



भारतीय विमानपत्तन प्राधिकरण
Airports Authority of India
जबलपुर विमानतल, जबलपुर
Jabalpur Airport, Jabalpur

सं.सं- भाविप्रा/प.क्षे/जेबीपी/संयु.मप्र(अभि.वि)प्रोजेक्ट/सीडब्लू/काआ.-01/2020-21/ 06 (1-12)
Ref. No.- AAI/WR/JBP/Jt. GM(E-E)/PROJECT/CW/WO-01/2020-21/

दिनांक: 18.05.2020

Date : 18.05.2020

Work Award letter/कार्यदेश पत्र

सेवा में,

To,

मेसर्स अमा प्राइवेट लिमिटेड,

कनाडा बिल्डिंग, 224

डॉ. डी.एन. रोड, फोर्ट

मुंबई-400001(महाराष्ट्र)

फोन नंबर :- 022-22075271

फैक्स नंबर :- 022- 22078910

ईमेल :- info@amaindia.com

M/s Ama Pvt. Ltd.

Canada Building , 224,

Dr. D.N. Road, Fort ,

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कार्य का नाम :- अप-ग्रेडेशन ऑफ जबलपुर एयरपोर्ट टू मेक इट सूटेबल फॉर ऑपरेशन ऑफ ए बी 320 टाइप एयरक्राफ्ट जी एल एफ एंड एसोसिएटेड वर्क्स.

Name of work : Up gradation of Jabalpur Airport to make it suitable for operation of AB 320 Type Aircraft --GLF and Associated Works.

संदर्भ:- आपका दिनांक 18.03.2020 को खोली गया ई-टेंडर आई डी क्रं 2020_AAI_40343_1

Ref No.:- Your e-tender ID No. 2020_AAI_40343_1 opened on 18.03.2020.

महोदय/ Sir,

1. उपर उल्लेखित कार्य हेतु आपकी निविदा अध्यक्ष, भारतीय विमानपत्तन प्राधिकरण की ओर से स्वीकार की जाती है। आपके द्वारा उद्धृत आइटम रेटों पर आपकी निविदा राशि कुल रुपये 6,73,65,760/- (रुपये छः करोड़ तेहतर लाख पैंसठ हजार सात सौ साठ मात्र) जी.एस.टी. रहित है, जो कि निविदा की औचित्य लागत रुपये 8,14,80,383/- (रुपये आठ करोड़ चौदह लाख अस्सी हजार तीन सौ तिराशी मात्र) जी.एस.टी. रहित से 17.32% कम है।

Your tender for the work mentioned above is hereby accepted on behalf of the Chairman, Airports Authority of India, at the item rate quoted by you totalling to Rs. 6,73,65,760.00 (Rs. Six Crore Seventy Three Lacs Sixty Five Thousand Seven Hundred & Sixty Only) Excluding GST, which is 17.32% Below the justified cost of Rs. 8,14,80,383/- (Rupees Eight Crore Fourteen Lacs Eighty Thousand Three Hundred & Eighty Three Only) Excluding GST put to tender.



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2. सयुं. महाप्रबंधक (अभि.-वि)-,परियोजना भारतीय विमानपत्तन प्राधिकरण, जबलपुर विमानतल, जबलपुर कार्य के प्रभारी अभियंता होंगे। आपसे अनुरोध है, कि आप संबिदा करार पर हस्ताक्षर करने एवं उसे पूरा करने हेतु दिनांक 02.06.2020 तक सयुं. महाप्रबंधक (अभि.-वि) - परियोजना. भारतीय विमानपत्तन प्राधिकरण, जबलपुर विमानतल, जबलपुर - 482005 के कार्यालय में अपना मान्यता प्राप्त प्रतिनिधि मुख्तारी अधिकार के साथ उपस्थित करें। ठेके का करारनामा 100/- रु के नोनज्युडिशियल स्टैम्प पेपर पर निष्पादित किया जायेगा, तथा स्टाम्प पेपर का खर्च आपके द्वारा उठाया जायेगा।

Jt.G.M. (E-E)-Project , Airports Authority of India, Jabalpur Airport, Jabalpur shall be Engineer-In-Charge of the work. You are requested to depute the your accredited representative, empowered to sign the contract agreement on your behalf to attend the office of Jt. Gen. Manager (Engg.-E), Jabalpur Airport. Jabalpur by 02.06.2020 to sign and complete the agreement. The contract agreement shall be executed on a non-judicial stamp paper of value of Rs. 100/- (Rupees one Hundred Only) and the cost of the stamp paper shall be borne by you.

3. आपकी निविदा के साथ प्राप्त रुपये 16,30,000/- (रुपये सोलह लाख तीस हजार मात्र) की अग्रिम धन राशि को निविदा दस्तावेज के अनुबंध की शर्त संख्या 1-ए पृष्ठ संख्या 16 के अनुसार प्रतिभूती जमा के रूप में प्रयुक्त तथा संपूर्णतः किया जायेगा। कृपया इस पत्र के जारी होने के 10 दिनों के भीतर सिक्स्योरिटी डिपोजिट के लिए रु 1738288/- (रुपये सत्रह लाख अड़तीस हजार दो सौ अठ्ठासी मात्र) जमा कर दें, अन्यथा ठेके के करारनामे के पृष्ठ जी सी सी की शर्त खण्ड 1ए पृष्ठ संख्या 16 के अनुसार, इतनी ही राशि आपके रनिंग बिलो से काट ली जाएगी।

The earnest money amount of Rs. 16,30,000/- (Rs Sixteen Lakhs Thirty Thousand Only) received along with your tender has been converted as part of security deposit as per GCC Clause 1A Page No. 16 of tender document . Please deposit Rs. 17,38,288.00 (Rs. Seventy Seven Lacs Thirty Eight Thousand Two Hundred Eighty Eight hree Only) toward security deposit within 10 days from the date of issue of this letter, failing which the same will be deducted from your running bill as per clause 1A of Page No. 16 of tender document.

