



### 4.3 Elevation

The elevation of the building has been fashioned to partially mimic the exiting façade of the TMC block. The areas marked in ash colour are large vertical bands which may be used for digital displays in the future. The vertical and horizontal RCC fins forming the louvers for sun-shading have been repeated in the new façade. The image below shows the façade of the building.



Figure 9: Exterior view of the CCC

## 5 Project Implementation Period

The Project implementation has been spanned over a period of 9 months. The chart below shows an initial 4 months for administrative process while the following 9 months are dedicated to implementation.

Table 2: Project Implementation chart

Task No.	Task Name / Activities	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11
1.1	Mobilization, Preliminaries	█										
1.2	Survey of existing features		█									
1.3	Dismantling and disposal of existing structure		█									
1.4	Excavation			█								
1.5	Basement floor - RCC footing, Pedestal, Raft foundation			█								
1.3	Basement floor - Retaining Wall, Columns, Stairs, Lift Well			█								
1.4	Basement floor - Beams and Slab				█							
1.5	GF RCC footing, Pedestal, Grade Beam				█							
1.6	GF RCC Columns, Stairs, Lift Well				█							
1.10	GF RCC Beams and Slabs					█						
1.11	FF RCC Columns, Stairs, Lift Well						█					
1.12	FF RCC Beams and Slabs							█				
1.13	Terrace floor - RCC OH tank, Parapet etc.								█			
1.14	RCC Vertical facade									█		
1.15	GF & FF - Block Work, Plastering										█	
1.16	Structural Earthing & Laying of water and Sewer pipeline											█
1.17	Door & Windows fixing											█
1.18	Sanitary & Water line piping and fittings											█
1.19	Landscaping											█
1.20	Cleaning and clearing snags											█
1.21	Handing Over											█

## 6 SCOPE OF WORK

As per the above mentioned design components a general scope of work is drawn out. This scope of work will be a reference document for the contractor to understand the project to be undertaken and will be an integral part of the RFP document.

However, over and above this, the binding document for the contractor to submit quotation would be the complete Bid document which will include Tender documents, BOQ, Tender drawings and specification standards etc. General layout of the Civil, Interior finishes, PHE and Landscape works to be implemented will be done as per Tender drawings which are a part of this contract. The work for all the various trades as given in this tender shall be executed in accordance with the necessary provisions and applicable specifications. Details of the required action are given elsewhere in this tender and in the BOQ. Contractor shall do all Confirmative survey and take necessary statutory clearances from all authorities as applicable, at his/her own cost with the assistance of the Client.

The scope of work for the Construction of Command and Control Center shall include the following-

### 1. Dismantling and Demolishing

- a) The Janaseva Kendra of area 140 m<sup>2</sup> in the NW corner of the TMC campus shall be demolished completely.
- b) The Interlocked pathway in front of the Janaseva Kendra needs to be dismantled and reinstalled with steps and ramps to the entrance to the CCC.
- c) The Landscaped area and the Cassia Fistula tree in the NW corner of the site shall be taken apart to create the new interlocked pathway entry for vehicle that refuel the Generator.

### 2. Earth Work and Foundation

- a) Excavation shall be done by mechanical means of hydraulic excavator and necessary shoring shall be done as mentioned in BOQ.
- b) Excavated earth shall be disposed by mechanical transport including loading, transporting, unloading to approved municipal dumping ground for lead up to 10 km.
- c) Isolated footing and raft foundation shall be done as per structural drawing and BOQ.

### 3. Anti-termite treatment- Chemical emulsion shall be diluted and injected along external wall areas where the apron is not provided and under floors as mentioned in BOQ.

### 4. Concrete Work

- a) Cement concrete shall be used in retaining walls, return walls, walls including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor, etc. up to floor level.
- b) Damp-proof course of 50mm thick shall be laid with cement concrete as mentioned in BOQ. A coat of residual petroleum bitumen shall be applied on the damp-proof course after cleaning the surface with brushes and with a piece of cloth lightly soaked in kerosene oil as mentioned in the BOQ.
- c) M25 grade cement concrete shall be used for the RCC works including admixture in recommended proportion as per BOQ and instruction of engineer-in-charge.
- d) Steel reinforcement up to the plinth level shall be done using thermo-mechanically treated bars of grade FE-500D or more as mentioned in BOQ.

