



भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

सं /Ref. No.: AAC/EMD-IV/Replacment_IRP//2023-24/ 768

दिनांक / Dated: 26/07/2023

To
M/s T K MAZUMDER
116, Sarat Bose Lane,
P.O. Rajbari Colony,
Kolkata- 700081

Email: sandhya_mazumder@yahoo.com

Mob : 9830525903
/9830552393
Office: 2514-5168

Name of work : "Replacement of IRP plants in Metro residential colony and other allied works. at NSCBI Airport Kolkata ."

Ref :-

1. Your Tender (Technical Bid) opened on dated: 26/05/2023
2. Your financial bid opened on dated: 21/06/2023

Dear Sir(s),

1) ऊपर उल्लिखित कार्य के लिए आपका टेंडर (Tender Id.: 2023_AAI_152875_1), अध्यक्ष, भारतीय विमानपत्तन प्राधिकरण की ओर से आपके द्वारा बताये गये मद मूल्यों पर टोटल ई-टेंडर राशि रु. 79,05,900/- (मात्र उनहत्तर लाख पांच हजार नौ सौ रुपये) (जीएसटी को छोड़कर) के लिए स्वीकृत किया जाता है, जो टेंडर की न्यायोचित राशि रु.88,53,687/- से 10.70 % कम है।

1) Your e-tender (Tender Id.: 2023_AAI_152875_1) for the work mentioned above is hereby accepted on behalf of Chairman, Airports Authority of India at the item rates quoted by you totalling to Rs.79,05,900/- (Excluding GST) (Rupees Seventy-Nine Lakhs Five Thousand Nine Hundred Only) which is 10.70 % below the justified cost of Rs.88,53,687/- (Excluding GST).

2) संयुक्त महाप्रबंधक इंजीनियरिंग (विद्युत), एएआई, नेताजी सुभाष चंद्र बोस अंतरराष्ट्रीय हवाई अड्डा कार्य के अभियंता प्रभारी होंगे। आपसे अनुरोध है कि आप संयुक्त महाप्रबंधक इंजीनियरिंग, (विद्युत), एएआई, परिचालनात्मक कार्यालय, एनएससीबीआई हवाई अड्डा, कोलकाता में इस पत्र के जारी होने के दस दिन के अंदर अनुबंध के समझौते पर हस्ताक्षर करने के लिए उपस्थित हो तथा करारनामे को पूरा करें। ठेके का करारनामा 100/-रुपए के गैर-न्यायिक स्टैंप पेपर पर (केवल एकसौ रुपये) के लिए निष्पादित किया जाएगा और स्टाम्प पेपर की लागत आपके द्वारा वहन की जाएगी।

2)Jt. General Manager (Engg. – Elect.), AAI, NSCBI Airport, Kolkata shall be the Engineer in charge of the work. You are requested to attend the office of Jt. General Manager (Engg. – Elect.), AAI, NSCBI Airport, Kolkata within 10 days from the date of issue of this award letter to sign and complete the contract agreement. The contract agreement shall be executed on non-judicial stamp paper of Rs.100.00 (Rupees one hundred only) and cost of the stamp paper shall be borne by you.

3) अग्रिम राशि रुपए रु. 1,77,074/- जो आपके टेंडर के साथ प्राप्त की गई थी संविदा शर्त A 1के अनुसार जमानत राशि में बदल दी जाएगी कृपया रुपए रु. 6,13,516/- (मात्र छह लाख तेरह हजार पांच सौ सोलह

रुपये) की जमानत राशि NIA के क्लॉज A 1 के अनुसार इस पत्र के जारी होने के दसवें दिन तक जमा कराये, अन्यथा निविदा दस्तावेज के अनुसार उक्त राशि की कटौती आपके रनिंग बिल से की जाएगी।

3) The Earnest money amounting to Rs.1,77,074/- received along with your tender will be treated and converted as part of security deposit as per clause no. 1A of contract documents. Please deposit **Rs. 6,13,516/- (Rupees Six Lakhs Thirteen Thousand Five Hundred and Sixteen only)** towards security deposit within 10 days from the date of issue of this letter, failing which, the same will be deducted from running bills as per condition of the contract document.

