



भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA



E-mail Id: electrical-vidn@aai.aero Tel: 0135-2411011

पत्रांक सं.: एएआई/डीडीएन/इंजी(ई)/एआरएमओ-एनटीबी/कार्य आदेश कं.02/2022-23
Ref No.: AAI/DDN/Engg-(E)/ARMO-NTB/Work Order No. 02/2022-23

दिनांक 19.04.2022
Date: 19.04.2022

सेवा में,

मैसर्स अभिषेक इन्तेग्रेशंस लिमिटेड,
801, वीनस बेनेसिया, पक्वान डाइनिंग लेन,
एस.जी. हाईवे, बोदकदेव,
अहमदाबाद - 380053

To,

M/s Abhishek Integrations Limited,
801, Venus Benecia, Pakvan Dining Lane,
SG Highway, Bodakdev,
Ahmedabad - 380053

कार्य का नाम: एआरएमओ ऑफ़ एचटी/एलटी इलेक्ट्रिकल एंड मैकेनिकल इंस्टालेशन ऑफ़ सब स्टेशन, टर्मिनल बिल्डिंग, इन्क्लुडिंग ऑपरेशन ऑफ़ एचवीएसी सिस्टम एंड ओटीबी एट देहरादून एयरपोर्ट फॉर द इयर 2022-24।

Name of Work: ARMO of HT/LT Electrical & Mechanical Installations of Substation, Terminal Buildings, including operation of HVAC systems and OTB at Dehradun Airport for the year 2022-24.

Ref.:

1. Your Technical bid opened on 06.04.2022
2. Your financial bid opened on 12.04.2022

महोदय/Sir,

1. ऊपर उल्लेखित कार्य हेतु आपका टेंडर कृते अध्यक्ष, भारतीय विमानपत्तन प्राधिकरण की ओर से स्वीकृत किया जाता है, आपके द्वारा बताये गये मद मूल्यों पर आपकी ई-टेंडर राशि रुपये 1,56,25,714/- (रु एक करोड़ चप्पन लाख पच्चीस हजार सात सौ चौदा मात्र) जीएसटी के बिना स्वीकृत किया जाता है, जो टेंडर की उचित लागत राशि रुपये 1,88,00,350/- (रु एक करोड़ अठ्ठासी लाख तीन सौ पचास मात्र) जीएसटी के बिना से 16.89 % नीचे है।

Your 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 totaling to Rs. 1,56,25,714-(Rupees One Crore Fifty Six Lacs Twenty Five Thousand Seven Hundred Fourteen only) excluding GST which is 16.89% Below to justified cost of Rs. 1,88,00,350/-(Rupees One Crore Eighty Eight Three Lacs Three Hundred Fifty only) excluding GST.

2. संयुक्त महाप्रबन्धक (अभि.वि.)परियोजना देहरादून विमानपत्तन कार्य के प्रभारी अभियन्ता होंगे। आपसे निवेदन है कि आप दिनांक 02.05.2022 तक संयुक्त महाप्रबन्धक (अभि.वि.) परियोजना देहरादून हवाई अड्डा के कार्यालय में उपस्थित हो या आपकी ओर से एक विश्वसनीय प्रतिनिधि प्रतिनियुक्त करें जो करारनामों पर हस्ताक्षर के लिए अधिकृत हो तथा करारनामों को पूरा करें। ठेके का करारनामा रु 100/- के नॉनज्यूडिशियल स्टेम्प पेपर पर निष्पादित किया जाएगा, तथा पेपर का खर्च आपके द्वारा उठाया जाएगा।



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Jt. General Manager (Engg-E) Project, AAI, Dehradun Airport, Dehradun shall be the Engineer-In-charge of the work. You are requested to attend the office of Jt. Gen. Mgr. (E-E) Project, AAI, Dehradun Airport, Dehradun by **02.05.2022** 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.

