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आज़ादी का
अमृत महोत्सव

भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

संदर्भ सं.: एएआई/लेह/सं.म.प्र(अभि-सि)/टी.जी.यू/कार्यआदेश-01/2023-24/292-302
Ref No: - AAI/Leh/Jt.GM(E-C) /TGU/W.O-01/2023-24/292-302

तारीख. - 06.04.2023

Date: -06.04.2023

सेवा में,

मेसर्स मेट्रो ग्लास हाउस / M/s Metro Glass House

प्लॉट नंबर ए-7, सेक्टर 12 / Plot No. A-7, Sector 12

विपरीत पंजाब एंड सिंध बैंक / Opp. Punjab & Sindh bank

महाराष्ट्र स्कूल के पास / Near Maharashtra School

रोडपली, कलंबोली / Roadpali, Kalamboli,

नवी मुंबई / Navi Mumbai,

महाराष्ट्र / Maharashtra- 410218.

कार्य का नाम : लेह हवाई अड्डे पर टर्मिनल बिल्डिंग का निर्माण और संबंधित कार्य

[उप शीर्ष: न्यू टर्मिनल बिल्डिंग में स्ट्रक्चरल ग्लेज़िंग सिस्टम का प्रावधान]

Name of Work: **Construction of Terminal Building & associated works at Leh Airport**
[SH: Provision of structural glazing system in the New Terminal Building].

Reference: Tender ID: 2023_AAI_143755_1

संदर्भ : निविदा पहचान: 2023_AAI_143755_1

- 1- उपर्युक्त कार्य के लिए आपके द्वारा दी गई 7,35,72,400.00 रुपये (सात करोड़ पैंतीस लाख बहत्तर हजार चार सौ मात्र) [जी.एस.टी रहित] की मदद दर निविदा को अध्यक्ष, भारतीय विमानपत्तन प्राधिकरण की ओर से स्वीकृत की जाती है। यह राशि अनुमानित लागत 8,98,49,250.00 रुपये से 18.12% [अठारह दशमलव बारह प्रतिशत] कम 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. 7,35,72,400.00** (Rupees Seven Crores Thirty-Five Lacs Seventy-Two Thousand Four Hundred only) [excluding GST] which is 18.12% (Eighteen point Twelve percent) below the estimated cost put to the tender of Rs. 8,98,49,250.00.

- 2- संयुक्त महाप्रबंधक (अभि.-सिविल), भा.वि.प्रा., के.बी.आर हवाई अड्डा, लेह कार्य के प्रभारी होंगे। आप कृपया अपने प्राधिकृत एवं संविदा-करार पर हस्ताक्षर करने में सक्षम प्रतिनिधि को हस्ताक्षर एवं करार पूरा करने हेतु इस कार्यालय में इस पत्र के जारी होने के पंद्रह (15) दिनों के अंदर भेजे। संविदा करार आपके द्वारा उपलब्ध कराए गए 100/-रु. (सौ रुपये) के गैर-अदालती स्टाम्प पेपर पर संपादित किया जाएगा।

Joint General Manager (Engg. -Civil), Airports Authority of India, KBR Airport, Leh shall be the Engineer-in-charge of the work. You are requested to depute your accredited representative empowered to sign the contract agreement on behalf of you to attend this office within Fifteen (15) days after issue of this letter and complete the agreement. The contract agreement shall be executed on a non-judicial stamp paper of value of Rs. 100/- and the cost of the stamp paper shall be borne by you.

[Signature]



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- 3- आपकी निविदा के साथ प्राप्त **17,96,985.00 रुपये** (सत्रह लाख छियानवे हजार नौ सौ पचासी रुपये) की बयाना राशि को संविदा कागजात के पृष्ठ जीसीसी-16 पर दर्ज -1 ए के अनुसार प्रतिभूति जमा राशि में परिवर्तित कर दिया गया है। कृपया इस पत्र के जारी होने की तिथि से 10 दिनों के भीतर शेष प्रतिभूति जमा राशि **18,81,635.00 रुपये** (अठारह लाख इक्कासी हजार छह सौ पैंतीस रुपये) जमा करें अन्यथा संविदा कागजात के पृष्ठ जीसीसी-16 पर दर्ज -1 ए के अनुसार यह राशि आपके चालू बिलों से काट ली जाएगी।

Earnest Money amount of Rs. **17,96,985.00** (Rupees Seventeen Lacs Ninety-Six Thousand Nine Hundred Eighty-Five only) received along with your tender has been converted as part of security deposit, as per condition clause 1A at page GCC 16 of the contract document. Please deposit the balance amount of Rs. **18,81,635.00** (Rupees Eighteen Lacs Eighty-One Thousand Six Hundred Thirty-Five only) towards Security deposit **within 10 days** from the date of issuing of this letter, failing which, the same will be deducted from your running bills as per clause of contract 1 A, Page GCC-16 of the contract document.

