

## **SUMMARY - PETLABURZ**

- The original layout lacked an emergency exit, necessitating a revision. This revision extends the corridor reducing the floor area of the Embryology Lab, which was then expanded by merging it with an adjacent room beyond the original layout area.
- The layout was revised to accommodate extra consulting rooms, a redesigned reception area, and a waiting area for patients.
- To maintain sterility, the Manifold Room was moved outside the sterile and semi-sterile areas as advised by the expert doctors, leading to an additional room.
- The hospital's existing electrical panel could not handle the additional load from the IVF Centre. A dedicated power cable was run from the main transformer, and a new electrical panel was installed, requiring an additional electrical panel room which could not be accommodated in UPS room.
- The above revisions resulted in a 27% increase in floor area (126.68 m<sup>2</sup>), leading to increased quantities of Civil, Electrical, and Finishing works, including more Air Conditioners, Fans, and Lighting.
- Due to the increased area and scope, several "authorized extras" were added, covering civil items, electrical items, and air conditioning components. These include additional demolition, construction, electrical installations, and HVAC systems, among others.
- Civil Extras – **14,40,341**  
Electrical Extras – **25,63,358**  
Air Conditioning Extras – **7,20,354**
- Dedicated 50 LPH RO system was installed to supply clean water to the Autoclave, following ICMR guidelines. – **75,000**
- The reception area was redesigned to meet ICMR approval standards, including moving the record room inside the centre. – **5,09,944**
- Shed For AHU Protection From Direct Sunlight, Birds & Rodents – **3,00,000**
- Increase in AHU & Condensing units capacity – **13,02,500**
- Mandatory MGPS Control Panels & Other Provisions – **9,58,094**

S. No	Description	As per Agreement	Supplemental	Total
1	Equipment	2,60,20,475.00	2,21,000.00	2,46,54,375.00
2	Civil Works	70,12,631.00	11,56,237.00	81,68,868.00
3	Plumbing works	1,36,973.00	8,985.00	1,45,958.00
4	Electrical works	56,41,335.00	4,96,686.00	61,38,021.00
5	ELV works	6,89,000.00	-	6,89,000.00
6	Fire Fighting works	8,73,880.00	-	8,73,880.00
7	Air Conditioning works	27,25,391.00	17,49,744.00	44,75,135.00
8	MGPS works	11,41,255.00	8,14,670.00	19,55,925.00
<b>9</b>	<b>Sub Total (Agreement Part-A)</b>	<b>4,42,40,910.00</b>	<b>44,47,322.00</b>	<b>4,86,88,262.00</b>
10	Provision towards Engineering Supervision Charges @ 4% on RE Value	17,69,636.40	1,77,892.88	19,47,529.28

11	GST @ 18%	79,63,363.80	8,00,517.96	87,63,881.16
12	<b>Sub Total</b>	<b>5,39,73,910.20</b>	<b>52,47,840</b>	<b>5,74,52,149.16</b>
13	Labour Cess @ 1% on Basic Price of Revised Estimate			4,86,882.32
14	NAC @ 0.1% on Basic Price of Revised estimate			48,688.23
15	Provision towards Seniorage Charges on Civil Component			448.00
16	Provision towards DMF Charges 30% on Seniorage Charges			134.00
17	Provision towards SMFT Charges 2% on Seniorage Charges			9.00
18	Provision towards Haritha Nidhi			4,868.82
19	Subtotal of S.No 12 to 17			<b>5,41,030.38</b>
20	Provision towards GST 18% on Seniorage Charges			97,385.47
21	Provision towards Unforeseen items and rounding off (LS) - Inauguration Expenses	10,26,089.80		9,10,280.00
	Subtotal of S.No 18 to 21	<b>10,26,089.80</b>		<b>25,85,946.84</b>
	<b>Grand Total</b>	<b>5,50,00,000</b>	<b>59,48,339</b>	<b>6,09,48,338.88</b>