- कृपया इस पत्र के जारी करने की तिथि से 10 दिन के अन्दर सुरक्षा जमा राशि के रूप में रु. 15,62,571/- जमा कराएं। अन्यथा अनुबन्ध की शर्तों के उपबन्ध संख्या 1A पृष्ठ संख्या 16 की शर्त के अनुसार रनिंग और अंतिम बिल से काटी जाएगी, जो कि करारनामे का हिस्सा होगा।

Please deposit **Rs.15,62,571/-** towards security deposit within **10 days** from the date of issue of this letter, failing which, the same will be deducted from Running and Final Bill as per condition of contract, Clause no 1A on page 16 of the General Conditions of Contract which will form part of the agreement.

- आपसे निवेदन है कि आप केन्द्रीय और राज्य सरकारों के 1970 के अधिनियम अनुबन्ध श्रम नियम तथा 1971 केन्द्रीय नियम अनुबन्ध श्रम नियम (नियमन तथा उन्मूलन एवं केन्द्र तथा राज्य सरकार के न्यूनतम वेतन अधिनियम और नियमों के प्रावधानों का अनुपालन करें।

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 and minimum wages act and rules thereof Central and State Governments.

- श्रम के विभिन्न विधानों के अनुसार सम्बन्धित अधिकारियों से लाइसेंस/अनुमति लेने व पालन करने के लिए एकमात्र दायित्व ठेकेदार (करार फर्म/कम्पनी सहित) का होगा जिसमें संविदा श्रम (विनियमन एवं उन्मूलन) अधिनियम, 1970 के अन्तर्गत लेबर लाइसेंस लेना भी शामिल है।

It will be the sole liability of the contractor (including the contracting firm/ company) to obtain and to abide by all necessary licenses/ permissions from the authorities concerned as provided under the various labour legislations including the labour licence obtained as per the provisions of the Contract Labour (Regulation & Abolition) Act, 1970.

- ठेकेदार को उसके द्वारा तैनात कर्मियों का नियमित और प्रभावी पर्यवेक्षण और नियन्त्रण सुनिश्चित करना होगा। और संविदात्मक दायित्वों के पालन के लिए उपयुक्त निर्देश देना होगा।

The contractor shall ensure regular and effective supervision and control of the personnel deployed by him and give suitable direction for undertaking the contractual obligations.

- आपसे निवेदन है कि आप चालू/अन्तिम बिल बनाकर उसे इंजीनियर इन चार्ज को प्रस्तुत करेंगे। कुल किये गये कार्यों की राशि का 10 प्रतिशत सुरक्षा जमा राशि के रूप में प्रत्येक चालू/अन्तिम बिल से काटी जायेगी। सरकारी नियमों के अनुसार सांविधिक करें एवं लेवी यदि लागू हो, काटा जायेगा।

You are requested that you will prepare your running/final bill & will submit the same to the Engineer-in-charge. 10% of total value of work done shall be deducted as security deposit from



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each running / final bill. Statutory taxes and levies, as applicable shall also be deducted as per Govt. norms.

8. कार्य के सन्तोषजनक पूरा होने पर, अन्तिम बिल निम्नलिखित दस्तावेजों के साथ इंजीनियर इन चार्ज को प्रस्तुत किया जायेगा।

On satisfactory completion of work, final bill shall be submitted by you to the Engineer-in-charge and same shall be processed with following documents : -

- I. आप का अन्तिम बिल।
Your final bill.
- II. आप और इंजीनियर इन चार्ज या उसके प्रतिनिधि द्वारा संयुक्त रूप से हस्ताक्षरित माप पुस्तिका।
Measurement book jointly signed by you and Engineer-in-charge or his authorised representative.
- III. इंजीनियर इन चार्ज द्वारा किया गया समापन प्रमाण पत्र।
Completion certificate issued by Engineer-in-charge.
- IV. अन्य सम्बन्धित दस्तावेज, यदि कोई हो।
Other relevant documents, if any.