4. आपको इस पत्र के जारी होने के 30 दिन के अन्दर, निविदा दस्तावेज के जी.सी.सी.क्लॉज़ -1 पृष्ठ संख्या 15, के अनुसार, रु. 33,68,288 / - (रुपये तेतीस लाख अड़सठ हजार दो सौ अठ्ठासी केवल) की परफॉरमेंस गारंटी को, निविदा दस्तावेज के जी.सी.सी. पेज संख्या 107-108 पर दिए गए प्रारूप के अनुसार ,बैंक गारंटी के रूप में, भा.वि.प्रा. को जमा करनी होगी।

With in 30 Days of issue of this letter , you shall submit to AAI, a performance Guarantee for an amount of Rs. 33,68,288/- (Rs. Thirty Three Lacs & Sixty Eight Thousand Two Hundred Eighty Eight Only) in form of Bank Guarantee as per GCC Clause 1 Page No. 16 of tender document , on the performa appended on at Tender document GCC P. No. 107-108.

5. आपसे निवेदन हैं, कि आप केंद्रीय और राज्य सरकारों के 1970 के अधिनियम अनुबंध श्रम नियम तथा 1971 के केन्द्रीय नियम तथा उन्मुलन न्यूनतम वेतन अधिनियम और नियमों के प्रावधानों का अनुपालन करें।

You are requested to comply with the provision of Contract Labour (Regulation and Abolition) Act of 1970 and Contract Labour (Regulation and Abolition) Center rules 1971 and minimum wages act & rules thereof Central and State Government.

6. आपका निर्देश दिया जाता है, कि आप तुरंत सहा. महाप्रबंधक (अभि.-वि) -ओ&एम को भाविप्रा जबलपुर, से मिले वह आपको साइट सौंपने की व्यवस्था करेंगे।

Your are also Directed to contact AGM (Engg-E) – O&M, AAI. Jabalpur Airport, immediately who will arrage to hand over the site to you.



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Jabalpur Airport, Jabalpur

7. कृपया नोट कर ले कि कार्य करने का अनुमानित समय 12 (बारह) माह की है, जो कि इस पत्र के जारी होने के 10 वे दिन से माना जायेगा।

Please note that the time allowed for carrying out the work shall be 12 (Twelve) Months, which Shall be reckoned from the 10th day of issuing of this letter.

8. यह पत्र इस समझौते का हिस्सा होगा |
This letter under reference shall form part of agreement.

9. इस ठेके के संबंध में आगे का कोई भी पत्राचार संयुं. महाप्रबंधक (अभि.वि)-परियोजना , भाविप्रा, जबलपुर विमानतल, जबलपुर के पते पर किया जाना चाहिए ।

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

10. उपरोक्त कार्य के लिए त्रुटि दायित्व की अवधि , निविदा दस्तावेज के विशेष अनुबंध की शर्तों के पृष्ठ संख्या 11 के अनुसार 24 माह की होगी, जो कार्य ककी प्रमाणित समाप्ति तिथि के दिन से गिनी जाएगी।

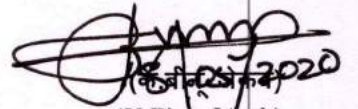
The Defect Liability Period for the above mentioned work shall be 24 Months from certified date of completion for work as per special Condition of contract P.No.11 of tender document.

11. यदि कोई विसंगति पायी जाती है तो अंग्रेजी संस्करण को सही माना जायेगा।
In case any discrepancy is found then English version will be taken as correct. .

12. कृपया इस पत्र की पावती भेजे।
Please acknowledge the receipt of this letter.

Encl:- Schedule of Work (15 Pages)

भवदीय/Yours faithfully


(K.Binu Jacob)

संयु.महाप्रबंधक (अभि.वि)-प्रोजेक्ट- जबलपुर एयरपोर्ट
Jt. General Manager (E.-E)-Project ,Jabalpur Airport
अध्यक्ष के लिए एवं तरफ से
For and Behalf of the Chairman
भारतीय विमानपत्तन प्राधिकरण,
Airports Authority of India
जबलपुर विमानतल, जबलपुर
Jabalpur Airport, Jabalpur



Airports Authority of India
Electrical Engineering Wing
Jabalpur Airport, Jabalpur

Name of Work :- Up gradation of Jabalpur Airport to make it suitable for operation of AB 320 Type Aircraft- GLF and Associated Works.

SCHEDULE OF WORK

Sl.No	Description of Items	Qty	Units	Rate	Amount
1	Supply of FAA and ICAO complied high intensity elevated type bi directional runway edge light fitting suitable for use with 150 watt, 6.6 Amps Halogne lamp complete with breakable coupling,central column assembly, vulcanised two pin secondary lead plug for connection to isolation transformer, base plate, gasket, inner lense with clampin mechanism, clear outer dom, pre-focus lamp holder, gaskets, washers etc and following type filters etc complete with all accessories as required				
1.01	360° clear filter	112	Each	7200.00	806400.00
1.02	1 no. 180° clear and 1 no. 180° yellow filter	72	Each	7200.00	518400.00
2	Supply of FAA and ICAO complied high intensity elevated type bi directional runway end light fitting suitable for use with 1 x 150 watt, 6.6 Amps Halogne lamp complete with breakable coupling,central column assembly, vulcanised two pin secondary lead plug for connection to isolation transformer,base plate , gasket, inner lense with clampin mechanism , clear outer dom, pre-focus lamp holder, gaskets, washers etc and having 1 no 180° red filter and 1 no. 180° balking plate etc complete with all accessories as required.	16	Each	7200.00	115200.00
3	Supply of FAA and ICAO complied high intensity elevated type uni directional runway threshold light fitting suitable for 1x 150 watt, 6.6 Amps Halogen lamp complete with breakable coupling, central column assembly, vulcanised two pin secondary lead plug for connection to isolation transformer, base plate, gasket, inner lense with clampin mechanism, clear outer dom, pre-focus lamp holder, gaskets, washers etc and having 1 no 180° green filter and 1 no. 180° balking plate etc complete with all accessories as required.	16	Each	8500.00	136000.00
4	Supply of FAA and ICAO complied high intensity elevated type uni directional approach light fitting suitable for use with 150 watt, 6.6 Amps Halogne lamp complete with breakable coupling,central column assembly, vulcanised two pin secondary lead plug for connection to isolation transformer,base plate , gasket, inner lense with clamping mechanism , clear outer dom, pre-focus lamp holder, gaskets, washers, clear front lens , refelector etc complete with all accessories as required.	136	Each	8500.00	1156000.00