## **Petlaburz (Details)**

- The Layout Plan provided in the estimate /tender / agreement drawing did not provide for the Emergency exit. A fire rated emergency exit door is highly essential in an access controlled facility for emergency evacuation at times of any fire hazards etc, as the evacuation through a corridor which has access only through Access controlled doors may become difficult. The IVF Centre layout was revised extending the corridor and providing a Fire Rated Emergency Exit at the end of the corridor on East side of the IVF Centre.
- Extending the corridor for providing the Emergency Exit passage in the revised layout had substantially reduced the floor area of Embryology Lab. The room available next to the previously planned embryology lab had to be merged to provide adequate space in the Lab.
- The expert doctors at the time of inauguration of the IVF Centre at Gandhi Hospital has strongly opined that the Manifold Room was to be kept outside the Sterile and Semi Sterile areas of the IVF Centre, as Daily movement of Gas Cylinders sourced from third party vendors was to be avoided to ensure that required sterility levels are not compromised. Therefore, an additional spare room from the Hospital on Eastern side of the IVF Center was added in the revised layout.
- The electrical panel available on the third floor of the hospital did not have the capacity to cater to the additional electrical load of the IVF Centre. Hence the power supply for IVF could not be connected to the existing electrical panel. A dedicated power cable had to be run directly from the main Transformer on the ground floor of the hospital building and an additional electrical panel was installed for this purpose.
- The layout plan provided in the estimate / tender / agreement had one common room for an electrical control panel and for the UPS & Batteries. This room was not sufficient for placement of this equipment and also for the additional electrical panel. Hence the separate rooms were planned and provided for UPS & Batteries and for the Electrical panels by adding one additional room next to the originally planned electrical cum ups room.
- Additional consulting rooms were provided for Embryologist, Anesthetist and Head of Department at the instructions of End User who is also a member of the experts committee. A waiting room for patient waiting his turn for using the sperm collection room was also created at her insistence.
- Reception area was redesigned in the revised layout as advised by field staff and end user to create the ambience required to comply and smoothly obtain ICMR approval for IVF Centre's operations. The current waiting area was additionally added from the available area in the corridor leading to IVF Centre. The record room provided behind the receptionist sitting area was moved inside the center to facilitate window provision at the reception as instructed.
- The increase in area due to changes is as follows:

S.No	Location of Area	Area (m <sup>2</sup> )
1	New Corridor for Emergency Exit	8.16
2	Extra Embryology Lab Area	25.19
3	Electrical Room	11.5
4	New Manifold Room	22.98
5	Waiting area at Entrance	25.02
6	Extra Major-OT Area	25.19
7	Extra Corridor at Emergency Exit	8.64
	<b>Total Area Increased</b>	<b>126.68</b>
	<b>As Per Agreement</b>	<b>465.65</b>
	<b>As Per Actual (Revised)</b>	<b>592.33</b>
	<b>Percentage of Area Increased</b>	<b>27%</b>

- The Total increase in area is **126.68 m<sup>2</sup>** i.e, **27%** above the area envisaged in the estimate / tender. This increase in area as largely contributed to increase in quantities of Civil, Electrical and finishing works. The Nos of Air Conditioner/Fans/Lighting also increased due to the increase in floor area.
- **The revised layout incorporating the above changes was prepared as instructed and submitted by the contractor for approval to Engineer in Charge on 30-10-2023. The same by approved by the Superintending Engineer and Chief Engineer and was issued to the contractor for execution on 01-11-2023 vide Ir.no.290/TSMSIDC/Spl.Proj./2022-23/2100.**
- After approval of revised layout drawing the following detailed drawings were submitted and progressively approved on 07-03-2024 after due scrutiny at respective departments of TGMSIDC.

