

THANE MUNICIPAL CORPORATION
FIRE BRIGADE THANE

No.: TMC/CFO/M/HR/ 342/336
Date: 08 /02/2024

SUB : NOC stipulating fire protection & fire fighting requirements for **Amendment** Commercial Building of Data Centre & GIS Sub Station on plot bearing C.T.S No.1996/B, (Old S.No. 238/2 (pt)) of Village Kalwa, Thane-Belapur Road, Thane, Tal. & Dist. Thane.

For M/s. Digital Edge DC (India) Pvt. Ltd. (Owner)

- REF :** i) Proposal Code – TMCB-23-48881.
ii) Letter Dt.05/02/2024 from M/s. Ambiaance Design Pvt. Ltd. through Director Ar. Makarand Toraskar.
iii) Initial NOC No. – TMC/CFO/M/HR/289/44, dated. 22/05/2023.
iv) Date of Inspection by STO Mr. J. L. Shelke on Dt.07/02/2024.

A.D.T.P. (TMC) Thane

In this case please refer to this office Initial NOC for Buildings vide No.- TMC/CFO/M/HR/ 289/44, dated. 22/05/2023, having Ground + 1st to 6th Floor with a total height of 46.55 Mt. from general ground level up to terrace level & GIS Substation Building having Ground + 1st & 2nd floor with a total height of 12.10 Mt. from general ground level up to terrace level. Permission/C.C. issued vide letter no. TMCB/B/2023/APL/00760, Dt.27/06/2023 upto 6th floor for Data Center Bldg. & upto 2nd floor for GIS Sub Station Bldg.

Now, Architect has submitted the amended plan & proposed the following amendments.

1. Architect has proposed minor internal changes & increase building height from 46.55 Mt. to 47.05 M., Now Data Centre Building having Ground + 1st to 5th Floor + 6th Lower Roof Floor.
2. Proposed minor internal changes & increase building height 12.10 Mt. to 14.65 M., Now GIS Sub Station Building having Ground + 1st & 2nd floor and minor changes in Layout.

Bldg. No.	Bldg. Name.	Floors	Users
High Rise	Data Center Bldg.	Ground	Shipping/Receiving, Waste/Recycle, Temporary Secure Storage Room, Secure Storage/Staging Room, Freight Lift Lobby AC, FOH electrical Room AC, 02 Nos. ITR Block AC, 02 Nos. Batt Room ACMV, Janitor, Fire Control Room, Office AC, Office, Meeting Room AC, Room/Local, 03 Nos. Flex Space AC, 02 Nos. ELV Room AC, Pantry, FER Room AC, Preaction Room ACMV, Customer Service/Work Area AC, Break Room/Kitchen AC, Lobby ACMV, Security Control Room (SCR) AC, Security AC, Vestibule Ac, Lobby AC, 02 Nos. Conference Room, Future Data Hall AC, 02 Nos. MV Room ACMV, Pre Action Room ACMV, FER Room AC, Security/Loading Dock Office AC, Mantrap/Loading Dock Security Vestibule AC & Loading/ Unloading Bay.
		1st Floor	02 Nos. DG-Gantry, Freight Lift Lobby ACMV, 02 Nos. STS Room ACMV, 02 Nos. Primary Block ACMV, 03 Nos. Batt Room ACMV, 02 Nos. Flex Space ACMV, Mechanical Redundant Block ACMV, 02 Nos. Pre Action Room ACMV, 02 Nos. FR Room ACMV, ELV Room ACMV, Lobby ACMV, Retail Data Hall ACMV, Hyper Scale Data Hall ACMV, Lobby ACMV & NIR Room ACMV.



