BRIHANMUMBAI MUNICIPAL CORPORATION MUMBAI FIRE BRIGADE

- **NOC:** NOC from fire safety point of view i.e. firefighting & fire protection point of view for the construction of High-Rise residential sale building under slum rehabilitation scheme on Plot Bearing C.T.S. No.195/191 of Village Ghatkopar, At Ghatkopar (EAST), Mumbai.
- **<u>Ref</u>:** Online submission from Architect Mrs. Sheetal P. Nikhare of, M/s. S.S. Associates under File no. TDR/SRP/Eastern Suburb/SRA/N Ward/ 0615.

ARCHITECT MRS. SHEETAL P. NIKHARE, OF M/S. S.S. ASSOCIATES.

In this case, please refer to the N.O.C. issued by this office u/r. no. P-9882/2021/(195/191/N/ward/Ghatkopar/337/1/NEW Dated 27/01/2022, for firefighting and fire protection requirements for the construction of low-rise residential cum commercial building having ground floor part on stilt + 1st to 9th upper residential floors with total height of 31.99 mtrs. measured from general ground level up to terrace level and also proposed mechanized car parking tower attached to the North-West side of the building with total height of 31.99 mtrs. measured from general ground level up to tot plevel up to tot plevel of the car parking tower having separate M.S. staircase of 01.00 mtrs. width & 01.00 mtrs. wide platform with railing at every alternate floor level.

Now, architect has submitted revised plans which are as follows:

Now, architect has proposed construction of High-Rise sale building having part basement (-04.20 mtrs.) + ground floor part on stilt + 1st to 20th upper residential floors (20th part) with a total height of 62.50 mtrs. measured from general ground level up to terrace level & also proposed automated mechanized car parking tower at north side of the building with height 62.50 mtrs. from general ground level with separate M.S. staircase of 01.20 mtrs. width having 01.00 mtrs. wide platform with Railing, as shown on the plan.

Floors	Users
Part basement	Pump room
(-04.20 mtrs.)	
Ground floor	Double height entrance lobby + 03 nos. of shops + electric
part on stilt	meter room + fire panel + stack car parking + space for D.G.
	set near car parking tower.
1 st floor	01 no. residential flat + society office + fitness centre with
	01.50 mtrs. wide internal staircase + entrance lobby void.
2 nd floor	03 nos. of residential flats + part terrace above fitness centre.
3^{rd} to 7^{th} , 9^{th} to	03 nos. of residential flats on each floor.
14 th & 16 th to	
19 th floor	
8^{th} & 15^{th} floor	02 nos. of residential flats + refuge area on each floor.
20 th floor	02 nos. of residential flats + part terrace.
Terrace	Open to sky (treated as refuge area)

FLOOR WISE USERS OF THE BUILDING:

THE DETAILS OF STAIRCASES:

No. of staircase	Type of staircase	Width	From – to
One staircase	Enclosed	01.50 mtrs.	Leading from basement floor
	Туре		to terrace level
The staircase is ex	sternally locate	ed & adequately	ventilated to outside air as
shown on the plan	n. The basemen	nt staircase is di	verted at ground floor with
smoke check lobb	y in basement	level.	

LIFTS:

No. of lifts	Type of lifts	Profile
03 nos.	Passenger lift	Leading from ground to top floor
One passenger lift shall be converted into fire lift. The lift lobby/common		
corridor at each floor level is ventilated to outside air as shown on the plans.		

THE OPEN SPACES:

The building abuts on 18.30 mtrs. wide existing road on south side of the building as shown on the plan.

Sides	From Building line to Plot boundary at Ground Level.
North	0.86 to 0.92 mtrs. from car parking tower.
South	01.50 to 01.56 mtrs. + 18.30 mtrs. wide existing road.
East	03.00 to 03.35 mtrs.
West	06.00 to 06.35 mtrs.

REFUGE AREA:

Refuge floor	Refuge area (Required)	Refuge area (Proposed)	At the height of refuge floor from ground level.
8 th floor	62.29 sq. mtrs.	64.48 sq. mtrs.	24.80 mtrs.
15 th floor	53.45 sq. mtrs.	53.53 sq. mtrs.	45.10 mtrs.
In addition to above, terrace of the building will be treated as refuge area. E.E.S.R.A. shall verify the refuge area calculation & Excess refuge area shall			
be counted in F.S.I.			