S.No	Layout Name
1	Power socket Layout
2	Power socket section layout
3	Switch Board Section Layout
4	Electrical & LV Cable Tray Layout
5	Earthing Layout
6	Lighting Layout
7	FA System Layout
8	MEP Layout
9	HVAC Layout, VRV Layout
10	Terrace Floor HVAC,VRV
11	HVAC Section Layout

- The revised approved layout drawing caused an increase of 27% in floor area resulting in increase of all Civil, Electrical, and Interior & Finishing works of the center resulting in “Authorized extras” of these items. The details as below.
- Clause 24 of section2 General Instructions to Tenders (Pg No 40). **“Variation of Quantity at the Time of Award/Currency of Contract”**, Provides variation of quantities up to 25% without any change in prices and Terms & Conditions.

### **Emergency Fire Exit Door**

<b>S. No</b>	<b>Description</b>	<b>Qty</b>	<b>Unit</b>	<b>Rate</b>	<b>Amount</b>	<b>Remarks</b>
1	Emergency Fire Door	1	Nos	55,000.00	55,000.00	This work was executed as per the requirement and instructions from higher officials

### **Authorized extras for Civil Items**

<b>S. No</b>	<b>Description</b>	<b>Qty</b>	<b>Unit</b>	<b>Rate</b>	<b>Amount</b>	<b>Remarks</b>
1	Dismantling of Old Cement Mortar	289.14	Sqm	13	3,759	The work was taken up as per approved floor plan drawings and in contingent with the main work and hence proposed as supplemental item.
2	Dismantling of Reinforced Cement Concrete	0.59	Cum	4,424	2,610	The work was taken up as per approved floor plan drawings and in contingent with the main work and hence proposed as supplemental item.
3	change room Cubicles	11.3	Sqm	9,055	1,02,322	This work was executed as per the requirement and instructions from higher officials
4	V-board partitions	13.7	Sqm	1,625	22,263	This work is mandatory in contingent to the main work. Hence, executed.
5	Thermo Mechanically Treated ( TMT) Bars	0.3	MT	95,386	28,616	This work is executed as per site conditions.
6	MS Grills to windows.	39.78	Sqm	1,791	71,246	The work was taken up at reception and entrance area as per the instructions issued by the End user and TSMSIDC higher officials.
7	Design Mix Concrete M 25 grade	0.75	Cum	14,683	11,012	This work is executed as per site conditions.
8	Skirting to internal walls to 10 cm height	174.5	Rmt	151	26,350	This work was executed as per the requirement and instructions from higher officials

S. No	Description	Qty	Unit	Rate	Amount	Remarks
9	UPVC 3 track sliding windows	15.00	Sqm	9,517	1,42,755	As per the site condition & floor plans approved, Qty exceeded and now proposed as AE
10	Flooring with non-skid full body ceramic floor tiles of size 300mm x 300mm	0.93	Sqm	1,395	1,297	As per the site condition & floor plans approved, Qty exceeded and now proposed as AE
11	False Ceiling with Mineral Fibre Board.	138.85	Sqm	1,636	2,27,159	As per the site condition & floor plans approved, Qty exceeded and now proposed as AE
12	Dadoing to walls with glazed full body porcelain wall tiles of size 300 x 600 mm	228.54	Sqm	1,391	3,17,899	As per the site condition and instructions of Higher officials, Dadoing provided in the corridor area. Hence the qty exceeded and proposed as AE
13	Wall putty	473.95	Sqm	315	1,49,294	As per the site condition & floor plans approved, Qty exceeded and now proposed as AE
14	Application of one coat water based cement primer	152.93	Sqm	259	39,609	As per the site condition & floor plans approved, Qty exceeded and now proposed as AE
15	CPVC Pipes 15.90mm OD pipe.	35.61	Rmt	199	7,086	As per the site condition & floor plans approved, Qty exceeded and now proposed as AE
16	50mm thick PCGI Ceiling Panels.	2.66	sqm	5,135	13,659	As per the site condition & floor plans approved, Qty exceeded and now proposed as AE
17	Double leaf clean room Doors of size 1500 x 2100 mm with 300mm X 300mm double glazed view panels	1.00	No	46,000	46,000	As per the instructions of Higher officials Access Control Door Mandates the scientific door, Qty exceeded and now proposed as AE
18	Single leaf clean room Doors of size 900 X 2100 mm with 300 mm x 300 mm View panel	3.00	No	28,700	86,100	As per the instructions of Higher officials Autoclave Room, UPS Room & Electrical Room Mandates the scientific door, Qty exceeded and now proposed as AE