		2nd & 3rd Floor	02 Nos. DG Gantry, Freight Lift Lobby ACMV, 02 Nos. STS Room ACMV, 02 Nos. Primary Block ACMV, 02 Nos. Batt Room ACMV, ELV Room ACMV, Lift Lobby AC, 02 Nos. FR Room ACMV, 02 Nos. Preaction Room ACMV, 02 Nos. Hyper Scale Data Hall ACMV, 02 Nos. Lobby ACMV, Flex Space ACMV & NIR Room ACMV.
		4 th (Refuge) Floor	02 Nos. DG Gantry, Freight Lift Lobby ACMV, 02 Nos. STS Room ACMV, 02 Nos. Primary Block ACMV, 02 Nos. Batt Room ACMV, ELV Room ACMV, Lift Lobby AC, 02 Nos. FR Room ACMV, 02 Nos. Preaction Room ACMV, Lobby ACMV, 02 Nos. Hyper Scale Data Hall ACMV, Flex Space ACMV, NIR Room ACMV & Refuge Area.
		5th Floor	02 Nos. DG Gantry, Freight Lift Lobby ACMV, 02 Nos. STS Room ACMV, 02 Nos. Primary Block ACMV, 02 Nos. Batt Room ACMV, ELV Room ACMV, Lift Lobby AC, 02 Nos. FR Room ACMV, 02 Nos. Preaction Room ACMV, 02 Nos. Hyper Scale Data Hall ACMV, 02 Nos. Lobby ACMV, Flex Space ACMV & NIR Room ACMV.
		6th (Refuge) Floor	Freight Lift Lobby, 02 Nos. Electrical Room, 02 Nos. Battery Room ACMV, Fire Lift Lobby, 02 Nos. ELV Room ACMV, 02 Nos. Preaction Room ACMV, Fire Lobby ACMV & Refuge Area.
Low Rise	GSI Sub Station Building	Ground	02 Nos. Cable Cellar & Tariff Meeting Room.
		1st Floor	Loading/Unloading Platform, GIS Room, 02 Nos. Battery Room, Pantry, Store Room, LT Panel Room, 02 Nos. Switchgear Room.
		2nd Floor	MSETCL CRP & Scada Room, Client CRP & Scada Room & UPS Room.



THE DETAILS OF STAIRCASES & LIFTS

Building	Staircase description	Width of staircase	Nos. of staircase
Data center	Leading from Ground to terrace	1.50 m. wide	03 Nos.
	Leading from Ground to 5th floor	1.50 m. wide	02 Nos.
Substation	Leading from Ground to 2nd floor	1.71 m. wide	01 No.
	Leading from Ground to terrace	1.69 m. wide	01 No.

Building	Lifts Type	Profile	Nos. of lifts
Data center	Passenger lift	Leading from Ground to 6th Floor	02 Nos.
	Fire lift	Leading from Ground to 6th Floor	02 Nos.
	Freight lift	Leading from Ground to 6th Floor	02 Nos.

The proposed staircases as shown in plans are enclosed type and are externally located & adequately ventilated to outside air above ground level. One of the lift from each lift bank of building will be converted into Fire lift. The lift lobby & common corridor at each floor level is directly ventilated to outside air as shown on the plan.



REFUGE AREA :

Sr. No.	Building	Floor	Provided Area (In Sq. M.)	Height (In M.)
1	Data center	4th	129.00	27.05
		6th	74.03	40.35

In addition to that terrace of building will be treated as refuge area.
Whether to calculate excess Refuge area in FSI or not shall be decided by A.D.T.P.

The A.D.T.P. is requested to scrutinized the plans & verify civil work and all other requirements pertaining to civil Engineering side including open spaces, R.G.s, corridors, staircases, amendments, height, refuge area in sq.mt. & floor occupancy of the building. If any changes in the plans other than mentioned above then A.D.T.P. shall refer back the proposal to this department for revised NOC till then further process shall not be permitted.

THE OPEN SPACES :

Plot is approachable by 30.00 M. wide D.P. Road from East Side and Accessible from 18.00 M. wide layout road from South side.

