



भारतीय विमानपत्तन प्राधिकरण AIRPORTS AUTHORITY OF INDIA

पत्रांक संख्या: एएआई / डीडीएन / इंजी(ई) / एआरएमओ जीएलएफ / कार्य आदेश कं. 02 / 2020-21 दिनांक 24.04.2020
Ref No: AAI/DDN/Engg-(E)/ARMO NTB/Work Order No. 02/2020-21 Date 24.04.2020

सेवा मे

मैसर्स मनीष इलेक्ट्रिकल्स,
कल्पना नगर, नियर न. 7, चौराहा,
मोरार, ग्वालियर, पिन- 474 006 (एम.पी.)

To,

M/s Manish Electricals,
Kalpana Nagar, Near No. 7, Chouraha,
Morar, Gwalior, Pin- 474 006 (M.P)

विषय : एआरएमओ आफ् एचटी/एलटी इलेक्ट्रिकल, एण्ड, मैकेनिकल इंस्टालेशन ऑफ सबस्टेशन, टर्मिनल बिल्डिंग इन्क्लुडिंग फायर फाइटिंग एण्ड फायर अलार्म सिस्टम एट देहरादून एयरपोर्ट फॉर द ईयर 2020-22
Subject : "ARMO of HT/LT Electrical & Mechanical Installations of Substation, Terminal Buildings including Fire Fighting & Fire Alarm System at Dehradun Airport for the year 2020-22."

Ref. No

1. Your Technical bid opened on 23.03.2020
2. Your financial bid opened on 21.04.2020

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 1,59,01,694/- (रु एक करोड़ उनसठ लाख एक हजार छः सौ चौरानवे मात्र) जीएसटी के बिना स्वीकृत किया जाता है, जो टेंडर की उचित लागत राशि रुपये 1,88,00,696/- (रु एक करोड़ अठ्ठासी लाख छः सौ छियानवे मात्र) जीएसटी के बिना से 15.42 % 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. 1,59,01,694/- (Rupees One Crore Fifty Nine Lac One Thousand Six Hundred Ninety Four only) excluding GST which is 15.42% Below to justified cost of Rs. 1,88,00,696/- (Rupees One Crore Eighty Eight Lac Six Hundred Ninety Six only) excluding GST.

2. संयुक्त महाप्रबन्धक (अभि.वि.) परियोजना देहरादून विमानपत्तन कार्य के प्रभारी अभियन्ता होंगे। आपसे निवेदन है कि आप दिनांक 04.05.2020 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 हस्ताक्षरों के लिए अधिकृत हों तथा करारनामों को पूरा करें। ठेके का करारनामा रु 100/- के नॉनज्यूडिशियल स्टैम्प पेपर पर निष्पादित किया जाएगा, तथा पेपर का खर्च आपके द्वारा उठाया जाएगा।

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 04.05.2020 to sign and complete the contract agreement. The contract agreement shall be executed on a non-judicial stamp paper of value Rs. 100/- (Rupees One Hundred Only) and the cost of the stamp paper shall be borne by you.

3. कृपया इस पत्र के जारी करने की तिथि से 10 दिन के अन्दर सुरक्षा जमा राशि के रूप में रु. 15,90,169 /- जमा कराएं। अन्यथा अनुबन्ध की शर्तों के उपबन्ध संख्या 1A पृष्ठ संख्या 16 की शर्त के अनुसार काटी जाएगी। जो कि करारनामों का हिस्सा होगा।

Please deposit Rs. **15,90,169** /- towards security deposit within **10 days** from the date of issue of this letter, failing which, the same will be deducted as per condition of contract, Clause no **1A** on page **16** of the General Conditions of Contract which will form part of the agreement.

4. 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.

5. 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/ permissssions 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.

6. 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.

7. 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 each running / final bill. Statutory taxes and levies, as appicable 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 प्रबन्धक (अभि.वि.) देहरादून विमानपत्तन से मिलें वह आपको साइट सौंपने की व्यवस्था करेंगे।

You are also directed to contact 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 कार्य आदेश के जारी करने के 10 वे दिन के बाद से गिना जायेगा।

Please note that the time allowed for carrying out the work shall be 24 months and which shall be reckoned from the 10th day after issue of this letter.

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 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 जौली ग्रान्ट 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 ,Jolly Grant Airport Dehradun.