S. No	Description	Qty	Unit	Rate	Amount	Remarks
19	Extruded Aluminium Coving at MGMH Petlaburj	9.80	Rmt	585	5,733	As per the site condition & floor plans approved, the Qty. exceeded and now proposed as AE
20	PVC/Vinyl flooring of 2mm thickness	33.31	Sqm	4,070	1,35,572	As per the site condition & floor plans approved, the Qty. exceeded and now proposed as AE
					<b>14,40,341.00</b>	

### **Authorized extras for Electrical Items**

S.No	Description	Qty	Unit	Rate	Amount	Remarks
1	56W Clean room Light fixture, 2' x2' (600mm x600mm)	12	Nos	17,241	2,06,892	During site inspection, The TSMSIDC higher officials have instructed to provide 56W lights to attain required illumination. Hence executed.
2	48" ( 1200 mm) High Speed Fan	28	Nos	4,317	1,20,876	During site inspection The TSMSIDC higher officials instructed to provide regular high speed fans since maintaining BLDC fans in government instructions is not viable. Hence executed
3	Labour charges for fixing of ceiling fan and regulator	28	Nos	185	5,180	As per Instructions of the TSMSIDC higher officials during site inspection, regular high speed fans were provided. Hence executed
4	2 Nos 6A, 2 in one socket - 2 Nos with 6A switch control	20	Nos	1,178	23,560	6Amp socket was required as per site conditions. Hence executed
5	19/20mm steel tube down rod	28	Nos	162	4,536	As difference in false ceiling one meter down rods are used as per site conditions
6	12 Way SPN DB	2	Nos	9,444	18,888	It is mandatory to provide 12 Way SPN DB for UPS Distribution System Hence executed

7	Cable adopters box with cover for DBs	8	Nos	5,085	40,680	It is mandatory to provide cable adapters to connect RAW power with UPS power. Hence executed
8	63A, 10 KA DP MCB	2	Nos	4,203	8,406	It is mandatory required to connect Power supply to autoclave and Air shower unit
9	4C x 1.5 Sqmm Copper Flexible Cable	210	Rmt	130	27,300	It is mandatory to provide for AHU Connection System, Hence executed
10	Outdoor feeder pillar box for connecting with 63A, 4 Pole MCB as incomer, 9 Nos 6-32A SP MCBs	1	Nos	30,768	30,768	It is mandatory to provide feeder pillar box to control separate AC units on terrace for maintenance of units
11	ISI 25mm outer dia PVC pipe concealed in wall.	263.5	Rmt	116	30,566	Qty increased to provide point wiring in all the rooms and corridors. And also to lay and run 2.5,4,6,10 sqmm wire various places necessary and proposed as AE
12	ISI 25mm outer dia PVC pipe on surface wall.	902.8	Rmt	107	96,600	Qty increased to provide point wiring in all the rooms and corridors. And also to lay and run 2.5,4,6,10 sqmm wire various places necessary and proposed as AE
13	Wiring with 2 runs of 22/0.3mm 1.5 Sq.mm	158	Pts	945	1,49,310	Qty increased to provide adequate lighting in rooms and corridors including Major OT, Embryology, Andrology, Manifold room, reception area etc. hence proposed as AE
14	6A ISI Mark 3/2 pin Modular socket with 6A 1way Modular switch, 3 Module box	21	No	675	14,175	Qty is increased as no of points increased and to provide proper power sockets in all the rooms and proposed as AE
15	16A/6A, 2 in one socket - 2 Nos with 16A switch control - 2 Nos modular type	17	No	1,755	29,835	Qty is increased due to extra points are used in Embryology ,Minor OT and other necessary areas and proposed as AE
16	Run of 1 of 22 /0.3mm 1.5 Sq.mm	29.6	Rmt	40	1,184	Qty is increased to connect all the fans to earthing, for safety of the equipment's and proposed as AE