- 4- आपसे अनुरोध है कि अनुबंध में अन्यत्र उल्लिखित अन्य जमाराशियों के अलावा निविदा राशि के 3% (तीन प्रतिशत) यानी 22,07,172/- रुपये (बाइस लाख सात हजार एक सौ बहतर रुपये मात्र) की अपरिवर्तनीय निष्पादन गारंटी किसी भी अनुसूचित बैंक से, लेकिन सहकारी या ग्रामीण बैंक से नहीं, अनुबंध समझौते के उचित निष्पादन के लिए प्रपत्र परिशिष्ट-XI (निविदा दस्तावेज का पृष्ठ जीसीसी-108) एवं पृष्ठ संख्या 10 पर उल्लिखित सामान्य नियमों और निर्देशों के खंड 14 (i) के अनुसार इस पत्र के जारी होने की तारीख से 30 दिनों के भीतर जमा करें।

You are requested to submit an irrevocable performance guarantee of 3% (Three percent) of the tendered amount i.e Rs. 22,07,172/- (Rupees Twenty Two Lakhs Seven Thousand One Hundred and Seventy Two only) in addition to other deposits mentioned elsewhere in the contract towards proper performance of the contract agreement from any scheduled Bank but not from co-operative or Gramin Bank in accordance with Appendix-XI (page GCC-108 of Tender Document) within 30 days from the date of issue of this letter as per clause 14(i) of GCC on page no. 10 of the General Rules & Directions.

- 5- आपसे अनुरोध है कि आप संविदा श्रम (नियमन व समापन) अधिनियम-1970 के प्रावधानों तथा संविदा श्रम (नियमन व समापन) केंद्रीय नियम, 1971 एवं केंद्र सरकार के तत्वसंबंधी न्यूनतम मजदूरी अधिनियम व नियमों का पालन करें।

You are requested to comply with the provisions of Contract Labour (Regulation & Abolition) Act. of 1970 and Contract Labour (Regulation & Abolition) Central Rules - 1971 & Minimum Wages Act., & rules thereof of Central Government.

- 6- आपको यह निर्देश दिया जाता है कि प्रबंधक (अभि.-सिविल), भारतीय विमानपत्तन प्राधिकरण, के.बी.आर हवाई अड्डा, लेह से शीघ्र संपर्क करें, जो आपको कार्य स्थल सौंपने की व्यवस्था करेंगे।

You are directed to contact the Manager (Engg-Civil), Airports Authority of India, KBR Airport, Leh immediately who will arrange to hand over the site to you.



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7- अनुबंध के संबंध में कोई और पत्राचार सामान्य रूप से प्रभारी अभियंता को संबोधित किया जाएगा।

Any further correspondence in connection with the contract shall normally be addressed to the Engineer –in-charge.

8- कृपया ये ध्यान रहे कि आपको यह कार्य करने के लिए **07 महीने** का समय प्रदान किया जाता है जो कार्य आदेश जारी करने की तिथि के **10 दिनों** के बाद से लागू माना जाएगा।

Please note that the time allowed for carrying out the work is **07 Months** as entered in the tender and shall be reckoned from the **10th day** after the date of issue of this letter.

9- काम निविदा एवं शेड्यूल- ए की शर्तों के अनुसार निष्पादित करें जो कि इस आदेश का अभिन्न हिस्सा होगा।

The work shall be executed as per the conditions of tender and schedule -A which will be the integral part of this order.

10-उपरोक्त के हिन्दी पाठ में कोई अन्तर या अनिश्चितता होने की स्थिति में अंग्रेज़ी पाठ मान्य होगा ।

In case of difference or ambiguity in Hindi and English version, the English version will prevail.

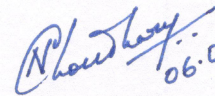
11-कृपया पत्र की पावती भेजें एवं साथ में संलग्न इस पत्र की प्रतिलिपि पर स्वीकारोक्ति के रूप में विधिवत हस्ताक्षर करके हमें वापस भेजें ।

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 । / Thanking You

अनुलग्नक / Enclosure:

1. अनुसूची-ए / Schedule-A


06.04.23

(एन.के.चौधरी)

(N.K.Choudhary)

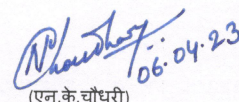
संयुक्त महाप्रबंधक (इंजी-सिविल)
Joint General Manager (Engg-Civil)
के.बी.आर हवाई अड्डा, लेह -194101
K.B.R Airport, Leh-194101

