Amendment No. 1 to Bid Ref. No.: SAMS/FIND/Proc/ATI/18/2020 dated 06/04/2020 for the renovation Works at Intermediate Reference Laboratory (IRL), Raipur, Chhattisgarh under National TB Elimination Programme (NTEP), Ministry of Health & Family Welfare, Govt. of India, under The Global Fund (GFATM) project

Following amendment is carried out in the Bid Ref. No.: SAMS/FIND/Proc/ATI/18/2020 dated 06/04/2020

Amendment No. 1

Dated: 29/04/2020

Reference original Bidding document published on 06/4/2020, following amendment is being issued (applicable at all relevant sections of bidding document). All the terms and conditions shall remain same as mentioned in the referred bid document.

- 1. Technical specification of few items and work is described below. Bidders are requested to submit a technical compliance statement for all the items mentioned.
- 2. Revised format of price bid is attached, bidders shall submit their prices in the given format.
- 3. Taking over certificate is not required.

Particulars	Technical Specification				
Door	Doors(5 Nos, out of 5 doors – one is emergency exit door)				
	i. Flush Door finishes shall be 45mm thick with chemical resistant, antifungal and anti-bacterial properties.1.2mm thick GPSP sheet suitable to fix on 60 mm thick wall panel with provisions for double glazing glass for all door and hardware like push plates and handle on both side, lock and key, etc. PUF Panels will be with GPSP Sheets, epoxy painted on both sides and PUF insulation of minimum 38-40 kg/m3. Concealed hardware for fixing of door frames, TS-71 door closure, SS hinges, SS Door handle, SS ball bearing butt hinges, concealed tower bolt for the double door, both sides lock and key arrangement. Suitable neoprene "Y seal" type gaskets may be used between the door jam and door stop.				
	ii. Door interlocking systems shall be complete with controller module, push button stations with LED indication, electromagnetic locks. To take care of malfunctioning of interlocking, alternative electrical switch to manually open the doors should be provided.				
	iii. Vision Glass for doors shall be fixed type vaccumised and insulated type with 6 mm toughened glass and shall be installed for natural lightening flushed with surfaces of the door. Fixed flush to both faces of the door / wall panels to provide ease of cleaning and maintenance. No crevices / joints / sloped profiles are used for fixing the glass. This will avoid particle contamination and dust accumulation.				
	iv. Emergency Exit door with panic latch door from the TB Containment Laboratory shall be provided wherever mentioned for personnel exit				

Particulars	Technical Specification				
	in case of an emergency and can also be used for equipment placement inside lab. Door should be equipped with hooter/audible alarm every time it is opened.				
Flooring	Flooring shall be of 5 mm (3 mm + 2mm) of self-levelling industrial epoxy including screed compound for adhesion, 3 mm semisolid cladding of EPOXY will be applied over a uniform cemented flooring and 2 mm semi-liquid epoxy over 3 mm hardened surface with bubble free perfect smooth finishing completed in three steps: Cementing (Uniform Flooring), Hardening (3 mm epoxy) and smoothening (2mm epoxy). Epoxy used for this application will be self-levelling and clean room compatible. Flooring outside the TB Containment facility where required for aesthetic purpose will be covered with vinyl flooring.				
Coving(R70 Coving Buffing) and R70 3D internal Corner coves along with wall support	Covings: Extruded aluminium anodized R70 clip-on type (Male & Female connectors) covings for entire wall to floor, wall to wall & wall to ceiling joints. Extruded aluminium double cove integrated with top track of the partition panels. Corner internal & external cove joining pieces in aluminium anodized finish. Having similar construction and finish as the walls and properly sealed with silicon sealant with wall & ceiling. Covings used in construction shall include Wall to Wall Coving -R-70, Wall to Ceiling Coving-R-70. 90°Corner, 3-D Corner, 2-D Corner				
	All penetrations through walls, ceiling & floors will be sealed using a suitable caulking. Caulking shall be applied around pipes and conduit. The interior of electrical and cable conduit shall also be caulked.				
FALSE CEILING	Modular false ceiling: The internal building finishes shall be monolithic, impervious, non-particle shredding, chemical resistant especially to Hypochlorite cleaning and suitable to withstand chemical use during decontamination/ fumigation. Modular false ceiling panels should be made for Clean Room application, pre-engineered 60 mm thick PUF panels with GPSP Sheets with PUF insulation of minimum 38-40 kg/m3. Both surfaces should be 0.8 mm thick GPSP sheet and has to be installed along the ceiling, to create an impervious shell which is fully sealed. The panels on inner side will be coated with Epoxy painted and powder coated on outer side. These panels must have good aesthetic appeal as well and have to be easily maintainable. The construction of false ceiling shall be strong to allow 1 person weighing 50- 60 kg to easily walk/crawl above it for necessary work. Service window will be provided for access above false ceiling preferably outside TB containment lab				
Telephone set	Telephone set, Co-axial wires & cables				
Access Control System	Existing Access control system(if available to removed). Access control system for entry / exits should be provided. 20 numbers of card to be provided and its should be linked with door electromagnet(door opening and closing)				
Ceiling light, LED type,(1X1 sq.ft.)	Lighting should be surface mounted, LED of reputable manufacturer, suitable capacity (~18W) and arranged as per the layout provided. Light fixtures inside shall be with gasket or otherwise sealed with silicon.				
UPS 5 KVA with battery back up of 30	UPS console shall be provided to cater to the extreme essential power requirement of the laboratory. All critical components like lights, Door				