Sl.No	Description of Items	Qty	Units	Rate	Amount
5	Supply of FAA and ICAO complied high intensity elevated type omni directional turning pad light fitting suitable for use with 1 x 45 watt, 6.6 Amps Halogen lamp complete with breakable coupling, central column assembly, vulcanised two pin secondary lead plug for connection to isolation transformer, base plate, gasket, inner lense with clampin mechanism, blue outer dom lense, pre-focus lamp holder, gaskets, washers etc complete with all accessories as required.	52	Each	4700.00	244400.00
6	Supply of FAA and ICAO complied medium intensity elevated type omni directional taxi way, light fitting suitable for blue LED 6.6 Amps complete with breakable coupling, die cast aluminium upper body, LED lens, lens bracket, control assembly, vulcanised two pin secondary lead plug for connection to isolation transformer, base plate, gasket, O-ring etc complete as required with all accessories.	96	Each	4700.00	451200.00
7	Supply of FAA and ICAO complied inset type bi directional 12" dia, 12 mm potrusion height high intensity runway edge light suitable for 2x105 Watt Halogen lamps complete with vulcanised plug for connection to isolating transformer, lamp holder assembly , clear prisms with stopper & gaskets, o-ring, washers , brass cable gland assembly, upper and lower cover etc and all other accessores complete as required.	3	Each	58000.00	174000.00
8	Supply of FAA and ICAO complied inset type uni directional 12" dia, 12 mm potrusion height high intensity runway end light suitable for 1x105 Watt Halogen lamp complete with vulcanised plug for connection to isolating transformer, lamp holder assembly , red prisim with stopper & gaskets, o-ring, washers , brass cable gland assembly, upper and lower cover etc and all other accessores complete as required complying with relevant FAA and ICAO standards.	19	Each	56000.00	1064000.00
9	Supply of FAA and ICAO complied inset type uni directional 12" dia, 12 mm potrusion high intensity runway threshold light suitable for 2x105 Watt Halogen lamp complete with vulcanised plug for connection to isolating transformer, lamp holder assembly , green prisms with stopper & gaskets, o-ring, washers , brass cable gland assembly, upper and lower cover etc and all other accessores complete as required.	43	Each	58000.00	2494000.00
10	Supply of FAA and ICAO complied LED Type elevated guard light as required with all accessories.	3	Each	157300.00	471900.00
11	Supply of FAA and ICAO complied PAPI unit Suitable 3 x 200W Halogen lamp with base plates complete as required with all accessories complying with relevant FAA and ICAO standards (1 SET of 4 nos.)	1	Set	460000.00	460000.00
12	Supply of calibration kit ,clinometer, sprit level, checking stick & base plates etc complete for PAPI set.	1	Set	95000.00	95000.00
13	Supply of FAA and ICAO complied LED model Wind Cone with LED obstruction Light complete as required with all accessories.	1	Each	185000.00	185000.00

Sl.No	Description of Items	Qty	Units	Rate	Amount
14	Supply of FAA and ICAO complied H-Indicator with LED Light as required with all accessories.	1	Each	255000.00	255000.00
15	Supply of FAA and ICAO complied all the equipment required to provide Airfield Lighting Control and Monitoring System (ALCMS), type L 890'BB"to the requirements of FAA Advisory Circular No. AC 50/5345-56B (current edition) and additional circular/ mechanisms /interfaces for power supply equipment, and Landing - H etc., including all hardware and software, licenses & other items as required for successful operation of the system in line with the scope of work, details of equipment, equipment specification, performance criteria etc. Two Vailt processor will be provided both running in parallel for redundancy in operation. (Does not include the cost of communication cable between ATC & CCR Room) Event logging & fault annunciation of all CCRs shall be provided.	1	Each	2000000.00	2000000.00
16	Supply of following rating FAA and ICAO complied indoor type microprocessor based, aircooled constant current regulator of Thyristor control, electronic type,suitable for use on 240/415 V AC,50/60 Hz, input AC supply with below mentioned output power at 6.6amps with 5 steps variation of current output suitable for local and remote control operation with 24/48 V DC control supply complete with output current indicated on multifunction digital display, overcurrent, over voltage, earth fault protection and earth leakage meter,positive back indication equipments relay contactor etc. as required as perspecification.				
16.01	30 Kw, 6.6 Amps.	3	Each	402500.00	1207500.00
16.02	15 Kw, 6.6 Amps	3	Each	310500.00	931500.00
16.03	10 Kw, 6.6 Amps.	2	Each	276000.00	552000.00
16.04	7.5 Kw, 6.6 Amps	2	Each	207000.00	414000.00
16.05	5 Kw, 6.6 Amps	4	Each	161000.00	644000.00
16.06	4 Kw, 6.6 Amps.	1	Each	147200.00	147200.00
16.07	2.5 Kw, 6.6 Amps.	2	Each	138000.00	276000.00
17	Supply of FAA and ICAO complied 6 sq.mm plug & receptacle of type I, class B connector & suitable field attachment with 5 KV grade XLPE insulated PE sheathed single core screened copper conductor cable as required.	725	Set	750.00	543750.00
18	Supply of FAA and ICAO complied 5 KV, 50 Hz, PCP encapsulated isolating transformer suitable for individual series lamps airport lighting circuits. The transformer shall be designed to be water proof and suitable for direct burial in the earth or installation in a base complete as per specifications attached.				
18.01	300 Watts 6.6/6.6 Amps	43	Each	5500.00	236500.00
18.02	200 Watts 6.6/6.6 Amps	60	Each	4300.00	258000.00
18.03	150 Watts 6.6/6.6 Amps	475	Each	3900.00	1852500.00
18.04	45 Watts 6.6/6.6 Amps	54	Each	3300.00	178200.00
18.05	15 Watts 6.6/6.6 Amps	96	Each	2500.00	240000.00