17	3 of 2.5 sq.mm 36/0.3 mm phase neutral and earth	1113.1	Rmt	177	1,97,019	Qty is increased due to separate emergency line system is used for emergency light point for convenience of uninterrupted power supply and proposed as AE
18	3 runs of 4.0 sq mm 56/0.3 mm phase neutral and earth	1221	Rmt	255	3,11,355	Qty is increased due to separate emergency line system is used for emergency light point for convenience of uninterrupted power supply and proposed as AE
19	Run of 5 of 6.0 Sqmm 90/0.3 mm 3 phases, neutral and earth	180.1	Rmt	606	1,09,141	Qty is increased due to distribution system are provided at different positions as per site condition and proposed as AE
20	Run of 5 of 10.0 Sqmm 140/0.3 mm 3 phases, neutral and earth	244	Rmt	967	2,35,948	Qty is increased due to distribution boards are provided at different positions as per site condition and proposed as AE
21	4 Way TPN DB	7	No	18,325	1,28,275	Qty is increased due to number of circuit lines are increased hence it was essential to provide separate distribution system for UPS line, and Raw Power line and proposed as AE
22	24W edge lit LED Down light	41	No	2,652	1,08,732	Qty increased for better illumination, as per site requirement and proposed as AE
23	36W Edge lit, 2 feet x2 feet 600mm x600mm	60	No	4,350	2,61,000	Qty increased for better illumination, as per site requirement and proposed as AE
24	Modular type Stepped electronic regulator	28	No	827	23,156	Qty increased due to extra fans that are provided in waiting area, UPS room, electrical room, Main fold , and Andrology lab and proposed as AE
25	225mm Light duty exhaust fan	8	No	2,203	17,624	Qty increased since provided in auto clave room and proposed as AE
26	Hot dip galvanized perforated cable tray of 100 mm	9	Rmt	429	3,861	Qty increased due to cable lines provided on terrace for AHU units and proposed as AE
27	Hot dip galvanized perforated cable tray of 300 mm	22.5	Rmt	1,310	29,475	Qty increased due to separate line system is used for UPS line and proposed as AE

28	Earth station, with 600X600 X3.15mm Copper Plate at 2500mm	2	No	22,283	44,566	Qty increased since suitable Resistance value was not getting to UPS systems. Hence proposed as AE
29	50x6 GI flat for body earthing	17.3	Rmt	329	5,692	Qty increased due to separate earthing line is laid on terrace for AHU units and proposed as AE
30	25x3 Copper flat for Neutral earthing of UPS and Equipment	7.3	Rmt	902	6,585	Qty is increased due to distance of earthing to ear thing were difference as per site condition hence proposed as AE
31	4 sqmm Copper wire for Earthing of DBs Equipment	370.6	Rmt	83	30,760	Qty increased due to Separate earthing used for Distribution board body as it is necessary for DB's hence Qty increased and proposed as AE
32	3.5Cx95 sqmm XLPE Insulated Cable 1100V grade	60	Rmt	1,207	72,420	Qty increased due to incoming supply is drawn from Hospital Main panel board rather than Sub distribution Panel. Which is at a longer distance from the IVF Center and proposed as AE
33	3.5CX50 sqmm XLPE Insulated Cable 1100V grade	110	Rmt	722	79,420	
34	4Cx16 sqmm PVC Insulated Cable 1100V grade	60.4	Rmt	1,483	89,573	Qty increased due to AC unit Control system is fixed in Electrical room for controlling the unit from the site and proposed as AE
					<b>25,63,358</b>	

**Authorized extras for Air Conditioning Items**

S.No	Description	Qty	Unit	Rate	Amount	Remarks
1	MS Angle for Duct Support of size 50 X 50 x 5 mm Thick.	211.24	Kg	190	40,136	It is mandatory required for support duct hence this work is executed as per the instructions of TSMSIDC Higher officials.
2	MS Angle for Duct Support, Cable Tray Support and Condensing Unit Stand of size 32 x32x5mm Thick.	74.25	Kg	190	14,108	It is mandatory required for support duct hence this work is executed as per the instructions of TSMSIDC Higher officials.