**5. Wall and Masonry**

- a) Solid block masonry shall be done wherever shown in drawing as per the discretion of SCTL using pre-cast solid blocks for foundation, plinth, superstructure with 20cm thickness and above as mentioned in BOQ.
- b) Half brick masonry with common burnt clay FPS non-modular brick shall be done as per the discretion of SCTL in the superstructure above the plinth level wherever shown in the drawing

**6. Flooring and Tile work**

Sloped areas of the roof shall be clad with pressed clay-tile with roof coat paint of approved premium-class exterior paint of grey colour as shown in the drawing and mentioned in BOQ.

**7. Finishing**

- a) Plastering of specified thickness and mix shall be done in areas as mentioned in the BOQ.
- b) White cement based putty of average thickness 1 mm and approved brand shall be applied on all plastered surfaces as mentioned in the BOQ.
- c) All steel work shall be finished with epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat as per engineer-in-charge.

**8. Water Supply and Sanitary Installations-** All fittings shall be installed in areas as shown in the drawing and shall be accompanied by necessary pipes, appurtenances, painting and cutting as mentioned in BOQ and done as per engineer-in-charge.

- a) Wall hung corner-type wash basin and 15 mm sensor based pillar taps.
- b) Double-Hook.
- c) Stainless steel toilet paper holder.
- d) Urinal systems of approved make with sensor and automatic flushing cistern.
- e) White vitreous china urinal division plate.
- f) Stainless-steel single-bowl kitchen-sink with C.I. brackets and stainless steel plug, with wall mounted type sink mixer and regular swinging spout, with drain board.
- g) Bib cock with wall flange
- h) Towel rod 60cm or nearest available length
- i) Counter top wash basin installed into granite, 15 mm sensor based pillar taps.
- j) Under-counter type wash basin to install into granite, 15 mm sensor based pillar taps.
- k) Automatic Tissue dispenser of standard size.
- l) White vitreous china wall mounted type European closet with dual flush cistern including seat cover, and cistern fittings, nuts bolts and gasket.
- m) Sensor-operated warm air hand dryer with rotating nozzle.
- n) CP Hand rail in differently-abled toilet of approved make.
- o) Brass concealed floor trap of 110 mm outer dia (multi trap).
- p) 600x450 mm bevelled edge mirror of superior glass
- q) Stainless steel soap dish
- r) Health Faucet
- s) Liquid Soap dispenser

**9. Plants and Trees-** All landscaping works shall be done as per BOQ and engineer-in-charge

- a) Excavated earth mixed with manure or sludge shall be stacked into the dug areas of the soil around where the landscaping is intended.

- b) Anti-termite treatment shall be done by digging holes using chemical emulsion.
- c) Shrubs to be planted at site including watering-
  - i. Happy plant (Draceana Messangiana)
  - ii. Nerium oleander (kaner)
  - iii. Cuphea chinensis plant

**10. Joinery Works-** All joinery works shall be done as per drawings, BOQ and instructions of engineer-in-charge on the exterior walls and toilets only.

**11. Waterproofing works**

- a) water proofing treatment shall be done in sunken portion of WCs, bathroom etc by applying cement slurry mixed with water proofing cement compound as mentioned in BOQ and as per engineer-in-charge.
- b) Four-course water proofing treatment shall be done with bitumen felt over roofs consisting of first and third courses of blown bitumen.
- c) Integral crystalline slurry of hydrophillic shall be used for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservoir, etc

**12. Structural Earthing-** Copper bonded steel solid round conductor 10mm diameter as mentioned in the BOQ.

**13. Miscellaneous**

- a) An underground water reservoir of 20000L capacity and the UG Fire-fighting reservoir of 18000L capacity shall be provided in the NW corner as shown in the drawing.
- b) An overhead reservoir of 9000L capacity shall be provided as shown in the drawing.
- c) Brick masonry manhole in cement mortar with SFRC manhole cover shall be provided as specified in the drawing and BOQ.
- d) Fires Escape Steel stair shall be installed from the first floor Main Ops Room to the ground directly as shown in the drawing.
- e) Handrail for the main stair shall be installed in steel as mentioned in the BOQ.

