

Amendment -II

Subject: Supply, Installation, Testing & Commissioning of Medical Gas Manifold System for All India Institute of Medical Sciences (AIIMS), Raebareli

IFB No : HSCC/SES/MGMS/AIIMS/Raebareli/2020 Date :15.01.2020

This has reference to above IFB.

The following Amendment may be noted which shall be treated as part of the tender document and to be submitted duly signed & stamp along with tender.

Sr. No.	Bidders' Queries	Reply
1.	<p>Bill of Quantity</p> <p>Item No.3</p> <p>Medical Air Plant (Package Unit) including electrical control panel: Supply, Installation, testing and commissioning medical air plant having a minimum capacity of 6000-7000LPM with necessary standby as per specification.</p> <p>To be amended as:</p> <p>Medical Air Plant (Package Unit) including electrical control panel: Supply, Installation, testing and commissioning medical air plant having a minimum capacity of 5000- 5500 LPM and 1000 - 1500 LPM or Total Plant Capacity should be minimum 6500 LPM</p> <p>The Plant Capacities mentioned are fixed type. Kindly revise the same. Kindly also mention total plant capacity (working + standby) should be minimum 6500 LPM</p>	<p>Medical Air Plant (Package Unit) including electrical control panel: Supply, Installation, testing and commissioning medical air plant having a minimum capacity of 5000- 5500 LPM and 1000 - 1500 LPM as standby or Total Plant Capacity should be minimum 6500 LPM or as per standard mentioned in the tendered specification.</p>
2.	<p>The Air Receiver shall be at least 50%(±5%) of primary plant capacity or should be as per standards as mentioned in the tendered specifications</p> <p>To be amended as:</p> <p>The Air Receiver shall be at least 50%(±5%) of primary plant capacity</p>	<p>Tender terms and conditions prevail</p>
3.	<p>Bill of Quantity</p> <p>Item No.4</p> <p>Medical Vacuum Plant (Package unit): Supply, Installation, testing and commissioning of Rotary Vane type medical vacuum plant having a minimum system</p>	<p>Medical Vacuum Plant (Package unit): Supply, Installation, testing and commissioning of Rotary Vane type medical vacuum plant having a minimum system capacity of 6500 -7000 LPM as</p>

	<p>capacity of 7000-8000 LPM as primary and 7000-8000 LPM as standby and as per specification</p> <p>To be amended as:</p> <p>Medical Vacuum Plant (Package unit): Supply, Installation, testing and commissioning of Rotary Vane type medical vacuum plant having a minimum system capacity of 6500 -7000 LPM as primary and 6500-7000 LPM or Total Plant Capacity should be minimum 12,500 LPM.</p> <p>The Plant Capacities mentioned are fixed type. Kindly revise the same. Kindly also mention total plant capacity (working + standby) should be minimum 12,500 LPM</p>	<p>primary and 6500-7000 LPM as standby or Total Plant Capacity should be minimum 12,500 LPM or as per standard mentioned in the tendered specification.</p>
4.	<p>Vacuum reservoir shall have total volume of at least 100% of Primary plant output ($\pm 5\%$).</p> <p>To be amended as:</p> <p>Vacuum Reservoir shall have total volume of at least 4000 ltrs or above</p>	<p>Vacuum Reservoir shall have total volume of at least 4000 ltrs or above or as per standard mentioned in the tendered specification.</p>
5.	<p>CO2 Manifold 4 + 4 Primary & 2 + 2 Standby cylinders with Automatic Control Panel as per specs.</p> <p>To be amended as:</p> <p>CO2 Manifold 4 + 4 Primary & 2 + 2 Standby with Automatic Control Panel as per specs.</p>	<p>CO2 Manifold 4 + 4 Primary & 2 + 2 Standby with Automatic Control Panel as per specs.</p>
6.	<p>Area Valve Service Unit with valves</p> <p>To be amended as:</p> <p>Area Valve Service Unit without valves.</p> <p>Since the quantities of valves mentioned are on higher side in item Sr.13 i.e Line Isolation Valves of tender BOQ and AVSU required are to be provided with pre-fitted ball valves, you are requested to kindly correct item description and mention "Area Valve Service Unit (Without valves)".</p>	<p>Area Valve Service Unit (Without valves).</p>
7.	<p>Bidder should provide a raised Loading/Unloading Platform of suitable sized adjacent to manifold room, so that cylinder can be loaded & unloaded easily from the lorry/vehicle.</p> <p>To be amended as:</p> <p>You are requested to either mention the same in tender BOQ or delete the same from MGPS bidder scope of works.</p>	<p>To be done by Civil contractor and deleted from scope of works of bidder.</p>
8.	<p>Bidder should be responsible for foundation of Plant Room (If required) for Medical Air Plant, Vacuum Pant</p>	<p>To be done by Civil contractor and deleted from scope of</p>