3	Canvas Connections For AHUS	2	Nos	6,500	13,000	Its mandatory required for support ducts hence this work is executed as per the instructions of TSMSIDC Higher officials.
4	Cassette Units 2.0 TR – 4 way	2	Nos	40,000	80,000	As per the site condition & floor plans approved, the pre & post-operative ward requires less capacity units. Hence proposed as Supplemental item
5	Split AC unit 1.5 TR inverter type 3 Star	2	No	48,000	96,000	Qty increased so as to provide AC in UPS room and Reception and proposed as AE
6	Magnehelic gauges across pre and fine filter	1	No	10,500	10,500	Qty increased as per site condition and proposed as AE
7	Aluminium powder coated Fresh air and Exhaust Louvers	0.8	Sqm	10,300	8,240	Qty increased as per site condition and proposed as AE
8	Class O Nitrile rubber 32mm Thick	45.79	Sqm	1,225	56,093	The Qty utilised as per site condition and hence savings
9	Class O Nitrile rubber 25mm Thick for Exposed Return Air Duct	103.32	Sqm	1,075	1,11,069	The Qty utilised as per site condition and hence savings
10	Class O Nitrile rubber 25mm Thick for Supply air duct	76.7	Sqm	785	60,210	Qty increased to provide proper covering from Dampness and moisture to copper pipe of IVF units and AHU units and proposed as AE
11	Class O Nitrile rubber 19mm Thick for Return air running inside the building.	57.49	Sqm	660	37,943	Qty increased to provide proper covering from Dampness and moisture to copper pipe of IVF units and AHU units and proposed as AE
12	VRF Indoor Units: 1.0 TR	3	No	30,700	92,100	Qty increased so as to provide AC in Anaesthetist room, Embryologist room, Sample collection room and proposed as AE
13	VRF Indoor Units: 1.5 TR	2	No	35,000	70,000	Qty increased so as to provide AC in Senior faculty room & UPS Room and proposed as AE
14	Refnet joints	5	Set	6,191	30,955	Qty increased as the no of indoor units increased and proposed as AE
					<b>7,20,354</b>	

- An Autoclave was installed in the IVF Centre as part of scope under the agreement. The water supply to the Autoclave has to mandatorily be supplied from an RO source to prevent scaling on the Autoclave chamber in case untreated water was used. A dedicated RO plant had to be installed to supply RO water to the Autoclave as no RO water line was available in the hospital facility.

S. No	Description	Qty	Unit	Rate	Amount	Remarks
1	50 LPH storage type RO	1.00	Nos	75,000.00	75,000.00	Autoclave needs clean water as per ICMR guidelines, hence this item is procured

- A 20 KVA UPS was provided as part of the original scope of Agreement. As per the BOQ of the Agreement 20 Nos 65AH batteries, however the rating of UPS requires 32 Batteries of 65AH to make it operational. Therefore 12 additional Batteries are supplied and installed.

S. No	Description	Qty	Unit	Rate	Amount	Remarks
1	Supply and fixing of 12V 65 AH SMF battery including wire leads. Makes: Quanta / Racket / Exide. at MGMH Petlaburj	12	No	20,584.00	2,47,008.00	As the UPS with isolation transformer requires min 32 no's of batteries to increase uptime of 60 minutes from 30 minutes considering the load. hence the Qty. exceeded and proposed as AE

- Certain Hospital furniture was not included in the scope of the EPC contract as it was contemplated that this furniture would be provided by the Hospital (MGM Hospital, Petlaburj). However, this furniture had to be supplied as per instructions of Officers of TGSMIDC, under scope of the EPC Contract in view of the urgency of target inauguration date of the IVF Centre. Such equipment/ furniture are listed below.

