

PART - D

Schedule of Quantities

SCHEDULE OF QUANTITIES : ELECTRICAL

Name of Work: Replacement of 4 Nos 13 Passenger Lifts at GPOA, Kendriya Bhavan, Kakkanad, Kochi, Kerala.

Sl.No	Description of Item	Qty	Rate	Unit	Amount
	<u>MAJOR COMPONENT : ELECTRICAL</u>				
	SH-I: LIFT				
1	Supply, installation, testing and commissioning of 13 Passenger (884Kg) with machine directly above lift well, Gearless lift with 1.5 mm thick stainless steel finish on all sides and having contract speed of 1.50 MPS serving different floors in the existing lift shaft and suitable for operation by differently abled persons as per the detailed specifications as under:-				
	Microprocessor based Simplex selective collective with or without attendant				
	Detailed specifications:				
	Speed - 1.50 MPS				
	Floor - 7 Floors (G+6)				
	Travel Height - 18 Mtrs (approx.)				
	Stops & Opening - 7 & 7				
	Drive System - Microprocessor based VVVF				
	Automatic Rescue Device complete with sufficient number of dry maintenance free batteries as required				
	Infra-Red door sensor along full length of doors as required				
	Power:- 415V, 3Phase, 50Hz AC Supply, Voltage Range: 415 V +/-10%				
	Type of doors:-				
	Car door:- Automatic Power operated, Center opening sliding with stainless steel frame scratch proof				

Sl.No	Description of Item	Qty	Rate	Unit	Amount
	surface (Moon rock/ Honeycomb/hairline)				
	Landing doors :- Automatic Power operated, horizontal sliding with stainless steel frame scratch proof (Moon rock/ Honeycomb/hairline)				
	Car operating panel -1 No				
	Braille buttons for visually challenged person inside car & landings.				
	Car Panels:- Stainless Steel moon rock / honeycomb/hairline finish) (1.5mm Thick) & PVC anti-skid flooring with drop ceiling, LED light fittings and fan.				
	Hand rail of stainless steel mirror finish at 900mm above floor level to be fixed in the lift car on three sides of the lift car.				
	Visual floor indications shall be provided above the lift car door and above the landing doors.				
	Voice announcement system in the car to announce the position of the elevator in the hoist way as the car passes or stops at each floor served by the elevator.				
	Providing scaffolding arrangement in the hoist way/ barricading at landings for lift erection and dismantling the same after completion of erection as required				
	Intercom facility:-				
	Lift car :- built-in intercom				
	Ground Floor & at top floor: 1No each for lift passenger to speak with attendant.				
	Car fan:- 1 No cabin fan suitable for 230V, 50Hz, Ac supply mounted on the car				

Sl.No	Description of Item	Qty	Rate	Unit	Amount
	Emergency alarm:- Alarm bell suitable to work on car light inverter and battery back up				
	Separate Maintenance contract agreement shall be executed with the Manufacturer of lift for Annual comprehensive maintenance of the lift which include routine preventive, break down maintenance, repair, replacement of worn out items including lamps, batteries for ARD and Lighting system etc. with minimum down time for a period of five years after completion of one year of guarantee period. The payment for the Annual comprehensive maintenance shall be made quarterly at the end of each quarter. The AMC rate for the first year after completion of one year of guarantee period shall be @5% of the agreement rate for the lift (ie Item No.1) with annual increment @4% for the succeeding periods.				
1.1	13 PASSENGER LIFT (at A Block) as above	1	25,66,658.00	Job	25,66,658.00
2	Supply, installation, testing and commissioning of 13 Passenger (884Kg) with machine directly above lift well , Gearless lift with 1.5 mm thick stainless steel finish on all sides and having contract speed of 1.50 MPS serving different floors in the existing lift shaft and suitable for operation by differently abled persons as per the detailed specifications as under:-				
	Microprocessor based Simplex selective collective with or without attendant				
	Detailed specifications:				
	Speed - 1.50 MPS				
	Floor - 8 Floors (G+7)				
	Travel Height - 21 Mtrs (approx.)				

Sl.No	Description of Item	Qty	Rate	Unit	Amount
	Stops & Opening - 8 & 8				
	Drive System - Microprocessor based VVVF				
	Automatic Rescue Device complete with sufficient number of dry maintenance free batteries as required				
	Infra-Red door sensor along full length of doors as required				
	Power:- 415V, 3Phase, 50Hz AC Supply, Voltage Range: 415 V +/-10%				
	Type of doors:-				
	Car door:- Automatic Power operated, Center opening sliding with stainless steel frame scratch proof surface (Moon rock/ Honeycomb/hairline)				
	Landing doors :- Automatic Power operated, horizontal sliding with stainless steel frame scratch proof (Moon rock/ Honeycomb/hairline)				
	Car operating panel -1 No				
	Braille buttons for visually challenged person inside car & landings.				
	Car Panels:- Stainless Steel moon rock / honeycomb/hairline finish) (1.5mm Thick) & PVC anti-skid flooring with drop ceiling, LED light fittings and fan.				
	Hand rail of stainless steel mirror finish at 900mm above floor level to be fixed in the lift car on three sides of the lift car.				
	Visual floor indications shall be provided above the lift car door and above the landing doors.				
	Voice announcement system in the car to announce the position of the elevator in the hoist way as the car				