13. कृप्या 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,
जौली ग्रान्ट हवाई अड्डा, देहरादून
कृते एवं की ओर से
अध्यक्ष, भारतीय विमानपत्तन प्राधिकरण

Encl: Schedule of work (08 Pages)

AIRPORTS AUTHORITY OF INDIA
JOLLY GRANT AIRPORT DEHRADUN
ENGINEERING ELECTRICAL WING

Name of Work: ARMO of HT/LT Electrical & Mechanical Installations of Substation, Terminal Buildings , Including Fire Fighting & Fire Alarm System at Dehradun Airport for the year 2020-22.

SCHEDULE OF QUANTITIES

Sl.No	Description of Work / Item(s)	Units	Qty.	Rate	Amount
1	Annual Operation and Maintenance of HT/ LT electrical & mechanical installations of 11/0.433 KV and 33/0.433 KV Substation, Operation of DG sets, New Terminal Building, Car Parking Area, Flood Lights, Water treatment plant, Pumps etc. and other related areas by deploying required manpower as per Special Conditions.	Months	24	475786	11,418,864.00
2	Servicing of 33kv/11 kv 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 contract, check and rectify motor spring charging 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:-The servicing of H.T. panel will be done once a year.) by the manufacturer or the authorised service dealer of manufacturer.Cost of spares (if required) shall be paid extra by AAI.	Job	2	30000	60,000.00
3	Annual maintenance contract 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				



Sl.No	Description of Work / Item(s)	Units	Qty.	Rate	Amount
	5. Check the varrious setting within the ACB of contacts, releases etc. 6. Check the hardware for wear and tear & 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:-servicing of ACB will be done once a year.) by the manufacturer or the authorised service dealer of manufacturer.Cost of spares (if required) shall be paid extra by AAI.	Job	2	25000	50,000.00
4	Annual Maintenance 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	Job	2	150000	300,000.00
	e) 160 A, MCCB -01 no f) 100 A, MCCB- 02 nos g) 63 A, MCCB- 02 nos (Note -AMC of servicing of L.T. panel will be done once a yearas by the manufacturer or the authorised service dealer of manufacturer.Cost of spares (if required) shall be paid extra by AAI.)				

Sl.No	Description of Work / Item(s)	Units	Qty.	Rate	Amount
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 . (As and when required) by the manufacturer or the authorised service dealer of manufacturer. Cost of spares (if required) shall be paid extra by AAI.	Visit	4	10000	40,000.00
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	10,000.00
7	Filtration and dehydration of transformer oils in the 11/0.433 KV and 33/0.433 KV transformers and its OLTC's including testing of di-electric strength as per instruction / requirement.	Ltr	12000	10	120,000.00
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	600	160	96,000.00
9	Testing and calibration of Voltage and current operated Earth Fault relays, OC relays, SC Relays including secondary injection testing and settings 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	25	750.00
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	200	2,000.00
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	10	250	2,500.00
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 waranty period of 06 (Six) months).	Job	20	400	8,000.00



Sl.No	Description of Work / Item(s)	Units	Qty.	Rate	Amount
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	20	600	12,000.00
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	2	4000	8,000.00
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) 5/7.5/12.5HP motor of submersible/ monoblock pump motor	Job	1	4000	4,000.00
16	DSR Items (%rate above or below) All items covered under CPWD, DSR electrical 2018 upto an amount of Rs. 2,12,100/-. (Including Operational area charges, Labour Cess etc.).	Job	1	175000	175,000.00
17	Supply of following Electronic Ballast of different sizes complete as required.				
17.01	Electronic Ballast for 1x36 watt light fitting	Nos.	10	300	3,000.00
17.02	Electronic Ballast for 1x28 watt light fitting	Nos.	10	300	3,000.00
18	Supply of Remote Bell of approved colour, make, suitable for supply voltage 230V, 50 Hz single phase AC supply complete as required.	Nos.	10	120	1,200.00
19	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	700	7,000.00
20	Supply of Insulating Tape (RYB) 0.125mm thickness X 1.80cm Width X 8m length complete as required.	Rolls	100	20	2,000.00
21	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	90	18,000.00
22	Supply of L.E.D. type indication lamps suitable for 240 VAC/110 VDC / 24 VDC Aux. Voltage. (R-Y-G)	Nos.	10	120	1,200.00