Sl.No	Description of Items	Qty	Units	Rate	Amount
19	Supply of M 5-10 size stainless steel bolt of 1 1/4" length with spring and plate washers suitable for elevated/inset Runway / Taxiway and Approach light fixtures as required.	5800	Each	13.00	75400.00
20	Supply of 2 x 4 sq.mm size secondary lead made out of multi stranded copper conductor, EPR insulated PCP sheathed, treated 600V grade cable as specified in particular specification and as required.	9000	Meter	92.00	828000.00
21	Supply of 600 V grade plug and receptacle of type II, class 'B' connector and suitable field attachment with EPR insulated, PCP sheathed, two core copper conductor secondary cable 4 sq.mm as required.	350	Each	750.00	262500.00
22	Supply of 6 mm thick powder coated MS cover plate to cover the CI transformer bousing box of 300 mm outside dia with 6 nos. M10 tapped holes and required dia hole at the centre for entry of secondary lead as required(Supply of bolt not included in the scope).	530	Each	900.00	477000.00
23	Supply of following rated bi pin halogen lamps suitable for elevated/ inset runway light fixtures.				
23.01	200 Watts ,6.6 Amps	24	Each	495.00	11880.00
23.02	150 Watts ,6.6 Amps	450	Each	495.00	222750.00
23.03	105 watts, 6.6 Amps	115	Each	900.00	103500.00
23.04	45 watts, 6.6 Amps	52	Each	495.00	25740.00
24	Supply of Spares for Elevated Halogen Type fitting.				
24.01	360°clear dom lens for runway edge light fitting.	20	Each	3400.00	68000.00
24.02	180°clear filter for runway edge light fitting.	20	Each	2100.00	42000.00
24.03	180° Yellow filter for runway edge light fitting.	10	Each	2100.00	21000.00
24.04	360°blue dom lens for taxiway light fitting.	10	Each	2300.00	23000.00
24.05	Bi- pin holder for 150/45 watt halogen lamp	20	Each	475.00	9500.00
24.06	Bi pin plug, .5 meter length, for runway edge, end, threshold, approach and taxiway fitting.	20	Each	1500.00	30000.00
24.07	Breakable coupling for runway edge/ Taxiway/Turning Pad/Runway end/ threshold/approach/taxiway Light fittings.	5	Each	450.00	2250.00
25	Spares inset Halogen fitting.				
25.01	Clear prism for runway edge light.	2	Each	2100.00	4200.00
25.02	Red prism for runway end light	3	Each	2300.00	6900.00
25.03	Green prism for runway threshold light.	5	Each	2500.00	12500.00
25.04	Bi pin plug , 0.5 meter length ,for edge /end / threshold/ approach light fitting.	5	Each	1500.00	7500.00
26	Spares for PAPI unit				
26.01	Red Filter	3	Each	6200.00	18600.00
26.02	Inner clear lens	2	Each	5650.00	11300.00
26.03	Bipin plug, 2.5 meter length	5	Each	2650.00	13250.00
26.04	Breakable coupling	2	Each	950.00	1900.00
27	Design, supply and installation of Frangible & tiltable type pole/ lattice mast (base mounted/central hinge /counter balanced type) complying with relevant ICAO standards suitable for Cat -I Approach light system (barrette type downward slope - 1 in 66 up to 300 meter and 1 in 60 beyond 300 meter) as per the profile attached including necessary foundation as required.	1	Job	8000000.00	8000000.00

Sl.No	Description of Items	Qty	Units	Rate	Amount
28	Design, supply and installation of Frangible & tiltable type pole/ lattice mast(base mounted/central hinge /counter balanced type) complying with relevant ICAO standards suitable for Simple Approach light system (single light source upward slope 1 in 120) as per the profile attached including necessary foundation as required.	1	Job	1200000.00	1200000.00
29	Supply of the 1 X 6 sq.mm Airfield Lighting (AFL) 5 KV grade, Single Core, Copper Conductor, Copper shielded, XLPE insulated, and with inner and outer semi conductor, Polyethylene (PE) outer sheathed, CopperBraid, Unarmoured Underground Cable confirming to IS 7098(PART-II) as required.	90000	Meter	105.00	9450000.00
30	Supplying following size XLPE insulated and PVC sheathed aluminium conductor cable of 1.1 confirming to IS 7098(PART-I) KV grade as required.				
30.01	3 .5 x 185 sq.mm	70	Meter	650.00	45500.00
30.02	3.5 x 50 sq.mm	315	Meter	314.00	98910.00
30.03	2 x 70 sq. mm	1500	Meter	180.00	270000.00
30.04	2 x 25 sq. mm	490	Meter	95.00	46550.00
30.05	2 x 10 sq. mm	60	Meter	108.00	6480.00
31	Supply of single mode 6 core armoured OFC cable.	300	Meter	75.00	22500.00
32	Installation, testing and commissioning of elevated ruway edge /end /threshold / approach / taxiway light fittings with all accessories on the existing transformer housing box i/c. assembling of accessories, alignment, levelling, installation of isolating transformer, crimping / jointing of plug & receptacles including filling the gap with water sealent material& applying PVC HT insulation tape as required for complete etc. as required.	346	Job	250.00	86500.00
33	Installation, testing, commissioning of inset ruway edge/end/threshold/approach / taxiway light fittings on runway i/c cutting the concrete /bitumen pavement with core cutting machine,installing the inset fitting with the help of jigs,filling the bottom and side with departmentally supplied sealant DOBEFIL-60/Hardner mixture ,installation of isolating transformer, crimping / jointing of plug & receptacles connection including filling the gap with water sealent material& applying PVC HT insulation tap, making connection with secondary lead& isolating transformer, leveling, aligning etc complete as required.	54	Job	8000.00	432000.00
34	Installation, testing and commissioning of elevated approach light fittings on the exiting lattice masts/poles including drawing of secondary cable ,lamps,all connectors and making field connections with plug & receptacle and isolating transformerincluding filling the gap with water sealent material& applying PVC HT insulation tape,lamps , connection of secondary cable and fixing of light fitting as required.	153	Job	25.00	3825.00
35	Installation, testing and commissioning of micoprocessor based CCRs	20	Job	13000.00	260000.00
36	Installation, testing and commissioning of PAPI Units (set of 4 nos) including necessary foundation, aligning complete as required.	2	Job	90000.00	180000.00