Sl.No	Description of Item	Qty	Rate	Unit	Amount
	passes or stops at each floor served by the elevator.				
	Providing scaffolding arrangement in the hoist way/ barricading at landings for lift erection and dismantling the same after completion of erection as required				
	Intercom facility:-				
	Lift car :- built-in intercom				
	Ground Floor & at top floor: 1No each for lift passenger to speak with attendant.				
	Car fan:- 1 No cabin fan suitable for 230V, 50Hz, Ac supply mounted on the car				
	Emergency alarm:- Alarm bell suitable to work on car light inverter and battery back up				
	Separate Maintenance contract agreement shall be executed with the Manufacturer of lift for Annual comprehensive maintenance of the lift which include routine preventive, break down maintenance, repair, replacement of worn out items including lamps, batteries for ARD and Lighting system etc. with minimum down time for a period of five years after completion of one year of guarantee period. The payment for the Annual comprehensive maintenance shall be made quarterly at the end of each quarter. The AMC rate for the first year after completion of one year of guarantee period shall be @5% of the agreement rate for the lift (ie Item No.2) with annual increment @4% for the succeeding periods.				
2.1	13 PASSENGER LIFT (at C3 Block- 1 No) as above	1	26,47,955.00	Job	26,47,955.00
3	Supply, installation, testing and commissioning of 13 Passenger				

Sl.No	Description of Item	Qty	Rate	Unit	Amount
	(884Kg) with machine directly above lift well , Gearless lift with 1.5 mm thick stainless steel finish on all sides and having contract speed of 1.50 MPS serving different floors in the existing lift shaft and suitable for operation by differently abled persons as per the detailed specifications as under:-				
	Microprocessor based Duplex selective collective with or without attendant				
	Detailed specifications:				
	Speed - 1.50 MPS				
	Floor - 8 Floors (G+7)				
	Travel Height - 21 Mtrs (approx.)				
	Stops & Opening - 8 & 8				
	Drive System - Microprocessor based VVVF				
	Automatic Rescue Device complete with sufficient number of dry maintenance free batteries as required				
	Infra-Red door sensor along full length of doors as required				
	Power:- 415V, 3Phase, 50Hz AC Supply, Voltage Range: 415 V +/-10%				
	Type of doors:-				
	Car door:- Automatic Power operated, Center opening sliding with stainless steel frame scratch proof surface (Moon rock/ Honeycomb/hairline)				
	Landing doors :- Automatic Power operated, horizontal sliding with stainless steel frame scratch proof (Moon rock/ Honeycomb/hairline)				
	Car operating panel -1 No				

Sl.No	Description of Item	Qty	Rate	Unit	Amount
	Braille buttons for visually challenged person inside car & landings.				
	Car Panels:- Stainless Steel moon rock / honeycomb/hairline finish) (1.5mm Thick) & PVC anti-skid flooring with drop ceiling, LED light fittings and fan.				
	Hand rail of stainless steel mirror finish at 900mm above floor level to be fixed in the lift car on three sides of the lift car.				
	Visual floor indications shall be provided above the lift car door and above the landing doors.				
	Voice announcement system in the car to announce the position of the elevator in the hoist way as the car passes or stops at each floor served by the elevator.				
	Providing scaffolding arrangement in the hoist way/ barricading at landings for lift erection and dismantling the same after completion of erection as required				
	Intercom facility:-				
	Lift car :- built-in intercom				
	Ground Floor & at top floor: 1No each for lift passenger to speak with attendant.				
	Car fan:- 1 No cabin fan suitable for 230V, 50Hz, Ac supply mounted on the car				
	Emergency alarm:- Alarm bell suitable to work on car light inverter and battery back up				
	Separate Maintenance contract agreement shall be executed with the Manufacturer of lift for Annual comprehensive maintenance of the lift which include routine preventive, break down maintenance, repair,				