Building Name	East	West	South	North
Data Center Bldg.	8.13 Mt. & 30.00 Mt. W. D.P. Road	12.28 Mt.	9.76 Mt.	6.00 Mt. W. Drive way
GIS Sub Station Bldg.	5.68 Mt. from Reservation R.G. Area	12.86 Mt.	6.00 Mt. W. Drive way	3.16 Mt.

Except above mentioned amendments in a Buildings of there is no any changes i.e. Staircases, location & area of refuge, Lift etc.

In view of the above, as far as this department is concerned, there is no objection from fire safety point of view for the above mentioned amendments for the proposed construction of commercial Building of Data Centre having Ground + 1st to 5th floor + 6th Lower Roof Floor with a total height of 47.05 M. from general ground level up to terrace level and GIS Sub Station having Ground + 1st & 2nd floor with a total height of 14.65 M. from general ground level up to terrace level as shown on enclosed amended plans, signed in token of approval subject to compliance of the following additional modified requirements stipulated by this department.

1. All the fire safety measures stipulated earlier Initial NOC No. – TMC/CFO/M/HR/289/44, dated. 22/05/2023 shall be strictly adhered to along with the following additional fire safety requirements.
2. There shall be no tree/canopy/arch/car parking to be located in compulsory open spaces. No compound wall shall be constructed on all road side.
3. Plot is approachable by 30.00 M. wide DP road from East side and accessible from 18.00 M. wide layout road from South side.
4. Architect has proposed operational area for firefighting at Ground level.
5. Automatic sprinkler system shall be provided in entire lift lobby, common corridor of each floor level, entire Commercial/official/technical Area, entire surface car parking area in such way to cover each car parking. As per the standards lay down by TAC or relevant IS specification.
6. Automatic smoke detection system shall be provided in lift lobby & common corridor at each floor level, entire Commercial/official/technical Area, entire sub-station, electric meter room & each lift machine room, Control / BMS Room and in electric shaft at every floor level with response indicator.





7. Fireman's lift / Fire lift shall be provided as per 9.27 of UDCPR & 7.1, 7.2 of Section 5, subsection 5A of Part VIII NBC 2016.
8. Fire and Life Safety Audit shall be carried out by the owner, or where the owner is not traceable, the occupier of a building as per section 45A of the Maharashtra fire Prevention and Life Safety measures (Amendment) Act (2023).
9. A qualified Fire Officer with experience of not less than 3 years shall be appointed as per clause 4.10.1 & 4.10.2 of NBC 2016 (Part IV) who will be available on the premises, for large educational complexes, business buildings with height 30 m and above, residential building with height 60 m and above, institutional buildings of 15 m and above, starred hotels and D-6 occupancy
10. For the building as specified under section 45, the owner, or where the owner is not traceable, the occupier of a building, shall ensure that the fire fighting systems as recommended in the relevant Fire Safety Approval, is provided with automated continuous monitoring system as may be prescribed for ensuring that the fire fighting systems are in good repair and efficient working condition and these shall be certified by the Licensed Agency in the prescribed form and the manner and shall submit the same to the concerned authority in the manner as may be prescribed."
11. It is important to limit the spread of a fire in any building. The usual method is to use fire barriers. In some instances these barriers need to be penetrated for ductwork, plumbing and electrical systems, and in such cases, use of passive fire protection measures shall be done so that the integrity of these barriers is not compromised.
12. The fire resistances rating for staircase F.R.D., Lift lobby/protected lobby & the lift doors as per N.B.C provisions.
13. Smoke extraction system & Smoke management system shall be provided as per as per NBC 2016
14. Provision of pumps as per table no. 7 with relevant notes & Provision of pump house as per 5.1.2.2 of Part IV NBC 2016.
15. During construction stage and before the final occupation party agreed to comply additional requirement stipulated by Thane Fire Brigade Officer.
16. If any discrepancies observed during construction Thane Fire Brigade officer may changed the requirement as the rules.

No other changes except mentioned above as shown on the plan shall be carried out in the building unless / until permitted by this department. Otherwise NOC's issued by this department will be revoked by Chief Fire Officer.