The proposal is considered favourably in view of the facts that;

- 1. Proposal falls under regulation 33(11) of DCPR 2034.
- 2. The site abuts on 18.30 meters. wide existing road on south side of the building, as shown on the plans, which is well accessible for firefighting in case of emergency.
- 3. Architect has submitted hardship letter stated that the said high rise residential building abuts on 18.30 meters. wide existing road on south side & provided with 06.00 meters. wide clear open space till car parking tower which is attached to stilt plus one upper floor portion of fitness center on north west corner of the building & also, stated that 06.00 meters. wide clear open space is provided up to typical floor building line Hence same is considered by this department.
- 4. Refuge area provided facing to wider open space on west side of the building.
- 5. Recommended to provide automatic sprinkler system in each shop, society office, fitness center, in each habitable room of each flat, in lift lobby/common corridor at each floor level as well as car parking area on ground floor.

- 6. Recommended to provide water spray projector system in mechanized car parking tower.
- 7. Recommended to provide automatic smoke detection system in each shop, society office, fitness center, electric meter room, in lift machine room & in pump room of the building.
- 8. During construction stage and before the final occupation party shall comply additional requirement stipulated by Mumbai Fire Brigade Officer, if any.

In view of the above, as far as this department is concerned, there is no objection from fire safety point of view i.e. from firefighting & fire protection point of view for the proposed construction of High-Rise sale building having part basement (-04.20 meters.) + ground floor part on stilt + 1st to 20th upper residential floors (20th part) with a total height of 62.50 meters. measured from general ground level up to terrace level & also proposed automated mechanized car parking tower at north side of the building with height 62.50 meters. from general ground level with separate M.S. staircase of 01.20 meters. width having 01.00 meters. wide platform with Railing, as shown on the plans signed in token of approval subject to satisfactory compliance with the following requirements;

<u>All the requirements stipulated earlier vide N.O.C. under No P-9882/2021/(195/191/N/ward/Ghatkopar/337/1/NEW Dated 27/01/2022</u> now treated as cancelled.

1. ACCESS:

There shall be no compound wall on 18.30 meters. wide existing road on south side of the building. However, removable bollard chain link with clean opening of 9 meters. or sliding gates may be provided.

2. <u>COURTYARDS:</u>

- i) The entire available courtyards on all the sides of the building shall be paved suitably to bear the load of fire engines weighing up to 58 m. tones each with a point load of 10 Kgs. per sq. cms.
- ii) The courtyards shall be kept free from obstruction at all times.
- iii) No structure of any kind shall be permitted in courtyards of the building.

3. <u>STAIRCASE:</u>

- i) The layout of the staircase shall be enclosed type as shown in the plan throughout its height and shall be approached (gained) at each floor level through at least one-hour fire resistant self-closing door (45 mm. thickness) placed in the enclosed wall of the staircase at landing.
- ii) The flight width of the staircase shall not be less than 01.50 mtrs. Throughout its height.
- iii) Permanent vent at the top equal to 5% of the cross-sectional area of the staircase shall be provided.
- iv) Openable sashes or R.C.C. grills with clear opening of not less than 0.5 sq. meters. per landing on the external wall of the staircase shall be provided.
- v) Nothing shall be kept or stored in staircase / corridor/passage.

The terrace door shall be provided in the following manner.

- A. The top of portion of the doors shall be provided with louvers.
- B. The single latch lock shall be installed from the terrace side at the height of not more than one meters.

- C. The glass front of 6-inch diameter with the breakable glass shall be provided just above the single latch lock, so as to open the latch in case of an emergency by breaking glass.
- D. The door shall either be fitted with magnetic lock connected to console & detection system or shall be synchronized with fire detection and alarm system.