Sl.No	Description of Item	Qty	Rate	Unit	Amount
	replacement of worn out items including lamps, batteries for ARD and Lighting system etc. with minimum down time for a period of five years after completion of one year of guarantee period. The payment for the Annual comprehensive maintenance shall be made quarterly at the end of each quarter. The AMC rate for the first year after completion of one year of guarantee period shall be @5% of the agreement rate for the lift (ie Item No.3) with annual increment @4% for the succeeding periods.				
3.1	13 PASSENGER LIFT (at C1 Block-02 Nos) as above	2	26,47,955.00	Job	52,95,910.00
4	Dismantling of existing 13-passenger electric lift including all mechanical, electrical and structural components such as car, counterweight assembly, guide rails, landing doors, calling indicators, controller panels, hoist-way equipment, buffers, wiring, cabling, safety gear, drive motor, machine unit, and all associated fixtures; complete as per CPWD specifications.	4	49,834.00	Job	1,99,336.00
5	Credit of Old passenger lift				
5.1	13 Passenger Lift with all mechanical and electrical accessories (G+6)	1	-1,53,400.00	Job	-1,53,400.00
5.2	13 Passenger Lift with all mechanical and electrical accessories (G+7)	3	-1,65,200.00	Job	-4,95,600.00
	** Note : The rates of items at SI No. 5.1& 5.2 in this Schedule of work will be taken as per the NIT rates, if the agency quoted % below the ECPT and same rate will be suitably enhanced by Tender %, if the agency quoted % above the ECPT. The total value of Tendered amount will be calculated based on the above method.				
	SH-II: IEI & FITTINGS				
6	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS/HFFR PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit, with modular switch, modular plate,				

Sl.No	Description of Item	Qty	Rate	Unit	Amount
	suitable GI box and earthing the point with 1.5 sq.mm FRLS/HFFR PVC insulated copper conductor single core cable etc. as required.				
6.1	Group C	4	2,277.57	Point	9,110.28
7	Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS/HFFR PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS/HFFR PVC insulated copper conductor single core cable etc. as required.				
7.1	Group C	35	1,328.58	Point	46,500.30
8	Wiring for light/ power plug with 2X4 sq. mm FRLS/HFFR PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit along with 1 No. 4 sq. mm FRLS/HFFR PVC insulated copper conductor single core cable for loop earthing as required.	175	498.55	Meter	87,246.25
9	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
9.1	20 mm	20	339.50	Meter	6,790.00
10	Supplying and drawing following sizes of FRLS/HFFR PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required.				
10.1	3 x 1.5 sq. mm	20	139.01	Meter	2,780.20
11	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS/HFFR PVC insulated copper conductor, single core cable in surface/				

Sl.No	Description of Item	Qty	Rate	Unit	Amount
	recessed medium class PVC conduit as required.				
11.1	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	40	644.24	Meter	25,769.60
11.2	4 X 10 sq. mm + 2 X 6 sq. mm earth wire	40	1,440.85	Meter	57,634.00
11.3	4 X 16 sq. mm + 2 X 6 sq. mm earth wire	12	1,943.42	Meter	23,321.04
12	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	39	880.82	Each	34,351.98
13	Supplying and fixing of following ways surface/ recess mounting, vertical type, 415 V, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 A tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCBs (but without MCBs and incomer) as required . (Note : Vertical type MCB TPDB is normally used where 3 phase outlets are required.)				
13.1	4 way (4 + 12), Double door	4	10,627.31	Each	42,509.24
14	Supplying and fixing following rating, four pole, 415 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
14.1	63 A	4	1,490.31	Each	5,961.24
15	Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
15.1	40 A	4	4,613.94	Each	18,455.76

Sl.No	Description of Item	Qty	Rate	Unit	Amount
16	Supplying and fixing following rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
16.1	40 amps TP MCB	4	3,075.00	Each	12,300.00
17	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
17.1	12 way, Double door	4	3,837.38	Each	15,349.52
18	Supplying and fixing following rating, double pole, 240 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
18.1	40 A	4	630.88	Each	2,523.52
19	Supplying and fixing following rating, double pole, (single phase and neutral), 240 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
19.1	25 A	4	2,861.66	Each	11,446.64
20	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
20.1	Single pole	20	380.93	Each	7,618.60

Sl.No	Description of Item	Qty	Rate	Unit	Amount
21	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	32	18.71	Each	598.72
22	Supply, installation, testing and commissioning of the IP 66 rated 10 W LED Bulk Head fitting with light output not less than 1000 lumen and power consumption not less than 10W. Complete with all accessories directly on ceiling/wall including connection with 1.5 Sq mm FRLS PVC insulated copper conductor, single core cable etc as required.	39	1,926.00	Each	75,114.00
23	Supplying and fixing 4 Pole sheet steel enclosure on surface/ recess along with 40A Four Pole ,415 Volts Residual Current Circuit Breaker(RCCB) having a sensitivity Current upto 100 mA complete with connections, testing and commissioning etc. as required.	4	5,577.00	Each	22,308.00
	TOTAL (MAJOR COMPONENT - ELECTRICAL)				1,05,68,548.00