9. आपको निर्देश दिया जाता है कि आप तुरन्त सहायक प्रबंधक (अभि.वि.) देहरादून विमानपत्तन से मिलें वह आपको साइट सौंपने की व्यवस्था करेंगे।

You are also directed to contact Assistant Manager (Engg.-E), Dehradun Airport immediately who will arrange to hand over the site to you.

10. कृप्या नोट कर लें कि काम करने का अनुमानित समय 24 महीने है जो कि दिनांक 01.05.2022 से गिना जायेगा।

Please note that the time allowed for carrying out the work shall be 24 months which shall be reckoned from date 01.05.2022.

11. दोष दायित्व अवधि प्रमाणित समापन तिथि से 06 महीने की होगी। इस अवधि के दौरान किसी भी प्रकार के दोष होने पर आपको दोष अपने खर्चे पर ठीक कराना होगा। जिसकी जिम्मेदारी आपकी होगी। सुरक्षा जमा राशि को दोष दायित्व अवधि के खत्म होने के बाद वापिस की जायेगी।

You will be responsible to make good and rectify at your own expense of any defect which may develop or may be noticed within the Defects Liability Period of 06 months which shall be



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reckoned from the certified date of completion. The security deposit shall be refunded only after expiry of defects liability period.

12. इस ठेके के सम्बन्ध में आगे का कोई भी पत्राचार संयुक्त महाप्रबन्धक (अभि.वि.) परियोजना, भारतीय विमानपत्तन प्राधिकरण, देहरादून हवाई अड्डा, देहरादून के पते पर किया जाएगा।

Any further correspondence in connection with the contract should normally be addressed to the Jt.Gen. Manager (Engg-E) Project, AAI, Dehradun Airport, Dehradun.

13. कृपया पावती भेजें और स्वीकृति के टोकन के रूप में संलग्न इस पत्र की दूसरी प्रति हस्ताक्षर करके वापस अधोहस्ताक्षरी को भेजें।

Please acknowledge the receipt and return the duplicate copy of this letter enclosed herewith after signing it, to the undersigned, as a token of acceptance.

धन्यवाद !

भवदीय

संयुक्त महाप्रबन्धक (अभि.-वि.), परियोजना
भारतीय विमानपत्तन प्राधिकरण,
देहरादून हवाई अड्डा, देहरादून
कृते एवं की ओर से
अध्यक्ष, भारतीय विमानपत्तन प्राधिकरण

Encl: Schedule of work (04 Pages)

**AIRPORT AUTHORITY OF INDIA
JOLLY GRANT AIRPORT DEHRADUN
ENGINEERING ELECTRICAL WING**

SCHEDULE OF QUANTITY

Name of Work: ARMO of HT/LT Electrical and Mechanical Installations of Substation Terminal Buildings including operation of HVAC systems and OTB at Dehradun Airport for the year 2022 24