4) आपसे निवेदन है की आप केन्द्रीय और राज्य सरकारों के नियमों 1970 के अधिनियम अनुबंध श्रम नियम तथा 1971 के केन्द्रीय नियम (नियमन तथा उनमुलन), बाल श्रम (निषेध और नियम) 1986 के अधिनियम, निर्माण श्रमिकों (रोजगार के नियम और सेवा शर्तों) 1996 के अधिनियम, 1996 के अधिनियम भवन और अन्य निर्माण श्रमिक कल्याणकारी उपकर जैसा की निविदा के खण्ड में निर्दिष्ट है एवं केंद्र तथा राज्य सरकार के नियमों के प्रावधानों का अनुपालन करें।

4) You are requested to comply with the provision of Contract Labour (Regulation and Abolition) Act 1970 and Contract Labour (Regulation & Abolition) Central rules 1971, Child Labour (Prohibition & Regulation) Act 1986, Construction Workers (Regulation of Employment and Condition of Service) Act 1996, Building and other construction Workers welfare cess Act 1996 as specified in Clause of tender and rules of Central and State Government.

5) आपको निर्देश दिया जाता है की आप सहायक महा प्रबंधक इंजीनियरिंग (विद्युत) एवं प्रबंधक इंजीनियरिंग (विद्युत), नेताजी सुभाष चंद्र बोस अंतरराष्ट्रीय हवाई अड्डा कोलकता - 52 से संपर्क करें जो आपको साइट सौपने की व्यवस्था करेंगे।

5) You are also directed to contact Asst. General Manager (Engg.-Elect.) & Mgr. (Engg-Elect) AAI, NSCBI Airport, Kolkata - 52 who will arrange to hand over the site to you.

6) कृपया ध्यान दें कि कार्य को पूरा करने के लिए अनुमत समय 06 (छह) महीने होगा जिसकी गणना इस पुरस्कार पत्र के जारी होने की तारीख से 10 दिनों से की जाएगी।

6) Please note that the time allowed for carrying out the work shall be 06 (Six) Months which shall be reckoned from 10 days from the date of issue of this award letter.

7) काम की दोष दायित्व अवधि सफलता पूर्वक कार्य समाप्ति के बारह महीने बाद की होगी।

7) The defect liability period of the work shall be **Twelve months** from the date of successful completion of the work.

8) इस ठेके के संबंध में कोई और पत्राचार आमतौर पर अभियंता प्रभारी को संबोधित किया जाना चाहिए।

8) Any further correspondence in connection with the contract should normally be addressed to the Engineer-In-Charge.

9) कृपया पावती भेजें तथा इस पत्र की डुप्लिकेट प्रतिलिपि स्वीकृति के एक टोकन के रूप में इस पत्र में हस्ताक्षर करने के बाद इसके साथ संग्राम करें।

9) 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.

10) अन्य सभी नियम और शर्तें एनआईटी के अनुसार होंगी।

10) All other terms and conditions shall be as per NIT.

11) हिंदी और अंग्रेजी भाषा की व्याख्या में किसी भी विसंगति के मामले में, अंग्रेजी भाषा मान्य होगी।

11) In case of any discrepancy in interpretation of Hindi & English Language, the English language will prevail.

Thanking you,

भवदीय,

सि. पा. ल. / 26 ⁷/₂₃

संयुक्त महाप्रबंधक (इंजी-वि.) I
भा वि प्रा, एन°एस°सी°बी°आई हवाई अड्डा कोलकाता
के लिए और अध्यक्ष,
भारतीय विमानपतन प्राधिकरण के तरफ से I

Encl: Schedule of Work

N.O.O. copy forwarded for kind information to:

आन्तरिक :-

- 1 विमानपतन निदेशक के निजी सचिव, भा वि प्रा, एन°एस°सी°बी°आई हवाई अड्डा कोलकाता I
- 2 महाप्रबंधक (अभि - वि) भा वि प्रा, एन°एस°सी°बी°आई हवाई अड्डा कोलकाता I
- 3 महाप्रबंधक (वित) भा वि प्रा, एन°एस°सी°बी°आई हवाई अड्डा कोलकाता I
- 4 सहायक महाप्रबंधक (अभि - वि) - IV, भा वि प्रा, एन°एस°सी°बी°आई हवाई अड्डा कोलकाता I
- 5 प्रबंधक (अभि - वि), श्री एस के गौर भा वि प्रा, एन°एस°सी°बी°आई हवाई अड्डा कोलकाता I
- 6 अनुबन्ध फ़ाइल

N.O.O. copy forwarded for kind information to:

वाह्य :-

- 1) Income Tax Commissioner, P-7, Chowringhee Square, Kol-69.
- 2) Regional Labour Commissioner, 234/4, A.J.C. Bose Road, Kol-20.
- 3) Dy. Commissioner, Commercial Taxes, Salt Lake Charge, DF Block, Sector - 1, Salt Lake City, Kolkata-91.
- 4) Regional Provident Fund Commissioner, DK Block, Sector - 2, Salt Lake City, Kolkata-91
- 5) Chief Commissioner of Central Excise, Service Tax Division-II, Central Excise Bhawan, 2nd Floor, 180, Shantipalli, Raj Danga Main Road, Kol-107.

भवदीय,

सि. पा. ल. / 26 ⁷/₂₃

संयुक्त महाप्रबंधक (इंजी-वि.) I
भा वि प्रा, एन°एस°सी°बी°आई हवाई अड्डा कोलकाता
के लिए और अध्यक्ष,
भारतीय विमानपतन प्राधिकरण के तरफ से I

AGM/Cont

उपरोक्त की जानकारी को ध्यान में रखते हुए, प्रमाणित करने के लिए निम्नलिखित जानकारी प्रदान की जाती है।

1. The information is true and correct as per the records maintained by the concerned authorities.

2. आपसे निवेदन है कि आप संबंधित और राज्य सरकारों के नियमों 1973 के अधिनियम अनुसार यह जानकारी 1973 के केंद्रीय नियम अनुसार तब तक उपलब्ध रहेगी जब तक कि आप और निम्नलिखित जानकारी के बिना किसी (संस्था) के बिना ही यह जानकारी 1973 के अधिनियम के तहत उपलब्ध नहीं होगी।

1-25/4/74

3. आपसे निवेदन है कि आप संबंधित और राज्य सरकारों के नियमों 1973 के अधिनियम अनुसार यह जानकारी 1973 के केंद्रीय नियम अनुसार तब तक उपलब्ध रहेगी जब तक कि आप और निम्नलिखित जानकारी के बिना किसी (संस्था) के बिना ही यह जानकारी 1973 के अधिनियम के तहत उपलब्ध नहीं होगी।

BLANK

AGM/Cont

SCHEDULE WORK

Item of Work: Replacement of IRP plants in Metro residential colony and other allied works. at NSCBI Airport Kolkata .

Sl. No.	Description of items	Qty.	Unit	Rate in Rs. (Excluding GST)	Amount in Rs. (Excluding GST)
1	Supply, installation, testing and commissioning of down flow MULTIGRADE FILTER having capacity 45000 LPH consisting vertical cylindrical mild steel pressure vessel with dished end, having suitable size of treated water output capacity , Vertical type one set of 100 mm dia nominal bore frontal mild steel pipe work for inlet, outlet, back wash and rinse line and 5 No butter fly valve having hand lever type complete all as specified and directed.	2.00	Jobs	5,60,000.00	11,20,000.00
	Note: - (i) The pressure vessel shall be made of medium Grade MS Sheet 5 mm thick				
	(ii) Dished ends shall be machine made of medium Grade MS Sheet 6 mm thick				
	(iii) The filter plant shall ensure even distribution across the surface area of the filter bed, header, lateral system & bottom collecting system.				
	iv) The plant shall have Air release arrangement with 2 No pressure gauge to monitor head loss across the filter and sampling cocks on inlet and outlet ends. The filter plant shall have full charge of filter media as per manufacturer's design				
	(v) Depth of filter media shall 915 mm and total media quantity shall 3150 kgs (Gravels, Pebbels, Silex, Core Silex & Sand).				
	(vi) The filter have man hole, hand hole and supporting legs.				
	(vii) The job shall include necessary surface dressing, PCC/RCC foundation as required complete all as specified & as directed by manufacturer & the same duly approved by officer.				
	(viii) The vessel shall be painted internally with 2 coats of anticorrosive and nontoxic black bituminous paint (compatible with drinking water) and external surface shall be painted with 2 coats of Synthetic Enamel paint over a coat of red oxide primer				
	(ix) The plant shall be designed for a flow of 45000 LPH				
	(x) The MULTIGRADE FILTER shall have first fill of filter as per manufacturer's instruction.				
	(xi) The TURBIDITY after treatment from should be ≤ 1 PPM.				
	(xii) The backwash frequency shall be every 12 hours (twice a day) for continuous operating unit. If unit is operated intermittently, the total operating time in service cycles shall be limited to 5-6 hours before next back wash & back wash time 15-20 minutes.				