Particulars	Technical Specification
minutes(Battery 12V/2.5AH or better)	Interlocks, exhaust blowers of BSCs, Fire alarm sensor, CCTV camera & monitoring shall be provided with uninterrupted power supply for 30 minutes.
Clean room monitor	3- channel display- Room Pressure, Relative humidity and temperature in the TB Containment Lab with Audio-visual alarm system, wiring & accessories
CCTV Camera monitoring	CCTV Monitoring Devices: Camera to continuously monitor the activities inside and outside the TB Containment Lab by providing Central CCTV Monitor. Five Camera unit should be installed (one outside the TB Containment lab covering the entry and corridor area, one in ante room and two inside TB Containment Room and one covering AHU Area). Supply, installation, testing and commissioning of the following shall be done:
	Color Camera 1/3" CCD, IR type, dome shaped, 480 TV lines resolution which work in low light.
	8 Channel standalone / Network version DVR Make: DAHUA /equivalent reputed OEM
	Hard Disk with 1 TB (TERA byte) Capacity -Make -Seagate or equivalent reputed OEM
	8 Channel Power Supply of reputed Make
	Supply Laying of Co-axial Cable with necessary Accessories
	Wall mounted monitor (at least 20/22 inch LED/LCD) located in Microbiologist room or as suggested by site i/c
	Fire Safety: Fire detection and alarm system (FDA System) and fire extinguishers of Type ABC 4 Kg & inert gas system 4 Kg shall be provided at strategic locations (TB Containment Room, Ante Room should be of inert gas system and outside at entrance of TB Containment Lab and near control panel, near AHU should be Type ABC and should overall comply with fire safety guidelines).
Fire alarm panel	Accessories: Fire alarm cable, Fire alarm hooter(Description: Mounting type, 24 V DC operating, Colour Red alarm 100DB) and Fire hooter glass switch manual call point
	Validation of BSC: Particle count test, PAO (Filter Integrity test for prefilters, filters ULPA filter/ HEPA filters), Air in-flow velocity and downflow velocity test as per NSF 49 and EN 12469 standards with devices traceable to National/International Standards, UV and Fluorescent light intensity
	For TB Containment Lab- balanced, tested and validated upon completion
Validation of BSC and TB Containment Lab	Pressure in each room/zone as per the design, differential pressure readings including across filters.
	Air inflow velocity and outflow velocity test across all inlets and outlets to measure/derive air change rate per hour (minimum 6-12 ACH)
	Smoke pattern test for directional airflow should be performed during validation including for Pass box.