	<p>& AGSS Plant.</p> <p>To be amended as:</p> <p>You are requested to either mention the same in tender BOQ or delete the same from MGPS bidder scope of works.</p>	<p>works of bidder.</p> <p>Although, Platform/Pedestaletc required for installation of Plant room's equipment(Medical Air Plant, Vacuum Pant & AGSS Plant) should be in the scope of bidder.</p>
9.	<p>The following systems/items must be from the same principal company /Manufacturer:</p> <p>a. Control Panels & Manifold for O2, N2O & CO2</p> <p>b. Medical air plant</p> <p>c. Medical Vacuum Plant</p> <p>d. AGSS Plant</p> <p>e. Area & Master Alarm</p> <p>f. All types Outlets</p> <p>g. AVSU</p> <p>h. Line Isolation valves</p> <p>i. High Pressure tubes</p> <p>To be amended as:</p> <p>The following systems/items must be from the same principal company /Manufacturer:</p> <p>a. Control Panels & Manifold for O2, N2O & CO2</p> <p>b. Medical air plant</p> <p>c. Medical Vacuum Plant</p> <p>d. AGSS Plant</p> <p>e. Area & Master Alarm</p> <p>f. All types Outlets</p> <p>g. AVSU</p> <p>h. Line Isolation valves</p> <p>i. High Pressure tubes</p> <p>j. Oxygen Flow meter with Humidifier Bottle</p> <p>k. Ward Vacuum Unit</p> <p>l. Theatre Vacuum Unit</p> <p>m. Low Flow Vacuum Unit</p>	<p>Tender terms and conditions prevail.</p>
10.	<p>Extra Works (optional)</p>	<p>Deleted</p>

	<p>a. Construction of MGPS Operator Room & Toilet (Optional)</p> <p>b. Construction of Overhead/Under Ground trench size approx 1.5mx1m (Optional)</p> <p>c. Construction of 9" brick wall</p> <p>d. Demolition of brick wall 200 Cu.ft.</p> <p>To be amended as:</p> <p>Extra works to be added in tender BOQ.</p>	
11.	<p>The payment of CMC will be made on six monthly basis after satisfactory completion of said period, duly certified by end user on receipt of bank guarantee for 2.5 % of the cost of the equipment shall be valid till 2 months after expiry of entire CMC period.</p> <p>To be amended as:</p> <p>The payment of CMC must be revised to monthly basis instead of Six monthly basis.</p>	Tender terms & conditions prevail
12.	<p>Point No.10 - Bidder shall be responsible for free maintenance of all component of Gas pipeline system during warranty period including all filters & consumables.</p> <p>To be amended as:</p> <p>Kindly delete "including all filters & consumables".</p>	Tender terms & conditions prevail
13.	<p>Performance Security – The successful bidder shall furnish to the consultant a security in the form of a bank Guarantee from Nationalized / Scheduled bank for an amount of 10 percent of the contract sum.</p> <p>To be amended as:</p> <p>The successful bidder shall furnish to the consultant a security in the form of a bank Guarantee from Nationalized / Scheduled bank for an amount of 5 percent of the contract sum.</p> <p>You are requested you to kindly reduce the performance Security from 10% to 5%, since you are going to deduct retention money @ 10% from Contractor RA Bills as mentioned in clause 60.5 of Volume-II, GCC of Tender documents.</p>	Tender terms & conditions prevail
14.	<p>Further there is a Bank strike on dated 31.01.2020 & 01.02.2020 respectively, however tender is due for submission on 03.02.2020. You are therefore humbly requested to kindly extend bid submission end date of tender for another 2-3 working days from the date of uploading of suitable corrigendum.</p>	Last date of bid submission is extended to 05.02.2020.

Revised BOQ is enclosed.

The bid submission date is extended from **03.02.2020 to 05.02.2020** and bid security should be valid for 180 days from the date of original bid submission ie. from 03.02.2020.

All other terms & conditions remain unchanged.