Sl.No	Description of Work / Item(s)	Units	Qty.	Rate	Amount
23	Supply of L.E.D. type indication lamps suitable for 240 VAC/110 VDC / 24 VDC Aux. Voltage. (Blue)	Nos.	10	120	1,200.00
24	Supply of LED type Push button actuator illuminated flush suitable for operation for 240 VAC/110 VDC / 24 VDC Aux. Voltage.	Nos.	2	120	240.00
25	Supply of Ammeter Selector Switch for LT panel.	Nos.	2	200	400.00
26	Supply of Voltmeter Selector Switch for LT panel.	Nos.	2	200	400.00
27	Supply of following capacity contactors, relays and Add-on Blocks to match the existing one complete as required.				
27.01	Contactor MN0 22E (2NO+2NC), 415V, 4A, Coil supply: 220/240 VAC	Nos.	2	3000	6,000.00
27.02	Contactor MN0dc 22E (2NO+2NC), 415V, 4A, Coil supply: 24 Vdc	Nos.	2	2000	4,000.00
27.03	Contactor MNX-1B, 415V, 4A, Coil supply: 220 VAC	Nos.	2	2500	5,000.00
27.04	Contactor MNX-25, 415V, 25A, Coil supply: 220 VAC	Nos.	2	3000	6,000.00
27.05	Add on Block MN-A1 (2NO + 2NC)	Nos.	2	300	600.00
27.06	Add on Block MNX-A1 (2NO + 2NC)	Nos.	2	500	1,000.00
27.07	Add on Block MNX-A2 (1NO + 1NC)	Nos.	2	500	1,000.00
27.08	Thermal Overload Relay MN 2, 14-23 Amp.	Nos.	2	400	800.00
27.09	Thermal Overload Relay MN 2, 20-33 Amp.	Nos.	2	450	900.00
28	Supply of following Wattages, Cap types, Compact Flourecent Lamp suitable to operate on 240 volt, 50 Hz single phase AC supply complete as required. (i) CFL 36W 4 Pin	Nos.	25	200	5,000.00
29	Supply of following type of MCBs, RCCBs & Isolators suitable for 220V, 50Hz AC supply complete as required. (i) MCB 63A C Series TPN	Nos.	5	750	3,750.00
30	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.				
30.01	2.5 MFD	Nos.	30	25	750.00
30.02	4 MFD	Nos.	10	30	300.00
31	Supply of following sizes PVC insulated & PVC round sheathed copper conductor (flexible) industrial cable, 1100V conforming to IS: 694 (01 coil = 100 meter) complete as required.				
31.01	2 x 2.5 Sqmm	Coil	1	4000	4,000.00
31.02	3 x 2.5 Sqmm	Coil	1	5800	5,800.00
31.03	3 x 4 Sqmm	Coil	1	8200	8,200.00

Sl.No	Description of Work / Item(s)	Units	Qty.	Rate	Amount
32	Supply of following sizes (Nominal Cross sectional area based on CR value as per IS) PVC insulated, Stranded, Copper conductor, FRLS, House hold wiring cable of approved make and different colour {1 coil = 90 meters).				
32.01	1.5 Sqmm, Single core	Coil	2	1200	2,400.00
32.02	2.5 Sqmm, Single core	Coil	2	1900	3,800.00
32.03	4.0 Sqmm, Single core	Coil	1	3500	3,500.00
33	Supply of following size of Gang Boxes complete as required.				
33.01	Gang box 5 Amp 2way	Nos.	15	30	450.00
33.02	Gang box 15 Amp 2way	Nos.	15	50	750.00
33.03	Gang box 5 Amp 4way	Nos.	15	40	600.00
34	Supply of following Modular type Switches & Sockets complete as required.				
34.01	Supply of 10Amp piano Type Switch	Nos.	15	40	600.00
34.02	Supply of 20Amp piano Type Switch	Nos.	15	50	750.00
34.03	Supply of 10Amp piano Type Socket	Nos.	15	40	600.00
34.04	Supply of 20/ 10Amp Twin piano Type Socket	Nos.	15	50	750.00
35	Operation and Maintenance Contract of various reputed Make(honnyewell, agniand EST) Addressable Fire Alarm & Detection System at New Terminal Building, ATC-cum- Tech. Block, Power House,OTB, comprising of control panels, repeater panels, Manual Call Points, Detectors, Hootes, Mimic Panel, PA System, UPS System, Batteries complete circuit & loop wiring etc. i/c all other associated accessories for satisfactory operation & making the system serviceable, periodically cleaning & testing all the associated accessories confirming to OEM specification and Special Terms and conditions attending the breakdown/ faults, preventive maintenance, ensuring serviceability / satisfactory working condition of the system, maintenance of records / documentation etc. as per the detailed specifications, terms and conditions covered under this contract on all days including Sundays and holidays complete as required.	Months	24	57000	1,368,000.00
36	Visit of Specialized Authorized Engineer for checking of servicibility of addressable fire detection alarm panel which includes checking of healthiness of complete system, including both hardware & software, reporting of faults/ deficiencies to E-I-C ,programming of device(if required) and submitting the healthiness report to E-I-C.at Dehradun Airport.	Visit	4	10000	40,000.00
37	Supply of following spares required for Fire alarm and detection system on as an when required basis complete with the satisfaction of Engineer-in-charge.				
37.01	Addressable type smoke detector	Nos.	5	3000	15,000.00