Sl.No	Description of Items	Qty	Units	Rate	Amount
37	Installation, testing and commissioning of elevated runway guard light fittings with all accessories on the existing transformer housing box i/c. assembling of accessories, alignment, levelling, installation of isolating transformer, crimping / jointing of plug & receptacles including filling the gap with water sealant material& applying PVC HT insulation tape as required for complete etc. as required.	2	Job	17500.00	35000.00
38	Installation, testing commisioing of lighted wind sock with all accessories, assembling, foundation etec complete as required	1	Job	55000.00	55000.00
39	Installation, testing commisioing of lighted H - indicator with all accessories, assembling, foundation etec complete as required	1	Job	55000.00	55000.00
40	Installation, tesing and commissioning of ALCMS with all accessories, connections, anchoring etc complete as required	1	Job	250000.00	250000.00
41	Numbering of runway light fixtures as per direction of Engineering - In-Charge	555	Job	50.00	27750.00
42	Covering of transformer housing boxe with 3 mm thick M.S dummy plate (M.S. plate will be supplied seperately)	523	Job	750.00	392250.00
43	Supply of cast iron isolating Transformer housing box, water tight round type, metal container of outside size 330 mm dia, height 450 mm made of 10 mm thick cast iron moulding all round, except the top surface, which is 15 mm thick, cast iron moulding suitable to receive a light fitting base plate on the top and underground housing associated with transformer, power cable and having two holes opposite as per site requirement at the periphery, centre 75 mm above bottom surface suitable to receive 50 mm dia HDPE as required. The box should have two SS earh bolts of M10x40 mm tapped inside near the hole (4" away from hole centre) and having drain hole at the bottom suitably tapped to receive 15mm dia GI pipe and having clear opening of 220 mm at the top surface and 06 Nos. M10 tapped hole having centre to centre distance of 260mm alongwith bolts as required as per the drawings.	60	Each	3800.00	228000.00
44	Installation of CI housing box of size 330 mm dia and 450 mm deep as per drawing/pecification attached i/c excavation of surface, Cement concrete all round, providing 250 mm long 15 mm dia 'B' class GI pipe in the bottom surface for drainage of water etc., cutting & threading of pipe,i/c adjustment of housing with thedolite etc, refilling the side surface, sloping and making good the same as original as required.	60	Job	3400.00	204000.00
45	Supply and laying of DWC/HDPE pipe of outer dia up to 50 mm by cutting of pipe groove with kerf cutting machine for laying on the concrete/ bituminous runway surface i/c kerfing, cheisling, cleaning and filling the groove with concrete and making good thye same complete etc. as required.	4350	Meter	205.00	891750.00

Sl.No	Description of Items	Qty	Units	Rate	Amount
46	Supplying and laying of 63 mm outer dia DWC HDPE pipe ISI along with all accessories like socket, bend, couplers etc.marked conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground at following depth below ground level including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.				
46.01	45 cm	22000	Meter	155.00	3410000.00
46.02	75 cm	700	Meter	160.00	112000.00
47	Supplying and laying of 50 mm outer dia 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. in the existing trench/shaft, complete as required.	300	Meter	65.00	19500.00
48	Laying of XLPE insulated and PE sheathed, copper conductor unarmoured airfield lighting cable of 5 KV grade direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc. as required.	25000	Meter	230.00	5750000.00
49	Laying of one number additional XLPE insulated and PE sheathed, copper conductor unarmoured airfield lighting cable of 5 KV grade direct in ground in the same trench in one tier horizontal formation including excavation, sand cushioning, protective covering and refilling the trench etc. as required	20000	Meter	230.00	4600000.00
50	Laying of one number XLPE insulated & PE sheathed un armoured copper conductor Runway primary/secondary cable of grade 5 KV of size not exceeding 16Sq.mm in the existing RCC/HUME/STONEWARE / METAL/ HDPE pipe etc. as required.	30000	Meter	20.00	600000.00
51	Laying of one number XLPE insulated and PE sheathed, unarmoured copper conductor Airfield lighting cable of 5 KV grade of size not exceeding 16 sqmm in the existing cable duct / masonry trench etc. as required.	650	Meter	20.00	13000.00
52	Laying of following sixe XLPE insulated and pvc sheathed, alunminum conductor armoured power cable of 1.1 KV grade direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc. as required.				
52.01	above 35 sq.mm and upto 95 sq.mm	1025	Meter	250.00	256250.00
53	Laying of following sixe XLPE insulated and pvc sheathed, alunminum conductor armoured power cable of 1.1 KV grade of size above direct in ground in the same trench in one tier horizontal formation including excavation, sand cushioning, protective covering and refilling the trench etc. as required.				
53.01	above 35 sq.mm and upto 95 sq.mm	350	Meter	250.00	87500.00
54	Laying of one number XLPE insulated & PVC sheathed armoured aluminium conductor power cable of grade 1.1 KV of following size in the existing RCC/HUME/STONEWARE / METAL/ HDPE pipe etc. as required.				
54.01	Upto 35 sq. mm	45	Meter	30.00	1350.00
54.02	Above 35 sq. mm and upto 95 sq. mm	75	Meter	30.00	2250.00