Sr. Chief General Manager -I, HSCC (I) Ltd.
For and behalf of Director, AIIMS, Raebareli

**ALL INDIA INSTITUTE OF MEDICAL SCIENCES
(AIIMS), RAEBARELI**

e- Tender

for

**Supply Installation Testing & Commissioning of Medical
Gas Manifold System for Hospital Block at AIIMS,
Raebareli**

VOLUME – V

Revised Bill of Quantities

January 2020



(Consultants & Engineers for Mega Hospitals & Laboratories)
E - 6 (A), Sector - I, NOIDA (U.P.) - 201 301 (INDIA)

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Tender No. HSCC/SES/MGMS/ AIIMS/Raebareli/2020

BOQ OF MEDICAL GAS PIPELINE SYSTEM FOR RAIBAREILY						
Name of Bidder M/s:						
Part-I -Plan. Design, Supply, installation, testing and commissioning of MGPS on turnkey basis including Warranty of 5 years						
Sl.No.	Description of items	QTY	Unit	Rate in Rs.	Rate in Rupees in Words	Amount in Rs.
1.1	Fully Automatic Oxygen Control System : Supply, Installation testing and commissioning of Fully Automatic Oxygen Control System. As per specification	1	Nos			0.00
1.2	Oxygen Manifold (2x20) : Supply, Installation, testing and commissioning of (2x20 size) class D cylinder Oxygen Supply System. As per specification	1	Nos			0.00
1.3	Emergency Oxygen Supply System : Supply, Installation, testing and commissioning of (2x5 size) class D cylinder Emergency Oxygen Supply System. As per specification	1	Nos			0.00
1.4	Oxygen Flow meter with Humidifier Bottle: Supply, installation, testing and commissioning of oxygen flow meter with humidifier bottle 0-15Litres. As per specification	891	Nos			0.00
1.5	LMO Tank 20KL with Vaporiser and Pressure Reducing Stn:Supply, installation,testing and commissioning complete with all accessories as per specification	1	Nos			0.00
2.1	Fully Automatic Manifold Control Panel for Nitrous Oxide: Supply, installation testing and commission of fully automatic control panel for Nitrous Oxide. As per specification	1	Nos			0.00
2.2	Nitrous Oxide Manifold System, (2x6 size): Supply, installation, testing and commissioning of (2x6 size) Nitrous Oxide Manifold system .As per specification	1	Nos			0.00
2.3	Emergency Nitrous Oxide Manifold System, 2x2 size: Supply, installation, testing and commissioning of (2x2 size) cylinder Emergency Nitrous Oxide supply System .As per specification	1	Nos			0.00
3.0	Medical Air Plant (Package Unit) including electrical control panel: Supply, Installation, testing and commissioning medical air plant having a minimum capacity of 5000- 5500 LPM and 1000 - 1500 LPM as standby or Total Plant Capacity should be minimum 6500 LPM as per standard as per specification.	1	Nos			0.00
4.0	Medical Vacuum Plant (Package unit): Supply, Installation, testing and commissioning of Rotary Vane type medical vacuum plant having a minimum system capacity of 6500 -7000 LPM as primary and 6500-7000 LPM as standby or Total Plant Capacity should be minimum 12,500 LPM as per standard as per specification	1	Nos			0.00
5.0	Ward Vacuum Unit: Supply, installation, testing and commissioning of Ward Vacuum Unit as per tender technical specifications.	839	Nos			0.00