**14. Service Connections-**

- a) KWA Water Connection
- b) KWA Sewerage connection to the main system

**15. Obtain final Approvals**

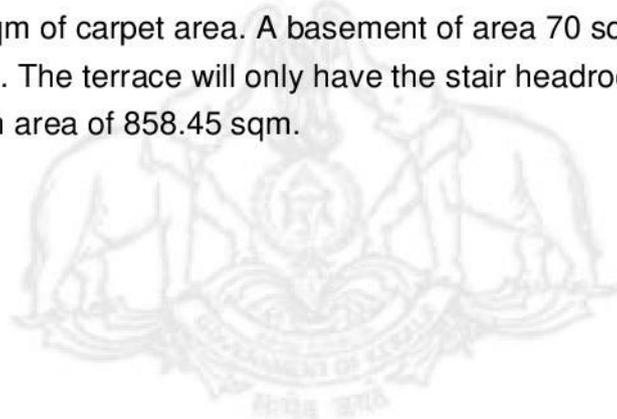
- a) Occupancy Certificate from TMC
- b) Any other approval and permissions required from concerned authorities.

The scope as described above is only indicative and not exhaustive. The Contractor shall be responsible for doing all the detailed designs and executing all the items required for completing the project in all respect to make the utility units accessible, and ready for workability and also all services and works complete as per direction of Engineer-in-charge.

The interior works, Electrical, HVAC, Fire-fighting, ICT and BMS works is not included in this scope and shall be done as a subsequent tender.

**Name of work : COMMAND CONTROL CENTRE****ESTIMATE REPORT**

The Detailed Estimate amounting Rs 1,60,81,000/- (Rupees One Crore Sixty Lakhs and Eighty One Thousand only) The Command and Control Center shall be designed in a new block as well as the interior of the old block. The new extension block in the ground floor shall house the CCC reception, Locker rooms, washrooms, dining, pantry and common movement spaces. It shall occupy an area of 236.62 sqm of plinth area and 202.17 sqm of carpet area. The first floor shall house the Video wall room, War room, help desk and common movement spaces, Work area, meeting rooms, conference rooms, planning section, Server room, UPS room, NOC room, VIP entry and Ladies' and Gents' toilets. The total area of the first floor is 533.51 sqm of Plinth area and 452.84 sqm of carpet area. The total space selected for the design is of area 770.13 sqm of plinth area and 655.01 sqm of carpet area. A basement of area 70 sqm has been provided for the Fire-fighting pump room. The terrace will only have the stair headroom of area 17.62 sqm. The total facility will have an area of 858.45 sqm.



Other Engineering Organisations

**PRICE**

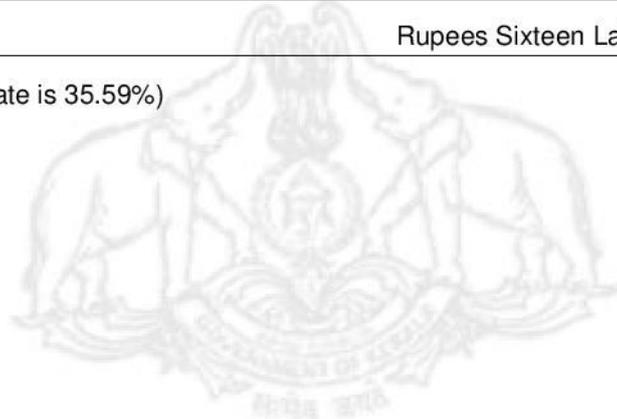
ICCC Structural Earthing

General Abstract

(Dsr year: 2018, Cost Index Applied for this estimate is 35.59%)

SI No	Heading Description	Amount
1	<b>Structural Earthing</b>	1375845.35
	Provision for GST payments (in %) @	<b>18.0%</b>
	Amount reserved for GST payments	<b>247652.16</b>
	Total	<b>1623497.16</b>
	Lumpsum for round off	<b>502.84</b>
		<b>TOTAL Rs 1624000.00</b>
		<b>Rounded Total Rs 16,24,000</b>
		Rupees Sixteen Lakh Twenty Four Thousand Only

(Cost Index Applied for this estimate is 35.59%)



Other Engineering Organisations

**PRICE**