD)</b> | 420      | Mtr   | 288.00                                                                      | 120960.00                              | INR One Lakh Twenty Thousand Nine Hundred & Sixty Only |
| 3.09    | Laying of following size of PLB-HDPE (Permanently lubricated High Density Polyethylene) pipe/duct <b>below the ground through HDD method</b> (across Road crossing, runway crossings, Cement concrete, Apron Area) alongwith required accessories like coupler, end plugs, rope, cable sealent etc. complete as per site requirement and as per specification. <b>50mm dia (OD)</b>                                                                                                                                  | 730      | Mtr   | 500.00                                                                      | 365000.00                              | INR Three Lakh Sixty Five Thousand Only                |
| 3.10    | Laying and fixing of following size of PLB-HDPE (Permanently lubricated High Density Polyethylene) pipe/duct on cable tray/ wall surface as required. <b>50mm dia (OD)</b>                                                                                                                                                                                                                                                                                                                                           | 50       | Mtr   | 100.00                                                                      | 5000.00                                | INR Five Thousand Only                                 |

3/7

  
 सहायक महाप्रबन्धक (अति-वि.)  
 Assistant General Manager (Engg-E)  
 भारतीय विमानपत्तन प्राधिकरण / Airports Authority of India  
 बंगलूरु हवाई अड्डा, बंगलूरु / Bangalore Airport, Bangalore - 1

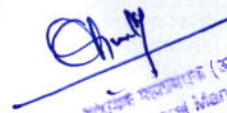
| Sl. No. | Item Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Quantity | Units | BASIC RATE In Figures<br>To be entered by the Bidder excluding GST<br>Rs. P | TOTAL AMOUNT<br>excluding GST<br>Rs. P | TOTAL AMOUNT<br>In Words                   |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|-----------------------------------------------------------------------------|----------------------------------------|--------------------------------------------|
| 3.11    | Providing, laying and fixing following size G.I. pipe (medium class) complete with G.I. fittings across culverts/open duct including concealing the same on the side walls by cutting/chiseling, finishing the same with cement concrete etc as required. <b>80mm dia</b>                                                                                                                                                                                                                                                                                           | 90       | Mtr   | 800.00                                                                      | 72000.00                               | INR Seventy Two Thousand Only              |
| 3.12    | Laying of 12 core armoured OFC cable through existing HDPE pipe/GI pipe by pulling/ blowing-in complete as required.                                                                                                                                                                                                                                                                                                                                                                                                                                                | 8550     | Mtr   | 10.00                                                                       | 85500.00                               | INR Eighty Five Thousand Five Hundred Only |
| 3.13    | Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray cable tray with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc as required. <b>150 mm width X 50 mm depth X 1.6 mm thickness</b>                                                                                                                                                                                                                     | 50       | Mtr   | 700.00                                                                      | 35000.00                               | INR Thirty Five Thousand Only              |
| 3.14    | Supplying and fixing cable route marker with 10 cm X 10 cm X 5mm thick G.I. plate with inscription there on, bolted /welded to 35 mm X 35 mm X 6 mm angle iron, 60 cm long and fixing the same in ground as required.                                                                                                                                                                                                                                                                                                                                               | 240      | Each  | 400.00                                                                      | 96000.00                               | INR Ninety Six Thousand Only               |
| 3.15    | Construction of masonry chamber of internal size 0.75 mtr (L) x 0.75 mtr (W) x 0.75 mtr (D), with F.P.S. bricks of class designation 7.5 in cement mortar 1:4 (1 cement : 4 coarse sand) and RCC top slab of 150mm thick made out of 1:2:4 grade cement concrete with hooks for easy handling, providing and laying in position cement concrete in 1:3:6 of 10cm thick at bottom including excavation of soil, plastering of inside & top surfaces including disposal of surplus excavated soil as directed, within a lead of 50 metres complete etc., as required. | 50       | Each  | 6000.00                                                                     | 300000.00                              | INR Three Lakh Only                        |
| 4.0     | <b>SH III : EARTHING WORKS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |       |                                                                             |                                        |                                            |
| 4.1     | 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.                                                                                                                                                                                                                                                                                                                   | 2        | Set   | 48000.00                                                                    | 96000.00                               | INR Ninety Six Thousand Only               |
| 4.2     | 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)                                                                                                                                                                                                                                                                    | 10       | Meter | 6000.00                                                                     | 60000.00                               | INR Sixty Thousand Only                    |
| 4.3     | 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.                                                                                                                                                                                                                                                                                                                                                                       | 30       | Meter | 1000.00                                                                     | 30000.00                               | INR Thirty Thousand Only                   |
| 4.4     | Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 20       | Meter | 100.00                                                                      | 2000.00                                | INR Two Thousand Only                      |
| 4.5     | Jointing of existing copper / G.I. tape (with another copper/ G I tape) by sweating and soldering/brazing etc as required.                                                                                                                                                                                                                                                                                                                                                                                                                                          | 300      | Each  | 1600.00                                                                     | 480000.00                              | INR Four Lakh Eighty Thousand Only         |