Schedule-A/ अनुसूची-ए

Name of Work : Construction of Terminal Building and associated works at Leh Airport [SH:Provision of structural glazing system in the New Terminal Building]					
Item no.	Description of Items	Unit	Quantity	Rate	Amount
1	Designing , fabricating, testing, protection, installing and fixing in position structural glazing system for linear as well as curvilinear portions of the building for all heights and all levels as per specifications including: (A) Structural analysis & design and preparation of shop drawings for the specified design loads conforming to IS 875 Part(III) (the system must pass the proof test at 1.5 times design wind pressure without any failure) including functional design of aluminium section for fixing glazing panels of various thickness, aluminium cleats, sleeves, & splice plates , gaskets, screws, toggles, nuts, bolts, clamps etc., weather silicon sealant , flashings, fire stop(barrier)cum smoke seal, microwave cured EPDM gasket, as per BS 4255 for water tightness, pressure equalisation and drainage and protection against fire hazard including : (B) Fabricating and supplying serrated M.S Hot dipped galvanised/ aluminium alloy brackets as per specifications, required size to accommodate three dimensional movement for achieving perfect verticality and fixing structural glazing system rigidly to the RCC/ MASONARY/ structural steel frame work of building structure using stainless steel anchor fastener/ bolts , nylon/inert polymeric material separator to prevent bimetallic contacts with nuts and washers etc. of Stainless Steel Grade-304 of required capacity and required numbers. (C) Providing and filling weather silicon sealant and necessary components such as double sided spacer tape, setting blocks and backer rod etc. (as required) as per approved grade , brand and manufacture, as per approved sealant design, all around the perimeter for holding glass. The weather sealant shall be non staining type capable of at least 50% expansion. (D) Providing and fixing flashings of 60-80microns powder coated solid aluminium sheet (wherever required) 2 mm or more thickness of sizes, shapes and profile as required as per site condition with 100mm thick Rockwool to seal the gap between the building structure and all its interface to make it water tight. (E) Provision of fire & smoke seal(wherever applicable) as per the specification. This item includes cost of all the inputs of designing, labour for fabricating & installation of aluminium grid, installation of glazed unit (TGU), T&P, Scaffolding, and other incidental charges i/c wastage etc., enabling temporary structures and services, cranes, cradles etc. as described above, and as specified. The item includes the cost of getting all the structures and functional design i/c shop drawings checked by a structural designer, dully vetted by IIT/NIT and approved by E-I-C. The item also includes the cost of all mock ups at site, cost of all samples of individual components for testing in an approved laboratory, field tests on all assembled working structural glazing as specified, cleaning and protection till the handing over of the building for occupation. In the end the contractor shall provide a water tight structural glazing (TGU) having all the performance characteristics etc. all complete as required as per architectural drawings, as per item description i/c specification, as per approved shop drawing and as directed by E-I-C Note:- 1. The cost of supplying extruded aluminium frames, thermal break system, TGU, will be paid separately under relevant items. However for the purpose of payment only the actual area of structural glazing (i/c width of grooves) on the external face shall be measured in Sqm up to two decimal places. Note:2. The following performance tests are to be conducted on structural glazing system from the certified laboratories accredited by NABL (National Accreditation Board for Testing and Calibration Laboratories), Department of Science & Technologies, India. Cost of performance testing shall be reimbursed separately on actual basis on submission of receipt/vouchers from laboratory. However, cost of all samples for testing and arrangements made for sending the samples to the approved laboratory shall be in the scope of contractor. Following Performance Test of Structural glazing system to be conducted: (a) Performance Laboratory Test for Air Leakage Test (-300pa to + 300pa) as per ASTM E-283-04 testing method for a leakage limit of 1.08 cum per hour per sqm. (b) Static Water Penetration Test at minimum 750pa as per ASTM E- 331-09 testing method for a range up to 2000 ml with no leakage. (c) Dynamic Water Penetration at minimum 750pa as per AAMA 501.01- 05 testing method for a range up to 2000 ml with no leakage (d) Structural Performance Deflection and deformation by static air pressure test (1.5 times design wind pressure without any failure) as per ASTM E-330-10 testing method for a range up to 50 mm (e) Seismic Movement Test (up to + or -10 mm) as per AAMA 501.4-09 testing method for Qualitative test. (f) Onsite Test as per AAMA 501.2 for water leakage for a pressure range 50 kpa to 240 kpa (35psi) up to 2000 ml. (g) Test for achieving overall U-value less than 1.3 W/sqm-K of Structural Glazing System sample.	Sqm	2900.00	3,310.00	95,99,000.00