At the time of Final NOC or during construction if any irregularity is observed, then above NOC will be revoked by Chief Fire Officer, Thane.

Summary of Paid Charges -

Charges	Amount	Receipt
Already paid Fire premium Charges	26,94,612/-	TMC/HQ/FIR/000213/23-24-20 Dt.19/05/2023
Already Paid Fire Safety Fund	1,68,414/-	TMC/HQ/FIR/000214/23-24-20 Dt.19/05/2023
Fire Safety And Emergency Charged to be paid for Data Center Bldg. on additional area.	1,14,395/-	TMC/HQ/FIR/001137/23-24 Dt.08/02/2024
Fire Safety And Emergency Charged to be paid for GIS Sub Station Bldg. on additional area.	47,479/-	TMC/HQ/FIR/001138/23-24 Dt.08/02/2024

Architect has certified the area & accordingly paid the various fees. Architect has certified & submitted the table of area along with fees paid, if any differences in fees paid & if any queries objected by the auditor then balance fees to be paid by Architect / developer, After payment of the said fees then only any amended NOC or final NOC for occupation will be issued or recovered legally as per rules & regulation.

However, A.D.T.P., TDD, TMC, Thane is requested to verify the total built-up area and inform this department, if the same is found to be more for the purpose of levying additional Scrutiny fees, if required.

Note:

1. The fire fighting installation shall be carried out by licensed approved agency.
2. The area calculation shown in the enclosed plan shall be checked by the A.D.T.P.
3. The A.D.T.P. is requested to scrutinized the plans & verify civil work and all other requirements pertaining to civil Engineering side including open spaces, R.G., corridors, staircases, amendments, height, refuge area in sq. m. & floor occupancy of the building. And if these plans, given open space is not approvable then this NOC shall be refer back to this department for revised NOC also till then further process of issuing IOD & C.C. shall not be permitted.
4. This N.O.C. is issued from fire risk point of view only.
5. The schematic drawings/plans of Sprinkler system, smoke detection System, Wet riser system, Public Address system etc. shall be got approved from CFO prior to installation.
6. Necessary permission for any licensable activity shall be obtained from concerned department & T.M.C. / C.F.O.'s department till then shall not be allowed to use.
7. During construction stage and prior to final occupation party agreed to comply with additional requirements stipulated by Thane Fire Brigade Officer if any in future.
8. Architect / Developer shall comply all the conditions laid down in environmental clearance NOC.
9. There shall be no tree/car parking to be located in compulsory open spaces, No compound wall shall be constructed on all road side and joint open spaces all around the building.
10. A qualified Fire Officer with experience of not less than 3 years shall be appointed as per clause 4.10.1 & 4.10.2 Of NBC 2016, Part IV, who will be available on the premises, for large educational complexes, business buildings with height 30 m and above, residential building with height 60 m and above, institutional buildings of 15 m and above, starred hotels and D-6 occupancy.
11. Fire and Life Safety Audit shall be carried out by the owner, or where the owner is not traceable, the occupier of a building as per section 45A of the Maharashtra fire Prevention and Life Safety measures (Amendment) Act (2023).
12. For the building as specified under section 45, the owner, or where the owner is not traceable, the occupier of a building, shall ensure that the fire fighting systems as recommended in the relevant Fire Safety Approval, is provided with automated continuous monitoring system as may be prescribed for ensuring that the fire fighting systems are in good repair and efficient working condition and these shall be certified by the Licensed Agency in the prescribed form and the manner and shall submit the same to the concerned authority in the manner as may be prescribed."
13. The area, size is to be consulted as per relevant I.S. Standards and Codes with consultant for the sprinkler system, detection system, fire alarm system, wet riser system, public address system, electrical duct, etc. to be verified & examined.
14. If any discrepancies observed during construction, then above said NOC will be revoked by chief Fire Officer.



**Chief Fire Officer
Thane Fire Brigade**

Copy To: M/s. Ambiaance Design Pvt. Ltd.