[Signature]

[Signature]
AGM/COM

Sl. No.	Description of items	Qty.	Unit	Rate in Rs. (Excluding GST)	Amount in Rs. (Excluding GST)
2	Supply, installation, testing and commissioning of down flow IRON REMOVAL FILTER having capacity 45000 LPH consisting vertical cylindrical mild steel pressure vessel with dished end, having minimum size of 2000 mm dia X 1875mm height Vertical type one set of 150 mm dia nominal bore frontal mild steel pipe work for inlet, outlet, back wash and rinse line and 5 No butter fly valve having hand lever type complete all as specified and directed.	2.00	Jobs	19,00,000.00	38,00,000.00
	IRON REMOVAL RESIN SPECIFICATION:				
	a) Appearance: Black, Moist spherical beads.				
	b) Particle Size: 0.3 to 1.2mm				
	> 1.2 mm: 5.0% maximum				
	< 0.3 mm: 1.0% maximum				
	c) Effective Size: 0.45 to 0.55 mm				
	d) Uniformity co-efficient: 1.7, maximum				
	e) Moisture Content: 46-52%				
	Note: - (i) The pressure vessel shall be made of medium Grade MS Sheet 6 mm thick				
	(ii) Dished ends shall be machine made of medium Grade MS Sheet 6 mm thick				
	(iii) The filter plant shall ensure even distribution across the surface area of the filter bed, header, lateral system & bottom collecting system.				
	(iv) The plant shall have Air release arrangement with 2 No pressure gauge to monitor head loss across the filter and sampling cocks on inlet and outlet ends. The filter plant shall have full charge of filter media as per manufacturer's design				
	(v) Depth of filter media shall 750 mm and total RESIN quantity shall 2355 Ltr (Iron Specific Resin).				
	(vi) The filter have man hole, hand hole and supporting legs.				
	(vii) The job shall include necessary surface dressing, PCC/RCC foundation as required complete all as specified & as directed by manufacturer & the same duly approved by officer.				
	(viii) The vessel shall be painted internally with 2 coats of anticorrosive and non toxic black bituminous paint (compatible with drinking water) and external surface shall be painted with 2 coats of Synthetic Enamel paint over a coat of red oxide primer				
	(ix) The plant shall be designed for a flow of 45000 LPH				
	(x) The IRON REMOVAL Filter shall have first fill of filter as per manufacturer's instruction.				
	(xi) The IRON after treatment from should be <0.03 PPM.				