Signature

2	Designing, Providing, assembling and supplying vision glass panels (IGUs) comprising of hermetically-sealed 57.52 mm thick Laminated T.G.U. (57.52mm thick Triple Glazed Unit comprising of 11.52mm laminated outside layer of glass (5mm fully tempered glass+1.52mm PVB+ 5mm fully tempered glass) +16mm Argon+ 6mm fully tempered low e glass with coating on the outside surface + 16mm Argon + 8mm thick fully tempered inside glass or as per specification) of size and shape as required and specified, of approved colour and shade including primary seal and secondary seal (structural silicone sealant) etc. all complete for the required performances, as per the Architectural drawings, as per the approved shop drawings, as specified and as directed by the Engineer-in-Charge. The TGUs shall be assembled in the factory/ workshop of the approved glass processor. (Payment for fixing of TGU Panels in the curtain glazing is included in cost of relevant item) (i)Glass properties shall be: • U Value <1.15 W/m²-K • SHGC >0.48 • VLT > 58% • Internal Reflection value <18% • External Reflection value <18% All the tempered glass shall be heat soaked and record of heat soaking shall be submitted .Payment of heat soaking shall be made separately. For payment, only the actual area of glass on external face of the glass panels (excluding the areas of the grooves and weather silicone sealant) provided and fixed in position, shall be measured in sqm. Performance test of TGU for ensuring U-Value less than 1.15 W/m²-K and tests for other parameters mentioned above shall be done from approved laboratory by the agency at his own cost.	Sqm	2900.00	9,100.00	2,63,90,000.00
3	Supplying Structural Glazing system (excluding TGU) including aluminium extruded sections such as Transom, Transom connector, mullion, mullion sleeve, glazing insert, toggle cleat, pressure plate, pressure cap, aluminium bracket etc.(As per EN AW 6060 T66/6063 T6 conforming to EN 573 Part-3), including imported thermal break profile (isolator) of extruded rigid PVC/Poly amide material to be fixed on horizontal and verticals, having thermal transmittance (U Value) between 0.10-0.22 W/m².K,complying the performance parameters, as per specification of approved colour and shade, all complete as per the Architectural drawings, as per the approved shop drawings, as per specification and as directed by the Engineer-in-Charge. The overall façade system shall provide a Composite U value less than 1.3W/sqm-K. The structural glazing system shall be designed in such a way that stability of TGU shall be ensured for all height and applicable sizes. Minimum thicknesses of the Aluminium Extrusions shall be as per specification. Minimum weight of aluminium profile(mullion,transom and cover cap combined) shall not be less than 8.44 kg/sqm. The cost includes supplying of complete structural glazing system (excluding supplying and fixing of TGU), but including T-bracket with spring, ST-screw, Torx screw self-drilling, expansion profile, glass support, safety ring, piece dilatation, piece drainage, end gasket etc. Nothing extra shall be paid over and above to complete the structural glazing system	Sqm	2900.00	9,896.00	2,86,98,400.00
4	Extra for open-able side/ top hung vision glass panels [TGUs having total thickness of 57.52mm comprising of 11.52mm laminated outside layer of glass (5mm fully tempered glass + 1.52mm PVB + 5mm fully tempered glass) + 16mm argon + 6mm fully tempered low e glass with coating on outside surface + 16mm argon + 8mm fully tempered inside glass or as specified in technical specification] including providing and supplying at site all accessories and hardware for the openable panels as specified and of the approved make such as heavy duty stainless steel friction hinges, minimum 4 -point cremone locking sets with stainless steel plates, handles, buffers etc. including necessary stainless steel screws/ fasteners, nuts, bolts, washers etc. all complete as per the Architectural drawings, as per the approved shop drawings, as specified and as directed by the Engineer- in-Charge. The height and width of openable glazing panel unit (the area of glass unit outside the snap beading shall only be measured) as fixed in place shall be measured correct to 1cm and area calculated in sqm correct to second place of decimal shall be taken for payment.	Sqm	300.00	12,700.00	38,10,000.00
5	Extra for heat soaking of all toughened glass of various thickness as mentioned in approved drawing to be used in Triple Glazed Unit (TGU) complete as per direction of Engineer-in-Charge. (Evidence of heat soaking records to be submitted by the supplier). Measurement shall be made in sqm considering thickness of all glasses placed in TGU system of 57.52mm.	Sqm	2900.00	1,750.00	50,75,000.00
Total					7,35,72,400.00


(एन.के.चौधरी)

(N.K.Choudhary)

संयुक्त महाप्रबंधक (इंजी-सिविल)
Joint General Manager (Engg-Civil)
के.बी.आर हवाई अड्डा,लेह -194101
K.B.R Airport, Leh-194101