4/7



| Sl. No. | Item Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Quantity | Units | BASIC RATE In Figures<br>To be entered by the<br>Bidder excluding GST<br>Rs. P | TOTAL AMOUNT<br>excluding GST<br>Rs. P | TOTAL AMOUNT<br>In Words                          |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|--------------------------------------------------------------------------------|----------------------------------------|---------------------------------------------------|
| 5.0     | <b>SH IV : SITC OF SPLIT TYPE AIR-CONDITIONING UNITS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |          |       |                                                                                |                                        |                                                   |
| 5.1     | Supply, Installation, Testing and Commissioning of High wall mounted inverter type Split type airconditioning units of 1.5 TR capacity with Five (05) star BEE rating suitable for R-32/equivalent eco-friendly refrigerant, complete with indoor and outdoor unit, copper condensor coil, first charging and topping up of refrigerant (if required), cordless remote control etc suitable for operation on 230V, 50 hz, Single phase, A.C supply complete with filter, standard length of refrigerant pipe with insulation, drain piping, interconnection control cables etc, wiring upto nearest socket outlet, metallic brackets for the indoor unit & wall mounted/ floor mounted stand for outdoor unit complete as required as per specifications and as required. | 6        | Each  | 48600.00                                                                       | 291600.00                              | INR Two Lakh Ninety One Thousand Six Hundred Only |
| 5.2     | Supply, Installation, Testing and Commissioning of Digital Dynamic AC Timers in suitable enclosure with latest microcontroller based technology with Auto/manual facility for cyclic operation of 02 Nos. Split Air Conditioners of upto 2 Ton capacity of any make, Digital display of ON/OFF status and electrical parameters, necessary relays, connectors etc. complete as required.                                                                                                                                                                                                                                                                                                                                                                                  | 3        | Each  | 6800.00                                                                        | 20400.00                               | INR Twenty Thousand Four Hundred Only             |
| 5.3     | Supply and fixing of extra copper refrigerent piping beyond standard length of suitable size for 1.5 TR Split Air Conditioners complete with suction / liquid line, control cabling etc including all accessories as per site requirement.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 30       | Meter | 1000.00                                                                        | 30000.00                               | INR Thirty Thousand Only                          |
| 5.4     | Supply and fixing of extra drain piping beyond standard length with PVC medium class pipe of suitable size for 1.5 TR Split Air Conditioners etc including insulation etc complete as per site requirement.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 30       | Meter | 100.00                                                                         | 3000.00                                | INR Three Thousand Only                           |
| 5.5     | Supply and fixing of 4KVA Voltage Stabilizer suitable for operation on 230V, 50Hz with working voltage of 170V to 270V, intelligent time delay system, high & low voltage cut-off, built-in thermal overload protection, provision for wall mounting etc complete as required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 6        | Each  | 2000.00                                                                        | 12000.00                               | INR Twelve Thousand Only                          |

5/7

  
 Assistant General Manager (Engg-E)  
 भारतीय विमानपत्तन प्राधिकरण / Airports Authority of India  
 बंगलुरु अंतर्राष्ट्रीय विमानतट / Bangalore Airport, Bangalore - 1



| Sl. No. | Item Description                                                                                                                                                                                                                                                                                                                                                                                                                         | Quantity | Units | BASIC RATE In Figures<br>To be entered by the<br>Bidder excluding GST<br>Rs. P | TOTAL AMOUNT<br>excluding GST<br>Rs. P | TOTAL AMOUNT<br>In Words               |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|--------------------------------------------------------------------------------|----------------------------------------|----------------------------------------|
| 6.0     | <b>SH V : SITC OF FIRE ALARM SYSTEM</b>                                                                                                                                                                                                                                                                                                                                                                                                  |          |       |                                                                                |                                        |                                        |
| 6.1     | Supply, Installation, testing and commissioning of IP based Single Loop microprocessor based intelligent Analogue Addressable Fire Alarm Control & Indicating Panel having the capacity to handle upto 99 devices, consisting of (i) Network card capable to connect with repeater panel (ii) 24V SMF battery having 24 Hrs backup with charger circuit (iii) LCD display module etc. as per specifications and as per site requirement. | 1        | Each  | 246000.00                                                                      | 246000.00                              | INR Two Lakh Forty Six Thousand Only   |
| 6.2     | Supply, installation, testing and commissioning of Analogue Addressable Multi sensor (Smoke & Heat) Detector [of same protocol of FDA Panel] with mounting base complete for fixing on above/below false ceiling etc complete as per specifications and as per site requirement.                                                                                                                                                         | 15       | Each  | 5000.00                                                                        | 75000.00                               | INR Seventy Five Thousand Only         |
| 6.3     | Supply, installation, testing and commissioning of Addressable Manual Call Point [of same protocol of FDA Panel] as per specifications and as per site requirement.                                                                                                                                                                                                                                                                      | 2        | Each  | 6200.00                                                                        | 12400.00                               | INR Twelve Thousand Four Hundred Only  |
| 6.4     | Supply, installation, testing and commissioning of Addressable Loop powered Sounder cum strobe [of same protocol of FDA Panel] as per site requirement.                                                                                                                                                                                                                                                                                  | 2        | Each  | 5000.00                                                                        | 10000.00                               | INR Ten Thousand Only                  |
| 6.5     | Supplying, installation, testing & commissioning response indicator on surface/recess MS box having two LEDs metallic cover complete with all connections etc. as required.                                                                                                                                                                                                                                                              | 3        | Each  | 220.00                                                                         | 660.00                                 | INR Six Hundred & Sixty Only           |
| 6.6     | Supply & fixing of GSM based Auto dialer i/c programming upto five telephone/mobile numbers etc. complete as required.                                                                                                                                                                                                                                                                                                                   | 1        | Each  | 16000.00                                                                       | 16000.00                               | INR Sixteen Thousand Only              |
| 6.7     | Supplying & laying of 2CX1.5 sqmm Fire survival armoured cable, 600/1000V rated with annealed copper conductor having glass mica fire barrier tape covered by an extruded layer of Cross Linkable Ethylene Propylene Rubber (EPR) / XLPE insulation and LSZH/FRLS inner bedding, steel wire armouring & LSZH/FRLS outer sheath complete as required.                                                                                     | 100      | Meter | 166.00                                                                         | 16600.00                               | INR Sixteen Thousand Six Hundred Only  |
| 6.8     | Supply and fixing of 4.5 Kg Carbon Di-oxide Fire Extinguisher as per IS 15683:2006 including all components/accessories and suitable for mounting on wall etc complete as required                                                                                                                                                                                                                                                       | 3        | Meter | 5500.00                                                                        | 16500.00                               | INR Sixteen Thousand Five Hundred Only |
| 6.9     | Supply and fixing of 5 Kg Dry Chemical Fire Extinguisher as per IS: 15683:2006 including all components/accessories and suitable for mounting on wall etc complete as required                                                                                                                                                                                                                                                           | 3        | Meter | 3300.00                                                                        | 9900.00                                | INR Nine Thousand Nine Hundred Only    |