Sl.No	Description of Items	Qty	Units	Rate	Amount
55	Laying of following size one number XLPE insulated and PVC sheathed, armoured aluminium conductor power cable of 1.1 KV grade of following size in the existing cable duct / masonry trench etc. as required.				
55.01	Above 35 sq. mm and upto 95 sq. mm	50	Meter	30.00	1500.00
56	Laying and Fixing of following size one number XLPE insulated PVC sheathed armoured copper aluminium power cable of 1.1 KV grade of following size on cable tray etc as required.				
56.01	Upto 35 sq. mm	400	Meter	30.00	12000.00
56.02	Above 35 sq. mm and upto 95 sq. mm	250	Meter	30.00	7500.00
56.03	Above 95 sq. mm and upto 185 sq. mm	50	Meter	30.00	1500.00
57	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 meter long etc. with charcoal/ coke and salt as required.	2	Set	16500.00	33000.00
58	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.	21	Set	9000.00	189000.00
59	Providing and laying earth connection from earth electrode with 6 SWG dia G.I. Wire in 15 mm dia G.I. pipe from earth electrode including connection with G.I. thimble excavation and re-filling as required.	105	Meter	275.00	28875.00
60	Providing and laying earth connection from earth electrode with 4.00 mm dia copper wire in 15 mm dia G.I. pipe from earth electrode including connection with copper thimble excavation and re-filling as required.	20	Meter	425.00	8500.00
61	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing along with existing cable as required.	75000	Meter	12.00	900000.00
62	Providing and fixing 4 mm dia copper wire on surface or in recess for loop earthing along with existing cable as required.	20	Meter	75.00	1500.00
63	Providing and fixing earth bus of 50 mm X 5 mm copper strip on surface for connections etc. as required.	1	Meter	3200.00	3200.00
64	Providing and fixing earth bus of 50 mm X 5 mm G.I. strip on surface for connections etc. as required.	1	Meter	1050.00	1050.00
65	Supplying and installing 150 mm x 50 mm x 1.6 mm thick of perforated painted with powder coating M.S. cable trays bends with perforation not more than 17.5%, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc as required.	200	Meter	1250.00	250000.00
66	Supply and placing in position of water tight MS cable chamber box of outer size 330 mm x 330 mm, 600 mm height made out of top & bottom surfaces with 10 mm thick plate and side surfaces with 6 mm thick plates and having three holes to receive DWC/ GI pipes as per site requirement, clear opening of 225 mm dia. on top surface, 06 nos. M10 holes on top surface to match with cover plate of 300 mm dia., drain hole on bottom surface with 15 mm dia., 100 mm length, GI pipe, earth studs etc. as required as per drawing attached.	316	Each	4500.00	1422000.00

Sl.No	Description of Items	Qty	Units	Rate	Amount
67	Supply of water tight MS housing box of outer size 330 mm x 330 mm, 150 mm height made out of top & bottom surfaces with 10 mm thick plate and side surfaces with 6 mm thick plates and having three holes to receive DWC/ GI pipes as per site requirement, clear opening of 225 mm dia. on top surface, 06 nos. M10 holes on top surface to match base plates of light fittings , drain hole on bottom surface to receive 15 mm dia. GI pipe, earth studs etc. as required as per drawing attached.	78	Each	3100.00	241800.00
68	Installation of 330 mm x 330 size ., 150 mm Height MS housing box in bituminous/concrete area including core cutting up to required depth , 15 mm dia. , 100 mm length , B class GI pipe for drain and filling with sealing compound including providing top slopped surface with 1:2:4 cement concrete etc. complete as required.	78	Each	3000.00	234000.00
69	Supplying and making indoor end termination with brass double 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.				
69.01	3.5 x 185 sq.mm	2	Set	3500.00	7000.00
69.02	3.5 x 50 sq.mm	6	Set	3000.00	18000.00
69.03	2 x 70 sq.mm	4	Set	2500.00	10000.00
69.04	2 x25 sq.mm	14	Set	2500.00	35000.00
69.05	2 x 10 sq.mm	6	Set	2000.00	12000.00
70	Supply, installation, testing and commissioning of mandatory/ information operational area guidance sign board of various sizes made out of 2 mm thick anodised aluminium frame with suitable angle support, 1.5 mm thick aluminium backcover, 4 mm thick polycarbonate sheet with glare free face, screen printed letter & symbol on self adhesive vinyl film with required colouring & applied on the inside face of polycarbonate sheet, frangible legs, reakable coupling, mounting plates, clamps, uniformly internally illuminated with required LEDs to achieve illumination level, converter suitable for operation on 2.8 A to 6.6 A series airfield lighting circuit without flickering, change over circuit, internal wiring, water tight & locking arrangement etc, grouting of each mounting leg by providing & laying 1:2:4 (1 Cement: 2 Coarse sand : 3 graded stone aggregate 20mm nominal size) cement concrete foundation of suitable size) including excavation, shuttering & centering, refilling, leveling etc, fixing of coupling through anchor bolts, secondary cable laying, connection to isolating transformer, crimping / jointing of plug & receptacles including filling the gap with water sealent material & applying PVC HT insulation tape, testing and commissioning etc complete as required and meeting ICAO Annex 14 specifications. (excluding Isolating transformer and secondary cable).	30	Sq. Meter	51000.00	1530000.00

Sl.No	Description of Items	Qty	Units	Rate	Amount
71	Supply, Installation, Testing and Commissioning of ICAO complied SNI (Stand Number Indicator) Triangular Side (Fascia 800mm X 600mm X 2mm) on existing pole to indicate SNI coordinates at gate or stand fabricated with 2mm Aluminium Sheet. The SNI shall be triangular in shape with rear side of 1700 mm and each front side of 1000 mm. The total height of triangle shall be 900 mm. There shall be laser cut opening of 800mm X 600 mm of front fascia for indicating SNI. The long-life fascia is UV stabilized polycarbonate face of 4mm thickness with special adhesive and vinyl pasting 2 layers as per approved legend and background on whole area from inside of polycarbonate face fixed from inside of fascia with changing arrangement from inside. The boards shall be internally uniformly illuminated with LED lamp(modules) and all other accessories including having individual LED drivers for each LED module/array to work on 230V AC supply complete with all internal wirings, connectors. The top Cover shall be single piece 2mm Al sheeting which shall cover the entire triangle with edge bent up to 25mm on all sides to prevent ingress of water and shall be openable for maintenance of board.	3	Each	45000.00	135000.00
72	Supply, Installation, Testing and Commissioning of ICAO complied WGS (World Geodetic System) of size 1220 mm x 800 mm to indicate WGS coordinates at gate or stand fabricated with central split type opening for easy maintenance made of reinforced 2mm thick anodized aluminum profile with suitable support. The rear panel shall be made of 1.2 mm thick anodized aluminium profile with ready to install fitting for mounting on pole or façade. The long-life fascia is UV stabilized polycarbonate face of 4mm thickness with special adhesive and vinyl pasting 2 layers as per approved legend and background on whole area from inside of polycarbonate face. The board shall have hinged front face to allow easy access for maintenance. Even light distribution shall be ensured using LED array. The boards shall be internally uniformly illuminated with LED lamp (modules) and all other accessories including having individual LED drivers for each module/array to work on 230V AC supply complete with all internal wirings, connectors.	3	Each	35000.00	105000.00