Particulars	Technical Specification				
	Temperature shall be maintained at 22°C±2 and humidity level should be maintained at 60±10%				
	HEPA Filter (in BIBO) integrity test based on PAO test and manufacturer's certifications				
	Electrical current readings, in amperes on full load work, average running, and on starting, Testing of power cabling, earthling, AHU control panel, MCCB panel and LT panels				
	Containment room -the walls, floors, ceilings, penetrations, and other containment barrier features have adequate integrity				
	i. The Validation Document shall provide the detailed procedure for validation, parameters for validation, validation schemes and formats for recording the validation details.				
	ii. The bidder shall arrange to do a mandatory third party validation				
	iii. The bidder shall arrange for all the instruments, tools, manpower etc. required for the validation. The validation results shall be recorded and documented and shared with the site and hiring/funding agency.				

Revised Price Bid Format

FINANCIAL PROPOSAL- STANDARD FORMS

Form FIN-3: Priced Bill of Quantity

(To be submitted with Price bid only)

Bidders shall submit detailed workings of Lump Sum Contract Price for renovation of IRL Raipur. The total price mentioned in the table below should coincide with the Price Component A as given in FIN-2.

IRL, Raipur Lab.

SI. No.	Item description	UNIT of Measurement	Quantity	Unit Price (inclusive of all applicable taxes)	Total Price (inclusive of all applicable taxes)
1	15/5 AMP SOCKET	Nos	24		
2	15/5 AMP SWITCH	Nos	24		
3	2.5 SQMM WIRE FOR UPS POWER SOCKET WIRING 90 MTR	Nos	6		
4	8 WATT LED LIGHT FOR PASS BOX	Nos	2		
5	8 WATT UV LIGHT FOR PASS BOX	Nos	2		

SI. No.	Item description	UNIT of Measurement	Quantity	Unit Price (inclusive of all applicable taxes)	Total Price (inclusive of all applicable taxes)
6	ACCESS CONTROL SYSTEM WITH DOOR ELECTROMAGNET	Nos	1		
7	ADDITIONAL DOOR CHANNEL FOR SUPPORT ALUMINUM WITH THICK GAUGE DIMENSION: 45X25 X25 ""U"" WITH RIVETS	Nos	5		
8	AHU PANEL LEDS	Nos	16		
9	BATTERY 12V/7.5AH	Nos	16		
10	C-CHANNELS (MATERIAL -GI)	ft	3		
11	CABLE TIE	pkt	4		
12	CAMERA CABLE (IN MTRS)	Mtr	200		
13	CCTV CAMERA	Nos	5		
14	CEILING LIGHT	Nos	20		
15	CHANNEL T-TYPE	ft	65		
16	CLAMP FOR THREADED ROD	Nos	30		
17	CLEAN ROOM MONITOR	Nos	2		
18	CONNECTION STRIP	Nos			
19	CONNECTION STRIP 01 NO. = 6 POSITION, TERMINAL BLOCK, BARRIER	Nos	20		
20	CONTACTOR 32 AMP/ 4 POLE	Nos	2		
21	DOOR CLOSER	Nos	5		
22	DOOR ELECTROMAGNET	Nos	2		
23	DOOR INTERLOCKING CONTROLLER	Nos	1		
24	DOOR RELEASE PUSH BUTTON	Nos	1		
25	DOORS (6.9 X 3.6 FT)	Nos	5		
26	DVR 8 CHANNEL	Nos	1		
27	ELBOW 1 INCHES	Nos	25		
28	EMERGENCY ALARM	Nos	1		
29	EMERGENCY ALARM SWITCH	Nos	1		
30	EPBAX CABLE 8CORE (IN MTRS)	mtr	200		
31	EPOXY FLOORING FOR BSL3 LAB,THICKNESS : 5 MM (3 MM + 2MM) , 3MM SEMISOLID CLADDING OF EPOXY + 2 MM SEMI-LIQUID EPOXY OVER 3 MM HARDENED SURFACE,	Sqft	600		
32	FALSE CEILING BSL 3 LAB,PUFF INSULATED PANELS GPSP SHEETS	Sqft	600		