S. No	Description	Qty	Unit	Rate	Amount	Remarks
1	3-Bay Surgical Scrub Station	1.00	Nos	97,000	97,000	This item is mandatorily required for ICMR Clearance, Hence Procured

S. No	Description	Qty	Unit	Rate	Amount	Remarks
2	Stainless Steel 304 grade CSSD Rectangular Working table	1.00	Nos	46,000	46,000	An autoclave needs a CSSD table. Hence Procured
3	SS-304 working table of size 685 x 685 x 762 mm	2.00	Nos	16,300	32,600	It is necessary to place the equipment's, hence procured as per the instructions of End-user & TSMSIDC Higher officials.
4	SS-304 working table of size 457 x 457 x 762 mm	1.00	Nos	14,500	14,500	It is necessary to place the equipment's, hence procured as per the instructions of End-user & TSMSIDC Higher officials.
5	SS-304 working table of size 61 x 610 x 762 mm	1.00	Nos	15,100	15,100	It is necessary to place the equipment's, hence procured as per the instructions of End-user & TSMSIDC Higher officials.
6	SS-304 working table of size 660 x 610 x 762 mm	1.00	Nos	15,800	15,800	It is necessary to place the equipment's, hence procured as per the instructions of End-user & TSMSIDC Higher officials.
					<b>2,21,000</b>	

- Good Quality interiors' work of Entrance Lobby, Reception & Waiting Area of the Centre was taken up for creating the ambience suited to obtain ICMR certification for operations of IVF Centers. Furniture, AC, Display Signs Boards etc., were installed under close guidance and supervision of Officers of Field Staff as requested by the end user.

S. No	Description	Qty	Unit	Rate	Amount	Remarks
1	Name Plates (Room Names).	38.00	Nos	600	22,800	This work was executed as per the requirement and instructions from higher officials
2	Hydraulic Door Closer (For ABS Doors)	15.00	Nos	2,819	42,285	This work was executed as per the requirement and instructions from higher officials

S. No	Description	Qty	Unit	Rate	Amount	Remarks
3	WPC Doors	9.21	Sqm	6,734	62,020	To maintain low VOC in Fertility centre, wooden doors are replaced with WPC doors as per MOM dated: 01-08-2023. (copy Attached)
4	PVC frames on the walls for covering the area over DB Boxes	0.74	Sqm	6,473	4,790	The work was taken up at reception and entrance area as per the instructions issued by the End user and TSMSIDC higher officials.
5	ABS Doors	32.08	Sqm	9,241	2,96,451	To maintain low VOC in Fertility centre, wooden doors are replaced with ABS doors as per MOM dated: 01-08-2023. (copy Attached)
6	Track lights at side wall décor frame with 4 fixtures and 2 tracks	1	Job	9,600	9,600	This work was executed as per the requirement and instructions from higher officials
7	Dress Hangers	5.00	Nos	510	2,550	This work was executed as per the requirement and instructions from higher officials
8	Sun Control film	48.00	Sqm	381	18,288	This work was taken up at Record room, P Change room, Pre/Post Operative wards, Embryologist room, Store room and Semen Collection room as per the instructions issued by the End user and TSMSIDC higher officials.
9	Rectangular Mirror Frameless of size 457 .2 mm x 609.6 mm (For Change room)	5.00	Nos	1,775	8,875	This work was executed as per the requirement and instructions from higher officials
					<b>5,09,944</b>	

- The Air Handling Units (AHUs) were installed on the terrace above 7th floor as originally contemplated. A shed to cover the AHUs, which is not included in the EPC Contract's scope, was built to protect the AHUs from Rainfall & Direct Sunlight. The Shed also protects the AHUs from Rodents and Pests. This will help in reducing breakdown of the AHU equipment also enhances the life and performance.
- The Estimate/Tender has provided for installation of 1 No condensing Unit for the Operation of HVAC in Embryology Lab & IVF-OT. However it is required to run the Air-Conditioning in this area round the clock (24/7) and it will not be possible to run one condensing unit round the clock. Therefore a second condensing unit was installed additionally with an automatic change over timer so that a single condensing unit will not be required to run continuously.