Sl.No	Description of Work / Item(s)	Units	Qty.	Rate	Amount
37.02	Addressable type Manual Call Point	Nos.	1	4000	4,000.00
37.03	Addressable type Hooter	Nos.	1	4000	4,000.00
37.04	Response Indicator.	Nos.	1	1000	1,000.00
37.05	Control module	Nos.	1	2000	2,000.00
38	Operation and maintenance of Fire hydrant and sprinkler System on around the clock basis with the help of manpower as specified, for New Terminal Building, & ATC cum Technical Block; comprising of different capacity of Electric pump motor sets, Diesel Engine Pump sets, De-watering pumps, Butterfly/slucie Valves, pipe line, Fire Hydrants, Sprinklers including painting etc. as per good engineering practice complete in all respect as required and as per specification.	Months	24	37860	908,640.00
39	Repairing, servicing sluice/ butterfly valves/ NRV etc. of different sizes provided in the fire system at various locations of fire hydrant and sprinkler system as required. (Item will be executed only if required)	Job	1	5000	5,000.00
40	Repairing & servicing of following capacity pump sets after dismantaling and providing all necessary defective/wornout parts such as nut-bolts, rubber gasket, gland dori, rubber coupling, suitable bearings etc. and re- assembling the pump, making the pump set in perfect working condition as per good engineering practice complete in all respect as required at site.(Item will be executed only if required)				
40.01	Jockey Pump Set	Job	1	3000	3,000.00
40.02	Sprinkler Pump Set	Job	1	4000	4,000.00
40.03	Hydrant pump	Job	1	4000	4,000.00
41	Painting of Fire Hydrant/ Sprinkler pipeline of different sizes installed inside/ outside of terminal building / Cargo Terminal with two or more coats of painting with synthetic enamel paint to give an even shade, including cleaning of surface with detergent etc of approved brand or as approved by engineer-in-charge as required.				
41.01	40 mm Dia	RM	200	50	10,000.00
41.02	80 mm Dia	RM	100	70	7,000.00
41.03	100 mm Dia	RM	200	80	16,000.00
41.04	150 mm Dia.	RM	200	90	18,000.00
42	Annual Maintenance of Hydro pneumatic pump system (Grundfos make) excluding the cost of spares for trouble shooting, routine maintenance, preventive maintenance and breakdown maintenance etc. as required as per good engineering practice, recommendation of the original equipment manufacturer (OEM) and instructions of Engineer-in-charge for maintaining the system in acceptable, functional, operational and serviceable state of the following system. Hydro pneumatic pump system:				



Sl.No	Description of Work / Item(s)	Units	Qty.	Rate	Amount
	i) Hydro pneumatic system = 500 Ltr, 3 nos ii) Hydro pneumatic pump = 7.5 HP, 2nos. iii) Filter feed pump = 3Nos, 2 nos iv) Treated water feed Pump = 2 Hp v) Water softner Plant = 2 HP, 2nos vi) Pressure Transmitter - 1 No. vii) Drain water Pump = 3 HP, 2nos) viii) Dry-run protection ix) Control panel (IP54) including MPC controller, Main switches, all required fuses, Motor protection, switching equipments, VFD - 1 No. etc.	Months	24	25000	600,000.00
43	Annual Comprehensive Maintenance Contract of 05 Nos. Automatic Sliding doors by making regular visits on monthly basis including periodic checking and examining the door operator equipment as per OEM recommendations, cleaning, lubricating, adjusting and aligning the various components, checking all electrical circuits and connection of door operator and attending complaints/ faults/ breakdowns and taking recification action, ensuring serviceability / satisfactory working condition of the systems. Maintenance of records / documentation etc. as per the detailed specifications & terms and conditions covered under this contract complete as required at site.	Months	24	20000	480,000.00
Total Amount Excluding GST					15,901,694.00

(Rs. One Crore Fifty Nine Lac One Thousand Six Hundred Ninety Four Only.)

Note : Rates are inclusive of all the taxes Excluding GST.


Jt. General Manager Engg (E) Project
Airports Authority of India
Jolly Grant Airport Dehradun