SI. No.		UNIT of Measurement	Quantity	Unit Price (inclusive of all applicable taxes)	Total Price (inclusive of all applicable taxes)
	WITH PUF INSULATION, DENSITY : 38- 40 KG				
33	FASTNER 8MM	Nos	30		
34	FIRE ALARM CABLE(IN MTRS.)	Mtr	200		
35	FIRE ALARM HOOTER DESCRIPTION: MOUNTING-TYPE PANEL SUPPLY VOLTAGE TYPE: DC VOLTAGE: 24 V COLOR: RED ALARM:100DB	Nos	3		
36	FIRE ALARM PANEL	Nos	1		
37	FIRE HOOTER GLASS SWITCH(MANUAL CALL POINT)	Nos	3		
38	FLEXIBLE PIPE (CONDUIT)	mtr	50		
39	FLEXIBLE PIPE 12 INCHES(IN FT)	FT	60		
40	FLEXIBLE PIPE 8 INCHES(IN FT)	FT	80		
41	HARD DISK ONE TB	Nos	1		
42	INSULATION TAPE BLACK FOR AC DUCTS	Nos	10		
43	JUBLEE CLAMP 10 INCHES	Nos	20		
44	JUBLEE CLAMP 14 INCHES	Nos	20		
45	JUNCTION BOX	Nos	20		
46	MCB 32 AMP/ 4 POLE	Nos	2		
47	MODULAR FITTING PLATE	Nos	30		
48	MONITOR FOR CCTV CAMERA 20/22 INCHES	Nos	1		
49	NC TERMINALS	Nos	16		
50	NO TERMINALS	Nos	16		
51	PASS BOX CONTROL UNIT	Nos	2		
52	PASS BOX ELECTROMAGNET	Nos	4		
53	PUSH SWITCHES	Nos	8		
54	PVC CLAMP 3/4 INCHES	Nos	50		
55	PVC PIPE LINCHES/10FEET	Nos	10		
56	R 70 COVING (BUFFING)	Ft	217		
57	R70 3D INTERNAL CORNER COVES	Nos	20		
58	SELF DRILL SCREW 1INCHES	pkt	1		
59	SILICON SEALANT	No	20		
60	SMART TIMER FOR AHU	Nos	3		

SI. No.	Item description	UNIT of Measurement	Quantity	Unit Price (inclusive of all applicable taxes)	Total Price (inclusive of all applicable taxes)
61	SMOKE DETECTOR	Nos	1		
62	SMPS FOR CAMERA 12V/10 AMP	Nos	1		
63	SMPS POWER SUPPLY 24V/ 5 AMP	Nos	1		
64	TELEPHONE SET	Nos	2		
65	THERMAL INSULATION 10MM(INSQFT.)DESCRIPTION: THICKNESS: VARIABLE MATERIAL :ROCKWOOL, NITRILE, RUBBER ETC MAX WITHSTANDING TEMPERATURE:260 C USAGE/APPLICATION: HOT/COLD INSULATION	ft	160		
66	THREADED ROD 8MM, 5FT LENGTH	Nos	30		
67	TRIPAL CLOTH(IN SQFT.) DESCRIPTION: PATTERN:PLAIN, WIDTH: 108, COLOR: NATURAL I ANY COLOUR 3SM 100-150 GSM, 150-200 GSM, 200-250,250-300	sqft	96		
68	UPS 5 KVA	Nos	1		
69	UV CHOKE	Nos	2		
70	VFD- 3.0 HP	Nos	2		
71	WASHER AND NUT 6 MM	Kg	1		
72	WASHER AND NUT 8MM(40 NOS.)	Kg	0.5		
73	Validation of BSL 3 Lab/TB Containment Lab				

For Strategic Alliance Management Services Pvt. Ltd.

Divars Grand_ New Delhi CS Same

Shivam Anand-Manager (Procurement & Hospital Services)