Sl.No	Description of Item	Qty	Rate	Unit	Amount
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<u>SCHEDULE OF QUANTITIES : CIVIL</u>					
	MINOR COMPONENT - CIVIL				
1	REINFORCED CEMENT CONCRETE				
1.1	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, flets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement:				
1.1.1	1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	1.55	14,683.55	cum	22,695.00
1.2	Centering and shuttering including strutting, propping etc. and removal of form for				
1.2.1	Lintels, beams, plinth beams, girders, bressumers and cantilevers	10.00	996.30	sqm	9,963.00
1.3	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.				
1.3.1	Thermo-Mechanically Treated bars of grade Fe-500D or more.	110.00	145.90	kg	16,049.00
2	MASONRY WORK				
2.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in :				
2.1.1	Cement mortar 1:6(1 cement: 6 coarse sand)	7.50	12,319.95	cum	92,400.00
3	CLADDING WORK				

Sl.No	Description of Item	Qty	Rate	Unit	Amount
3.1	Granite work gang saw cut (polished and machine cut) of thickness 18 mm for wall lining (veneer work), backing filled with a grout of average 12 mm thick in cement mortar 1:3 (1 cement : 3 coarse sand), laid and jointed with white cement slurry @ 3.3 kg/sqm including pointing with white cement slurry admixed with pigment to matching shade (To be secured to the backing by means of cramps, which shall be paid for separately).				
3.1.1	Granite stone slab of colour Jet Black, Cherry/Ruby Red				
3.1.1.1	Area of slab over 0.50 sqm	121.00	11,410.65	sqm	13,80,689.00
3.2	Providing and fixing cramps of required size & shape in RCC/ CC / Brick masonry backing with cement mortar 1:2 (1 cement :2 coarse sand), including drilling necessary hole in stones and embedding the cramp in the hole (fastener to be paid separately).				
3.2.1	Gunmetal cramps	80.00	978.80	kg	78,304.00
4	FINISHING				
4.1	12 mm cement plaster of mix :				
4.1.1	1:6 (1 cement: 6 fine sand)	33.00	451.00	sqm	14,883.00
4.2	Distempering with 1st quality acrylic distemper (ready mixed) having VOC (Volatile Organic Compound) content less than 50 gram/ litre, of approved brand and of required said and colour complete to give and even shade.				
4.2.1	Old work (one or more coats)	957.00	84.85	sqm	81,201.00
5	DISMANTLING AND DEMOLISHING				
5.1	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50	3.00	4,804.70	cum	14,414.00

Sl.No	Description of Item	Qty	Rate	Unit	Amount
	metres lead as per direction of Engineer - in- charge.				
5.2	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.				
5.2.1	In cement mortar	10.00	2,787.35	cum	27,874.00
5.3	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	130.00	73.95	sqm	9,614.00
5.4	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	20.00	357.10	cum	7,142.00
	TOTAL (MINOR COMPONENT - CIVIL)				17,55,228.00
	ABSTRACT OF TOTAL ESTIMATED COST				
	TOTAL (MAJOR COMPONENT – ELECTRICAL)				1,05,68,548.00
	TOTAL (MINOR COMPONENT – CIVIL)				17,55,228.00
	GRAND TOTAL				1,23,23,776.00
	Say				1,23,23,776.00
(Rupees One Crore Twenty Three Lakhs Twenty Three Thousand Seven Hundred and Seventy Six Only)					

Contractor

Executive Engineer



Central Public Works Department

NIT. NO. 50/SE/EE(E)-KOCHI/2026-27

Name of Work: Replacement of 4 Nos 13 Passenger Lifts at GPOA, Kendriya Bhavan, Kakkanad, Kochi, Kerala.

ABSTRACT OF COST

Name of the Contractor					
Sl.No.	Name of Component	Estimated Cost (Rs.)	Percentage above or below the estimated cost	% in Figures	Tendered Amount (Rs.)
1	Rs. 1,23,23,776/- (Civil- Rs. 1,05,68,548/- + E&M- Rs. 17,55,228/-)	1,23,23,776 /-			
	Total Amount as per Schedule of Quantities	1,23,23,776/-			

Important Note:

1. The estimated cost of tender has been worked out by taking into consideration the cost index of **Cochin District** for DSR 2023 (Civil) and DSR 2025 (Electrical) and market rates for NSR items; therefore are adjusted accordingly.
2. The tenderer is to quote a single consolidated percentage only at par/above/below estimated cost to cover all the rates of all the items under the schedule of composite tender.
3. If the percentage quoted is not clear, or if the rate is not quoted in percentage, the tender shall be treated as invalid and will not be considered as lowest tenderer.
4. The rates quoted by the tenderer shall be inclusive of all taxes including GST and levies applicable in respect of this contract. Government will not entertain any claim whatsoever in respect of the same.

Contractor

Executive Engineer