Sl.No	Description of Work / Item(s)	Units	Qty.	Rate	Amount
1	Annual Operation and Maintenance of HT/ LT electrical & mechanical installations of 33/0.433 KV Substation, Operation of DG sets, New Terminal Building, Car Parking Area, Flood Lights, etc. and other related areas by deploying required manpower as per Special Conditions. 1-Supervisor (in General Shift) (High Skilled) -----01 2-Skilled -----11 3-Semi-Skilled Lift Operator -----04 4-Un- Skilled -----11 NOTE: Shift timing will be decided by Engineering-in-charge or his representative as per the site requirement and flight operational hours.	Months	24	499000.00	11976000.00
2	Servicing of 33kv H.T panel 33 kV Switch Board VCB panel with 02 Nos. VCBs as incomer 630 Amps and 04 Nos. VCBs, as Outgoing, 630 Amps i/c cleaning, lubrication of all movable parts, pole alignment, testing of closing/tripping/ control circuit, checking of operation mechanism, checking of busbar tightness, bottle inspection, TNC switch operation, wiring tightness, trolley movement checking, setting and greasing of finger contact, check and rectify motor spring charing mechanism, checking of all protection ckt tripping of breaker with transformer (WTI,OTI & buchholz relay) etc. and testing & calibration of associated relays (Master trip relay, trip circuit supervision relay, Current balances relay , O/C & E/F relay, and Auxiliary relay etc. and submission of report. (NOTE:- Service/Visit/Job for HT panel will be called only after DLP (29.09.2022) and when required. Service/Visit/Job will be done only by OEM or OEM authorised dealers. Cost of spares (if required) shall be paid extra by AAI.	Job	2	45000.00	90000.00
3	Servicing of Air Circuit breakers of Make-C&S /L&T /ABB i/c attending the complaints whenever required & normal service visits/breakdown visits,by OEM. Testing of release of ACB through Secondary injection set & submission of the report. The servicing includes the following scope of work:- 1. Racking out and removal of ACB from the switchboard. 2.Cleaning all parts for dust, deposits, foreign particles etc. 3.De greasing the various parts of ACB. 4. Cleaning all parts with cleaning agents such as CRC-2-26 5. Check the varrious setting within the ACB of contacts, releases etc. 6. Check the hardware for wear and tear and also for its termination and tightness. 7. Check for presence of all hardware. 8. Re-greasing of the ACB parts as recommended in ACB Service Manual. 9. Re-fixing the ACB in the switchboard. SETTING 1. Set contact gaps. 2. Set pull rod. 3. Set trip properly. TESTING 1. Check closing time. 2. Check tripping time. 3. Check Contact Resistance before and after Servicing of ACB. (NOTE:- Service/Visit/Job for HT panel will be called only after DLP (29.09.2022) and when required. Service/Visit/Job will be done only by OEM or OEM authorised dealers. Cost of spares (if required) shall be paid extra by AAI.	Job	2	14000.00	28000.00

Sl.No	Description of Work / Item(s)	Units	Qty.	Rate	Amount
4	Servicing of all LT panel suitable for 415 V , 3 Phase , 4 wire 50 Hz AC supply system , having 3200 Amp capacity extensible TPN aluminium alloy bus bars of high conductivity and switchgear mentioned below /as per specifications enclosed in the tender (but excluding of ACB,s.) i/c attending the complaints whenever required & normal service visits/breakdown visits and submission of report etc. as per scope of work given in special conditions and technical specifications of contract. Details of ACB/ MCCB A) 4P, 415 V ACB (Incomer) a) 3200 A , ACB - 03 nos b) 1250A , ACB 01 no B) 4P, 415 V ACB (Out going) a) 1600 A , ACB - 5nos b)1250 A , ACB - 3nos				
	C) 4P , 415 V MCCB a) 630 A, MCCB -16 nos b) 400 A, MCCB -09 nos c) 250 A, MCCB -01 no d) 200 A, MCCB -01 no e) 160 A, MCCB -01 no f) 100 A, MCCB- 02 nos g) 63 A, MCCB- 02 nos (NOTE:- Service/Visit/Job for HT panel will be called only after DLP (29.09.2022) and when required. Service/Visit/Job will be done only by OEM or OEM authorised dealers0 Cost of spares (if required) shall be paid extra by AAI.	Job	2	11500.00	23000.00
5	Visit of specilized Engineer (Panel Person) for attending synchronization issue including repairing of fault of main LT panel along with software Engineer for attending synchronization PLC System by the manufacturer or the authorised service dealer of manufacturer at substation Jolly Grant Airport Dehradun. (NOTE:- Service/Visit/Job for HT panel will be called only after DLP (29.09.2022) and when required. Service/Visit/Job will be done only by OEM or OEM authorised dealers0 Cost of spares (if required) shall be paid extra by AAI.	Visit	2	8000.00	16000.00
6	Annual maintenance contract of 610 KVAR Hybrid Panel and 310 KVAR Capacitor Panel with capacitor bank and switchgear (but excluding of ACB,s.). The scope of work is as per special conditions and technical specifications of contract.	Visit	2	5000.00	10000.00
7	Filtration and dehydration of transformer oils in the 33/0.433 KV transformers and its OLTC's including testing of di-electric strength as per instruction / requirement.	Ltr	1000	10.00	10000.00
8	Supply of transformer oil of IS: 335/1980 amended upto date with test report as required. (make of oil shall be as per OEM's recommendation)	Ltr	500	100.00	50000.00
9	Testing and calibration of Voltage and current operated Earth Fault relays, OC relays, SC Relays including secondary injection testing and settings and Dehydration of Transformer oil etc. once in a year, submitting test reports etc complete as required. Job includes checking proper co-ordination of relays, testing of tripping, checking all the control systems, checking and testing electrical interlocking, checking of control wiring, tightening of the wiring etc. complete as required	Each	30	1100.00	33000.00
10	Maintenance of Ceiling Fans upto 1400 mm sweep Overhauling, Oiling and greasing of fan, bush, replacement, quarter pins, wire with 1.5 sq.mm copper wire & other minor repairs i/c pasting of the sticker clearing mentioning date of maintenance complete as required.	Job	10	100.00	1000.00
11	Maintenance of Exhaust Fans upto 450 mm Overhauling, Oiling and greasing of exhaust fan, bush, replacement, quarter pins, wire with 1.5 sq.mm copper wire & other minor repairs i/c pasting of the sticker clearing mentioning date of maintenance complete as required.	Job	5	100.00	500.00