S. No	Description	Qty	Unit	Rate	Amount	Remarks
1	AHU shed	1.00	Job	3,00,000	3,00,000	This work is proposed as safety measure for AHU's keeping in view of temperature of outdoor and weather conditions. Technically 5° to 6° C temperature will be reduced which will decrease the power bill also.
2	Condensing units - VRF/VRV System - 22 HP	1	Nos	4,02,500	4,02,500	As per the site condition & floor plans approved, the increase of indoor units as the new rooms added requires higher capacity of VRV system. Hence proposed as Supplemental item
3	Air Handling Unit 4400CFM / 11.0 TR	1	Nos	7,18,500	7,18,500	As per the site condition & floor plans approved, the increased area requires higher capacity of AHU. Hence proposed as Supplemental item.
4	Condensing units of 11.0 TR capacity	2	Nos	2,40,750	4,81,500	As per the site condition & floor plans approved, the increased area requires higher capacity of condensing unit to maintain required temperature and increase in AHU capacity too. Hence proposed as Supplemental item
					<b>16,02,500</b>	

- Automatic GAS Alarm Panels for MGPS lines carrying the required Medical Gas from Gas Manifold Room was installed to ensure un-interrupted gas flow as any interruption in Gas Supply even for a short time will have very serious consequences on the incubation process in the labs.

S. No	Description	Qty	Unit	Rate	Amount	Remarks
1	12 mm Valve for 12 mm OD Pipe	3	Nos	930	2790	This work is executed as per the necessity of medical gases in IVF Center under the instructions of End user
2	Fully Automatic Control Panel for CO2 System:	1	Set	175180	175180	This work is executed as per the necessity of medical gases in IVF Center under the instructions of End user
3	Fully Automatic Control Panel for Oxygen System	1	Set	175180	175180	This work is executed as per the necessity of medical gases in IVF Center under the instructions of End user
4	Fully Automatic Control Panel for Trigas System	1	Set	175180	175180	This work is executed as per the necessity of medical gases in IVF Center under the instructions of End user
5	CO2 Manifold for 2 Cylinders	1	Set	20750	20750	Additional Manifold is provided to supply CO2 at 2-3 bar pressure to IVF OT and proposed as AE
6	Medical Air-4 Outlet with matching probe	6	Nos	12470	74820	This work is executed as per the necessity of medical gases in IVF Center under the instructions of End user
7	15mm COPPER PIPE	87.23	Rmt	824	71878	Qty. increased as per the site requirement hence proposed as AE
8	22mm COPPER PIPE	42.65	Rmt	1191	50796	Qty. increased as per the site requirement hence proposed as AE
9	46.7 litre CO2 cylinders	2	Nos	20850	41700	This work is executed as per the necessity of medical gases in IVF Center under the instructions of End user
10	46.7 litre N2O cylinders	2	Nos	33000	66000	This work is executed as per the necessity of medical gases in IVF Center under the instructions of End user
11	46.7 litre size O2 cylinders	2	Nos	17850	35700	This work is executed as per the necessity of medical gases in IVF Centre under the instructions of End user
12	46.7 litre size Trigas cylinders	2	Nos	29250	58500	This work is executed as per the necessity of medical gases in IVF Center under the instructions of End user
13	Trigas Emergency Manifold D-Type	1	Set	9620	9620	This work is executed as per the necessity of medical gases in IVF Center under the instructions of End user
					<b>9,58,094</b>	