Sl.No	Description of Items	Qty	Units	Rate	Amount
73	Supply of 7-meter height Swaged MS Pole fabricated from MS Pipes of following Sizes. 1) Up to 2 meters from Bottom 200 mm X 5 mm Thick. 2) From 2 Meter to 7 Meter 140 mm X 5 mm Thick with 300mm inside overlap with the 200 mm dia pipe with swaging. 3) Base of 600mm X 600mm X 25 mm thick MS Plate with 250 mm X 10 mm thick tapered web flanges and providing 1 No. template for the same. 4) 8 Nos of Holes suitable for M25 X 1000 mm Foundation bolts. 5) Double Ended Flange type pole of 300mm height shall be made for fixing Triangular SNI with the poles on top side. 6) Suitable size water proof junction box for terminating incoming and outgoing cable with a provision of suitable rating MCB. The entire Pole shall be Sand blasted, chemically treated and PU painted in desired colour as approved by EIC.	3	Each	30000.00	90000.00
74	Erection of 7 mtr. metallic pole including making foundation by Providing and laying in position reinforced cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) as per Approved Design including excavation and refilling etc. as required	3	Job	25000.00	75000.00
75	Supply and installation of day night sensor switch for automatic on and off of guidance sign boards suitable to operate on single phase 230 V, 50 Hz AC supply including connection, testing and commissioning etc complete as required.	3	Each	2000.00	6000.00
76	Supply and installation of of weather proof IP66 thermoplastic cable junction box suitable for termination of 2x10 sqmm armoured cable including one number 6 A, 10 kA, DP MCB, connector kit etc and fixing on 6' dia existing GI pole by clamps, bolts, nuts etc complete as required.	3	Each	1050.00	3150.00

Sl.No	Description of Items	Qty	Units	Rate	Amount
77	Supply, Installation, Testing & Commissioning following capacity 3 phase input, 3 phase output IGBT based, modular type, true online double conversion type with isolation transformer, harmonic filter etc 2 nos UPSs with provision to run in load sharing moded suitable to drive constant current regulators(CCR) with 100% unbalanced load at output at full load condition with standard features like 100% rated static bypass, maintenance bypass facilities active input power factor correction, phase sequence corrector,pure sinwave output, compatibility of generator supply, user friendly LCD display and battery management features integrated with main UPS controller, operating condition 415V +15%, -20%, 3 phase, 50Hz $\pm$5%, IP20 capable of running at 100% 2 phase/single phase unbalance load with 3phase of output and as per the enclosed technical specification.The job also includes.. (a) Supply, Installation, Testing & Commissioning suitable capacity SMF batteries to give a backup time of minium 30 minutes at full load with each UPS System along with suitable rating switch gears, interconnection between battery bank and UPS , battery rack etc as required. (b) Supply, Installation, Testing and Commissioning of necessary switchgears, cables etc for synchronisation of the UPSs on laod sharing mode.				
77.01	160 kva	1	Job	3250000.00	3250000.00
78	Fabrication, assembly, wiring and supply, erection , testing and commissioning of cubicle type compartmentalised as per Form 4B, free standing, dust and vermin proof (Minimum IP 42 ingress protection) main switchboards conforming to IEC-60439 for incomer up to 250 amps and IEC-61439 for incomer above 250 amps suitable for use at 433 volts, 3 phase 4 wire 50 Hertz system suitable for a symmetrical fault level of kA (as specified with the respective panel item) at 433 volts, fabricated from 2 mm outer thick CRCA sheets with hinged, gasketted (metal based neoprene) and lockable doors having structural reinforcement with suitable angle/channel/T/flat sections including 3 mm thick gland plates on top and bottom including lifting hooks and earth bus of required size with 2 nos. earthing terminals, coating, paint finish of approved shade over metal surface cleaned and treated with nine tank process complete with interconnections etc. as per specifications, as required and as below. The incoming and outgoing feeders shall be accommodated in a modular arrangement, detachable gland plates, adequate size cable alley, Sign writing, Painting, Earthing,Numbering, Danger plate, including PVC insulated copper FRLSH wires of minimum1.5sq.mm(for metering)& 2.5sq.mm (protection)for CT's etc. complete with metering & protection as required as per specifications and drawing attached.				

Sl.No	Description of Items	Qty	Units	Rate	Amount
78.01	ALL Digital electronic MFM and KWH meter shall be provided with RS 485 port/RJ-45 communication port compatible for BMS & Three phase indicating lamps protected by 2 amps SP MCBs. All MCCB's shall be suitable for (Icu= Ics= 100% at 415/433Volts, --kA for 1 sec as specified in the item,.).Wiring with space heater, thermostat and control MCB's shall be provided for all vertical sections of main LT panel, All breakers shall be interlocked electricallay and mechanically . All incoming as well as outgoing feeders shall have pad locking facility, Suitable danger board shall be provided, All MCCB's shall be provided with front rotary handle and operating mechanism for door interlock with Pad locking of MCCB's handles in "OFF" Position, The Panel fabricator shall provide Al. Bus-bars link from Breakers wherever more than two nos. of cables are terminated in the breakers. Additional set of C.T.s, potential free contacts, connectors, contactors with wiring etc. are to be provided for BMS including space required for various transducers in Main Switch Board sections. Only transducers shall be supplied by BMS contractor. All hinged door shall be earthed through 2.5 sq mm tinned braided copper wire. All the panels shall be internal arc protection for minimum 0.3 sec. as per IEC and specifications.				
78.02	All Back access panel shall be housed with encapsulated Spark gap based class-1/type-1 SPD with in built fuse for each incomer at each Bus Section of 100kA 10/350mS as per IS/IEC 62305-3 LPL-I. All front operated panel/Sub panels shall be housed with Mov(Metal Oxide Varistor) based class-2/type-2 SPD with in built fuse for each incomer at each Bus Section of In 10kA & Irms 20kA 5/20mS as per IS/IEC 62305-3 LPL-I. Each Panel Shall be equipped with Automatic fire suppression system, having linear Pneumatic heat detection tube based with Novec 1230. The system shall be LPCB approved & coordination with Fire alarm system etc., suitable for the panel size accordance with specifications, NEC-2011, NBC ammended up to date. Antistatic rubber mat as per specification shal be provided along the full length of panel as per specification (Note: The contractor may select the next higher fault rating of MCCB if the specified one is not readily available)				