Sl.No	Description of Work / Item(s)	Units	Qty.	Rate	Amount
12	Rewinding of Ceiling fan motor upto 1400 mm sweep with suitable copper winding wire as reqd complete in all respect i/c pasting of the sticker clearing mentioning date of rewinding . (Dismantle copper wire shall be kept by the contractor need not to be returned & rewound motor will have minimum warranty period of 06 (Six) months).	Job	15	300.00	4500.00
13	Rewinding of Exhaust fan motor upto 450 mm sweep, desert coolers motor with suitable copper winding wire as reqd complete in all respect i/c pasting of the sticker clearing mentioning date of rewinding . (Dismantle copper wire shall be kept by the contractor need not to be returned & rewound motor will have minimum warranty period of 06 (Six) months).	Job	10	300.00	3000.00
14	Lifting / lowering of followings, submersible pump motor / sewerage pump motor i/c dismantling, checking, re-installation after repairs etc as required complete in all respect. 5/7.5/12.5HP motor of submersible/ monoblock pump motor	Job	4	4500.00	18000.00
15	Rewinding of followings, submersible pump motor / sewerage submersible pump motor / monoblock pump motor with suitable size of copper winding, Replacement of bush, bearing, seal and other worn out spares i/c testing commissioning etc. as required complete in all respect. (Dismantle copper winding shall be property of the contractor i) 5/7.5/12.5HP motor of submersible/ monoblock pump motor	Job	1	5000.00	5000.00
16	DSR Items (%rate above or below) All items covered under CPWD, DSR electrical 2018 upto an amount of Rs. 3,18,000/-. (Including Operational area charges, Labour Cess etc.).	Job	1	254400.00	254400.00
17	Supply of Remote Bell of approved colour, make, suitable for supply voltage 230V, 50 Hz single phase AC supply complete as required.	Nos.	10	520.00	5200.00
18	Supply of 20 amps, 240 volts, SPN industrial type, socket outlet, with 2 pole and earth, metal enclosed plug top alongwith 20 amps "C" curve, SP, MCB, in sheet steel enclosure complete as required.	Nos.	10	1250.00	12500.00
19	Supply of Insulating Tape (RYB) 0.125mm thickness X 1.80cm Width X 8m length complete as required.	Rolls	60	9.00	540.00
20	Supply of following sizes of 1.1 KV grade, flat three core PVC insulated and PVC Sheathed industrial cable for submersible pump motor as per IS:694(Part-1) (i) 3 x 4.0 sq. mm	Meter	200	120.00	24000.00
21	Supply of following rating B-series SP MCBs.				
21.1	6 Amp	Nos.	20	110.00	2200.00
21.2	16 Amp	Nos.	15	110.00	1650.00
22	Supply of 6-32 Amp, C series SP MCB.				
22.1	20 Amp	Nos.	10	95.00	950.00
22.2	25 Amp	Nos.	10	95.00	950.00
22.3	32 Amp	Nos.	15	95.00	1425.00
23	Supply of following rating C-series DP MCB				
23.1	32 Amp	Nos.	5	330.00	1650.00
23.2	40 Amp	Nos.	5	615.00	3075.00
24	Supply of following rating C-series TP MCB				
24.1	40 Amp	Nos.	5	910.00	4550.00
24.2	63 Amp	Nos.	5	995.00	4975.00
25	Supply of following rating C-series TPN MCB				
25.1	40 Amp	Nos.	5	1140.00	5700.00
25.2	63 Amp	Nos.	5	1230.00	6150.00