6/7

*[Signature]*  
 Assistant General Manager (Engg-2)  
 Bangalore Airport, Bangalore - 1

| Sl. No.                                                              | Item Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Quantity | Units | BASIC RATE In Figures<br>To be entered by the Bidder excluding GST<br>Rs. P | TOTAL AMOUNT<br>excluding GST<br>Rs. P | TOTAL AMOUNT<br>In Words                                         |
|----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|-----------------------------------------------------------------------------|----------------------------------------|------------------------------------------------------------------|
| 7.0                                                                  | <b>SH VI : GAS SUPPRESSION SYSTEM</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |          |       |                                                                             |                                        |                                                                  |
| 7.1                                                                  | Design, Manufacturing, Supply, Installation, Testing and Commissioning of of Gas Suppression System consisting of Cylinder PESO Approved, complete with UL / VDS / PESO Approved valve assembly and arrangement for supervisory switch connection for monitoring cylinder pressure, pressure guage with a safety burst disc, electronic control head / Solenoid, pressure operated control head, Manually operated actuator, Pneumatic actuator valve, flexible hose, strap, NRV, Pressure Switch and a safety cap, required nos of Nozzles (UL / VDS listed) and directional valves, Addressable Fire Alarm Gas release panel,, Manual gas release and abort station with manual call points, Piping, Manifold, copper cabling, required integration with fire alarm panel etc. complete as required as per specifications.                                       |          |       |                                                                             |                                        |                                                                  |
| 7.2                                                                  | Note : (1) Gas (Quantity would be as per the volume given below and as per the UL / VDS certification). CLEAN AGENT: FK-5-1-12 / NOVAC 1230 / Inert Gas with Zero Ozone Depletion Potential (ODP), has appearance / Colourless gas and odour less. Gas quantity to be computed as per the volume of largest room (* marked) and system to be designed accordingly. Room volume indicated is tentative with a tolerance limit of $\pm 10\%$ .<br>(2) Complete designing of the system along with shop drawings and technical details of the components to be submitted for approval of EIC prior to execution of work.<br>(3) The Cylinder, Volume of Gas, Nos. of Nozzles, discharge valves, piping design and pressure calculations using manufacturer design software duly approved by manufacturer (OEM) shall be submitted prior to commencement of the works. |          |       |                                                                             |                                        |                                                                  |
| 7.3                                                                  | (i) Equipment Room* (Volume = 50 cum) & (ii) Battery room (Volume = 23 cum)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1        | Set   | 60000.00                                                                    | 60000.00                               | INR Sixty Thousand Only                                          |
| Total in Figures                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |       |                                                                             |                                        |                                                                  |
| Quoted Rate in Words                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |       |                                                                             | 4557320.00                             | Forty Five Lakh Fifty Seven Thousand Three Hundred & Twenty Only |
| INR Forty Five Lakh Fifty Seven Thousand Three Hundred & Twenty Only |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |       |                                                                             |                                        |                                                                  |

7/7

  
(Arun Kumar K)

AGM (E-E)

AAI, Bangalore Airport

Assistant General Manager (Engg.-E)

कार्तीय विमानपत्तन प्राधिकरण / Airports Authority of India  
बैंगलूर विमान मण्डल, बैंगलूर / Bangalore Airport, Bangalore - 17