ACM/C

Sl. No.	Description of items	Qty.	Unit	Rate in Rs. (Excluding GST)	Amount in Rs. (Excluding GST)
	(xii) The backwash frequency shall be every 12 hours (twice a day) for continuous operating unit. If unit is operated intermittently, the total operating time in service cycles shall be limited to 5-6 hours before next back wash & back wash time 15-20 minutes.				
	Supply, installation, testing and commissioning of down flow SOFTENER FILTER having capacity 45000 LPH consisting vertical cylindrical mild steel pressure vessel with dished end, having minimum size of 1800 mm dia X 2500 mm height Vertical type one set of 100 mm dia nominal bore frontal mild steel pipe work for inlet, outlet, back wash and rinse line and 5 No butter fly valve having hand lever type complete all as specified and directed. Regeneration Tank 1600mm X 1250mm HDPE.	2.00	Jobs	9,00,000.00	18,00,000.00
	Note: - (i) The pressure vessel shall be made of medium Grade MS Sheet 5 mm thick				
	(ii) Dished ends shall be machine made of medium Grade MS Sheet 6 mm thick				
	(iii) The filter plant shall ensure even distribution across the surface area of the filter bed, header, lateral system & bottom collecting system.				
	(iv) The plant shall have Air release arrangement with 2 No pressure gauge to monitor head loss across the filter and sampling cocks on inlet and outlet ends. The filter plant shall have full charge of filter media as per manufacturer's design				
	(v) Resin media quantity shall 3400 ltrs (225 NA RESIN).				
	(vi) The filter have man hole, hand hole and supporting legs.				
	(vii) The job shall include necessary surface dressing, PCC/RCC foundation as required complete all as specified & as directed by manufacturer & the same duly approved by officer.				
	(viii) The vessel shall be painted internally with 2 coats of anticorrosive and non toxic black bituminous paint (compatible with drinking water) and external surface shall be painted with 2 coats of Synthetic Enamel paint over a coat of red oxide primer				
	(ix) The plant shall be designed for a flow of 45000 LPH				
	(x) The Multigrade Filter shall have first fill of filter as per manufacturer's instruction.				
	(xi) The HARDNESS after treatment from should be <=100 PPM.				
	(xii) The output between regeneration shall be every 10 hours (once a day) for continuous operating unit.	1.00	Jobs	90,000.00	90,000.00
4	Supply, installation, testing and commissioning of on line automatic electronic sodium hypo dosing unit with automatically operated dosing pump etc., The unit shall comprise of the following: One no. single moulded FRP cylindrical type chemical solution tank of 100 litres capacity having detachable lids with a moulded inserts for mounting of pumps and stirrer.				
a	One on. Electronic diaphragm type positive displacement for chemical dosing with plastic head. The electronic pump shall be operated on 220V single phase supply and shall be mounted directly on the tank top.				
b					

[Signature]

[Signature]
AGM/Cont

Sl. No.	Description of items	Qty.	Unit	Rate in Rs. (Excluding GST)	Amount in Rs. (Excluding GST)
	Complete set of pipes, valves and fittings, foot valve magnetic float switch to trip the dosing pump at low level of chemical in the tank.				
c					
d	The free chlorine content in the filtered water shall not be less than 0.5 PPM.				
e	Shall consists of one no. 200 L PVC/ HDPE/ LDPE tank with one no. PP, diaphragm typr pump, with high speed stirrer shall be provided with a tubular level indicator.				
	The pump shall be suitable for the following requirements:				
f	Min. Actuating Pressure - 0.3 kg/sq cm				
g	Max. Working Pressure - 0.5 kg/sq cm				
h	Max. Temperature - 50 C				
i	Dosing flow range- 11 lph				
j	Head - 5 - 10 mtr				
5	Supply, Installation, Testing and Commissioning of 15 HP horizontal split cassing centrifugal pump of suitable stage and energy efficient motor set for water delivery . The pump shall be capable to discharge 45000 LPH with a minimum head of 40 Meter , pump operating speed shall not be more than 1450 rpm. The complete set shall be mounted on a heavy duty common base frame including coupling gaurd, foundation bolt , AVM pad as required and suitable CC foundation etc.with proper end termination etc. complete as required.	4	Job	150000.00	6,00,000.00
6	Supply of 15 HP horizontal split cassing centrifugal pump of suitable stage and energy efficient motor set for water delivery . The pump shall be capable to discharge 45000 LPH with a minimum head of 40 Meter , pump operating speed shall not be more than 1450 rpm with all accessories such as heavy duty common base frame , coupling gaurd, foundation bolt , AVM pad etc. complete as required.	1	Each	148000.00	1,48,000.00
7	Dismentalling of existing 2 Nos 10000GPH IRP units with all connected E & M installation including shifting of the same to AA1 store as per instruction of Engg-in- Charge etc. complete as required.	1	Job	35000.00	35,000.00
8	Supply, erection, testing and commissioning of GI heavy duty pipe conforming to IS 1239 i/c fixing the pipe with clamps, from floor/ceiling supports and fitting/acesories like tees, flanges, tapers, bends, bolts, nuts, fasteners, gaskets,supports and painting with two or more coats of synthetic enamel paint of required shade complete as required. (Discharge pipe/Suction)				
a)	100mm Dia	30	Meter	3200.00	96,000.00
9	Supplying, fixing, testing and commissioning of 100 mm Dia BUTTERFLY VALVE (MANUAL) with C I body SS disc nitrile sheet & O - ring & PN 16 pressure rating with all accessories for water supply etc. complete as required.	4	Each	4000.00	16,000.00
10	Supplying, fixing, testing and commissioning of 100 mm Dia NON - RETURN VALVE with dual plate of C I body SS plates vulcanized NBR seal flanged end & PN 16 pressure rating with all accessories for water supply etc. complete as required.	4	Each	3500.00	14,000.00