Sl.No	Description of Work / Item(s)	Units	Qty.	Rate	Amount
26	Supply of Capacitor/Condenser for Ceiling fan/Exhaust fan, tube light & Vapour Lamps suitable for 240 volt and 50Hz A.C. Supply complete as required.				
26.1	2.5 MFD	Nos.	40	25.00	1000.00
26.2	4 MFD	Nos.	10	70.00	700.00
27	Supply of following size of Gang Boxes complete as required.				
27.1	Gang box 5 Amp 2way	Nos.	20	70.00	1400.00
27.2	Gang box 15 Amp 2way	Nos.	30	90.00	2700.00
27.3	Gang box 5 Amp 4way	Nos.	30	110.00	3300.00
28	Supply of following Modular type Switches & Sockets complete as required.				
28.1	Supply of 10Amp piano Type Switch	Nos.	15	14.00	210.00
28.2	Supply of 20Amp piano Type Switch	Nos.	15	65.00	975.00
28.3	Supply of 10Amp piano Type Socket	Nos.	15	32.00	480.00
28.4	Supply of 20/ 10Amp Twin piano Type Socket	Nos.	15	70.00	1050.00
29	Annual Operation of HVAC system (Consisting of Centrifugal type water cooled Chiller 02 nos. with VFD giving actual Capacity of 700TR , Cooling tower 02 no each 700 TR, Centrifugal Pumps, AHUs 07 nos.of different capacity, Hot Water pumps -02 no each 160 KW ,BMS,Ozone system, Exhaust system, water softening plant and Air curtains etc by engaging following man power per day including Sundays/ weekly off/ holidays etc for operating the system as required. 1) Operator for HVAC & BMS System-----02 nos (Highly Skilled) 2) Mechnic cum Operator for HVAC System-----03 nos (Skilled) 3) Helper -----01 nos (Unskilled) NOTE: Shift timing will be decided by Engineering-in-charge or his representative as per the site requirement and flight operational hours.	Months	24	125666.00	3015984.00
Total (Including Operational Area Charge but excluding Contingencies & GST) Rs.					15625714.00

(Rs. One Crore Fifty Six Lakhs Twenty Five Thousand Seven Hundred Fourteen Only)

Note: Rates are inclusive of all the taxes excluding GST



Joint General Manager (Engg-E), Project
Airports Authority of India
Dehradun Airport

Signature Not Verified

Digitally signed by BIPIN PRAKASH
Date: 2022.04.25 14:55:20 IST
Location: eProcurement System for Central
PSUs