6.0	Low Flow Ward Vacuum Unit : Supply, installation, testing and commissioning of Low Flow Ward Vacuum Unit as per tender technical specifications.	30	Nos.		0.00
7.0	Theater Vacuum Unit for Operation Theaters: Supply, installation, testing and commissioning of Theater Vacuum Unit as per tender technical specifications.	39	Nos		0.00
8.0	Supply installation and commissioning of AGSS System having a minimum system capacity of 1200 -1500 LPM working and 1200 -1500 LPM as standby as per specification	1	Nos		0.00
9.0	Copper Pipes				
	As per tender technical specifications				
i	108mm OD x 1.5mm thick	66	mtr		0.00
ii	76mm OD X 1.5mm thick	242	mtr		0.00
iii	54mm OD X 1.2mm thick	200	mtr		0.00
iv	42mm OD X 1.2mm thick	300	mtr		0.00
v	35mm OD X 1.2mm thick	500	mtr		0.00
vi	28mm OD X 1 mm thick	2000	mtr		0.00
vii	22mm OD X 1 mm thick	4500	mtr		0.00
viii	15mm OD X 1 mm thick	4000	mtr		0.00
ix	12mm OD X 1 mm thick	2956	mtr		0.00
10.0	Gas Outlet Points/ Terminal Units with probe: Supply,Installation, testing and commissioning of Gas outlet points for Oxygen, Nitrous Oxide, Medical Air 4 Bar , Vacuum, CO2 and AGSS .				
i	Oxygen outlet with probe (MOT outlets are in the MOT Package)	839	Nos		0.00
ii	Nitrous Oxide outlet with probe (MOT outlets are in the MOT Package)	2	Nos		0.00
iii	Medical Air 4 outlet with probe (MOT outlets are in the MOT Package)	113	Nos		0.00
iv	Vacuum outlet with probe (MOT outlets are in the MOT Package)	844	Nos		0.00
v	Medical Air 7 outlet with probe (MOT outlets are in the MOT Package)	0	Nos		0.00
vi	AGSS outlet with probe (MOT outlets are in the MOT Package)	2	Nos		0.00
11.0	AREA VALVE BOX : Supply,Installation, testing and commissioning of Area Valve Boxes. as per specification				
	Valve Box - 2 Gas Service	28	Nos		0.00

	Valve Box - 3 Gas Service	10	Nos		0.00
	Valve Box - 5 Gas Service	15	Nos		0.00
12.0	MEDICAL GAS ALARM PANEL : Supply, Installation, testing and commissioning of Medical Gas Alarm Panel.as per specification				
	Medical Gas Area Alarm for 2 services (Oxygen and MA4 bar)	28	Nos		0.00
	Medical Gas Area Alarm for 3 services (Oxygen, MA4 bar and Vacuum)	10	Nos		0.00
	Medical Gas Area Alarm 5 services (Oxygen, N2O, MA4 bar , N2O,and Vacuum)	15	Nos		0.00
	Master Alarm Panel	1	Nos		0.00
13.0	LINE ISOLATION VALVES				
	15 mm ball valve	120	Nos		0.00
	22 mm ball valve	110	Nos		0.00
	28 mm ball valve	10	Nos		0.00
	35 mm ball valve	12	Nos		0.00
	42 mm ball valve	14	Nos		0.00
	54 mm ball valve	8	Nos		0.00
	76 mm ball valve	2	Nos		0.00
14.0	Supply of O2 cylinders-Class D cylinders	60	Nos		0.00
15.0	Supply of N2O cylinders-Class D cylinders	20	Nos		0.00
16.0	Supply of CO2 cylinders-Class D cylinders	10	Nos		0.00
17.0	Bed Head Horizontal Panel (Without outlets) as per specification	111	Nos		0.00
18.0	Supply installation testing and commissioning of Medical gas hose assemblies as per standard followed	500	mtr		0.00
19.0	Electric wiring inside the gas manifold and plant room including electrical panel for plant & Manifold rooms	1	Nos		0.00
20.0	CO2 Manifold 4 + 4 Primary & 2+2 Standby with Automatic control panelas per specs	1	Nos		0.00

21.0	Turnkey works as per Specification					
a	Bidder should be responsible for Ironite flooring in the manifold & Plant room with minimum thickness 5mm.	1	Nos			0.00
b	Minimum 20TR AC (Split/Ductable and exhausts) should be considered.	1	Nos			0.00
c	Dedicated earthing (Chemical type) for MGPS Plant room	1	Nos			0.00
d	Inter connection to Manifolds with LMO tank with necessary automatic switchover panels between LMO & Manifold will be up to responsibility of bidder upto 100m distance.	1	Nos			0.00
					SUB TOTAL Rs.	0.00
Part-II						
	Item No.	2	Unit	Qty	Rate in Rs.	Rate in Rupees in Words
			3	4		Amount
						7
						Rs
1	Comprehensive Maintenance Charges for the complete Medical Gas Manifold System including spares, repair or replacement of defective equipments/parts, tolls, tackles, accessories, consumables, labour charges etc. complete in all respect after completion of DLP as per the contract.					
	6th Year	Job	1			0.00
	7th Year	Job	1			0.00
	8th Year	Job	1			0.00
	9th Year	Job	1			0.00
	10th year	Job	1			0.00
					SUB TOTAL Rs.	0.00
SUMMARY OF RATES QUOTED						
	TOTAL (PART-I)					0.00
	TOTAL (PART-II)					0.00
	Grand Total Amount (PART - I + PART - II) (in Figures) :-					0.00