Sl.No	Description of Items	Qty	Units	Rate	Amount
79	UPS PANEL (For panel details Refer item no. 78)	1	Job	825000.00	825000.00
79.01	Incomers:				
79.02	i) 2 No. 400 Amps. 4P MCCB 50 KA, Icu=Ics with thermo magnetic based release having O/L ,S/C earth fault protection & necessary interlocking arrangement between two nos. incomers & one no. bus coupler and equipped with the following:				
79.03	a) 3 Nos. Phase indication LED lamps with 2 Amp back up MCB, breaker 'ON/OFF/TRIP' indicating light with 2A MCB.				
79.04	Digital Multifunction Meter, accuracy class 0.5s, with LED screen as per specs. with 3 Nos. cast resin current transformers of dual core CT's of suitable Amp. ratio, 15 VA Class 1.0 metering. ,protection MCBs as required accessories to complete the system.				
79.05	Bus couplers:				
79.06	i) 1 No.400 Amps. 4P MCCB 50 kA, Icu=Ics with Thermal Magnetic based release having O/L, S/C protection.				
79.07	Bus Bar :				
79.08	2 Sections of Electrolytic high conductivity Aluminium extensible three phase and neutral busbars rated at 500 amps , & auxiliary Bus Bars of suitable capacity insulated with heat shrinkable coloured PVC sleeves & suitable to withstand symmetrical fault level of 16 kA at 433 volts, i/c DMC/SMC bus bars supports at required intervals complete for cross section, size supports & their spacing etc.				
79.09	Outgoings:				
79.10	All MCCB (Ics=Icu) with O/L, S/C,E/F followings shall be applicable to each.				
79.11	All outgoing with MCCB for O/C, S/C,E/F protection with On, off trip indications of following capacity and rating, 50 KA (Ics=Icu=100%) with Set of Digital flush type calibrated Intelligent multifunction meters (with communication port) suitable rating class - 1.0 accuracy , showing V, A, KW with 3 Nos. cast resin current transformers of dual core CT's of suitable Amp. ratio, 5 VA Class 1.0 metering. , Spreader links and phase barrier, solid neutral link complete with wiring , connections etc.				
79.12	i) 3 Nos. Microprocessor based 400 Amp. 4P MCCB				
79.13	Necessary interlocking shall be successfully operational in all possible combinations.				
79.14	The Switchboard panel (wall mounted) shall be complete with all interconnections, risers, internal wiring, labels, control/circuit fuses etc. complete as required.				
80	CCR PANEL (For panel details Refer item no. 78)	1	Job	2350000.00	2350000.00
80.01	Incomers:				
80.02	i) 2 No. 400 Amps. 4P MCCB 50 KA, Icu=Ics with thermo magnetic based release having O/L ,S/C earth fault protection & necessary interlocking arrangement between two nos. incomers & one no. bus coupler and equipped with the following:				

Sl.No	Description of Items	Qty	Units	Rate	Amount
80.03	a) 3 Nos. Phase indication LED lamps with 2Amp back up MCB, breaker 'ON/OFF/TRIP' indicating light with 2A MCB				
80.04	Digital Multifunction Meter, accuracy class 0.5s, with LED screen as per specs. with 3 Nos. cast resin current transformers of dual core CT's of suitable Amp. ratio, 15 VA Class 1.0 metering. ,protection MCBs as required accessories to complete the system.				
80.05	Bus couplers:				
80.06	i) 1 No. 400 Amps. 4P MCCB 50 kA, Icu=Ics with Thermal Magnetic based release having O/L ,S/C protection.				
80.07	Bus Bar :				
80.08	2 Sections of Electrolytic high conductivity Aluminium extensible three phase and neutral busbars rated at 500 amps , & auxiliary Bus Bars of suitable capacity insulated with heat shrinkable coloured PVC sleeves & suitable to withstand symmetrical fault level of 16 kA at 433 volts, i/c DMC/SMC bus bars supports at required intervals complete for cross section, size supports & their spacing etc.				
80.09	Outgoings:				
80.10	All MCCB (Ics=Icu) with O/L, S/C,E/F followings shall be applicable to each.				
80.11	All outgoing with MCCB for O/C, S/C,E/F protection with On, off trip indications of following capacity and rating, 50/35 KA (Ics=Icu=100%) with Set of Digital flush type calibrated Intelligent multifunction meters (with communication port) suitable rating class - 1.0 accuracy , showing V, A, KW with 3 Nos. cast resin current transformers of dual core CT's of suitable Amp. ratio, 5 VA Class 1.0 metering. , Spreader links and phase barrier, solid neutral link complete with wiring , connections etc.				
80.12	i) 5 Nos. - Microprocessor based 100 Amp. 4P MCCB				
80.13	ii) 8 Nos. - Microprocessor based 63 Amp. 4P MCCB				
80.14	III) 5 Nos. - Thermal Magnetic 32 Amp. 2P MCCB				
80.15	iv) 12 Nos. - Thermal Magnetic 32 Amp. 2P MCCB				
80.16	Necessary interlocking shall be successfully operational in all possible combinations.				
80.17	The Switchboard panel (wall mounted) shall be complete with all interconnections, risers, internal wiring, labels, control/circuit fuses etc. complete as required.				
Total Rs					69265760.00

Discount offered after reverse Auction -- Rs 1900000.00

Total amount after reverse auction Discount - Rs 67365760.00

(Rs.Six Crores Seventy three Lacs Sixty Five Thousand Seven Hundred & Sixty Only)


 J. GM (E-E) - Project
 Imports & Exports of India,
 Ministry of Power, New Delhi
 Digitally signed by ANIL KUMAR TIWARI
 Date: 2020.06.24 12:52:26 IST
 Location: eProcurement System for Central PSUs