-210-

[Handwritten signatures and initials]

Sl. No.	Description of items	Qty.	Unit	Rate in Rs. (Excluding GST)	Amount in Rs. (Excluding GST)
11	Supplying, fixing, testing and commissioning of 100 mm dia. dial type pressure gauges for water supply as per specifications etc. complete as required	4	Each	900.00	3,600.00
12	Providing and fixing 100 mm dia Gun metal foot valve with wire mesh (Pump suction line inside underground tank) with all accessories etc. complete as required.	4	Each	2525.00	10,100.00
13	Supply 1.1 KV, Power Cable with Stranded compact Sector shaped Aluminium Conductor, XLPE Insulated, Colour Coded, Cores Laid Up, Thermoplastic tape Inner Sheathed, Single layer of Galvanized Flat Steel Strip Armoured and overall FRLS PVC Type (ST-2) Outer Sheathed conforming to IS: 7098 (Part-1) - 1988 as amended up to date				
a)	3.5 C x 50 Sqmm	250	Meter	270.00	67,500.00
14	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.				
a)	3 1/2 X 50 sq. mm (35mm)	8	EA	350.00	2,800.00
15	Earthing with GI earth pipe 4.5 mtr Long, 40mm dia i/c all accessories and providing masonry enclosure with cover plate, having locking arrangement and watering pipe etc. with charcoal/coke and salt as required.	4	EA	5000.00	20,000.00
16	Providing and fixing 25 mm X 5 mm G.I. strip in 40 mm dia G.I. pipe from earth electrode including connection with G.I. nut, bolt, spring, washer excavation and re-filling etc. as required.	30	Meter	160.00	4,800.00
17	Providing & fixing 25mm X 5mm GI strip on surface or in recess for connections etc. as required.	40	Meter	135.00	5,400.00
18	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	20	Meter	35.00	700.00
19	Providing, laying and fixing following 80mm dia G.I. pipe (medium class) in ground complete with G.I. fittings including trenching and re-filling as per site requirement etc as required	20	Meter	900.00	18,000.00
20	Supply of permanently lubricated HDPE (Higher density polyethylene) duct of 160 mm outer dia, black colour along with necessary connectors/ couplers/ adapters etc. conforming IS 4984-16 with latest amendments.	100	Meter	450.00	45,000.00
21	Laying of following size of permanently lubricated HDPE (High Density polyethylene) pipe along with its necessary accessories like coupler, end plugs etc. below the ground (i/c. Road crossing, Cement concrete Apron Area) at a depth of 1.6 m to 6 m through horizontal directional drilling as per site as required (size upto 160 mm).	100	Meter	90.00	9,000.00
Total Amount Rs.				7905900.00	
Say Rs.				7905900.00	

AGM/COH

*For Juvd
MGR (E-C)*

*Arum (E-C)
26/07/23*

*Qaf 126 7/23
JCM (E-C)*

12111