4. PART BASEMENT: (-04.20 Meters.) (FOR PUMP ROOM)

- i) Basement shall be used for designated purpose only.
- ii) The staircases of the basement shall be of enclosed type and entry to basement areas shall be through one-hour fire resistance self-closing door provided in the enclosed wall of the staircase and through cut off lobby.
- iii) Suitable signages shall be provided in the basement showing exit direction, way to exits etc.
- iv) One Dry Chemical Powder Extinguisher ABC type of capacity 09 kgs. shall be kept for pump room.

5. <u>CORRIDOR / LIFT LOBBY:</u>

- i) Corridor / lift lobby at each floor level shall be naturally ventilated.
- ii) The common corridor / lift lobby at each floor level shall be kept free from obstructions at all times.
- iii)Proper signage for way to staircase, escape routes, staircase, floor nos. etc. shall be provided at each floor of building.

6. <u>ELECTRIC CABLE SHAFT AND ELECTRIC METER PANEL/ROOM:</u>

- i) Electric cable Duct shall be exclusively used for electric cables or shall be taken in concealed manner and should not open in staircase enclosure.
- ii) Electric duct shall be sealed at each floor level with noncombustible materials such as vermiculite concrete. No storage of any kind shall be done in electric duct.
- iii) Electric wiring/ cable shall be halon-free, non-toxic, non-flammable, low smoke hazard having copper core for the entire building with provision of ELCB/MCB.
- iv) Electric meter panel/room shall be provided at location marked on the plan. It shall be adequately ventilated.
- v) Low & medium voltage wiring running in shaft & in false ceiling should run in separate conduits.
- vi) Water mains, telephone lines, intercom lines, gas pipes or any other service line should not be laid in the duct for electrical cables;
- vii) Master switches controlling essential service circuits shall be clearly labeled & provide in the lobby for emergency operations.

7. <u>INTERNET OF THINGS SYSTEM:</u>

- a) The IOT based Micro Controller Device shall be provided in the electrical installation of the building as per the requirement stipulated in circular No. शासन परिपत्रक क्र. मुविनि-२०२१/प्र. क्र. ११४/ऊर्जा -५.
- b) The IOT based Micro Controller Device shall be tested and verified by NABL accredited testing agency / laboratory in accordance with the recognized IS:732-2019 code for practice for Electrical wiring installation.
- c) The complete installation of IOT based Micro Controller Devices shall be checked and certified by the Chief Electrical Inspector, Govt. of

Maharashtra and certificate to that effect shall be issued at that time of compliance.

- d) The data and the alert generated by IOT based Micro Controller Devices shall be monitored by building management system and the necessary corrective measures shall be taken by the owner, occupier immediately.
- e) The data generated by IOT based Micro Controller Devices shall be made available to fire brigade department as and when required to investigate the cause of fire.

8. <u>D.G SET:</u>

- i) D.G. Set with appropriate change over switch shall be provided for fire pumps, sprinkler pump, booster pump, staircase and corridor lighting circuits, manual fire alarm system & Fire lift.
- ii) Forproposed D.G. Set acoustic enclosure will be provided for safe operation.
- iii) Entire installation of D.G. Set shall be confirming to the Indian electrical act/rules & practice.
- iv) A deep tray shall be kept under the fuel tank of the D.G. Set to collect the spillage & same shall be disposed off daily without fail.
- v) Cable in the cable trenches shall be coated with fire retardant material.
- vi) Electrical wiring shall be having copper core having the fire resistant and low smoke hazards cables for the entire building with the provision of ELCB/MCB.
- vii) In electrical installation of the building shall be provided for vertical electrical shaft with feeder pillar box of a gap of every 24 mtrs. Height of the building.
- viii) Adequate air and ventilation for switchgear room is essential to prevent condensation of moistures.
- ix) The capacity of the D.G. Set shall be as per electricity company requirements.
- x) D.G. Set shall be properly grounded.
- xi) Exhaust of D.G. Set shall not be directed in to the exit/entrance of any adjoining structure.
- xii) Sand bed of 6 inches thickness shall be provided below D.G. Set.
- xiii) Electrical cable of D.G. Set shall be FRL Stype.
- xiv) Adequate quantity of diesel shall be stored in its original container near D.G. Set, away from electrical switches of source of ignition.
- xv) Automatic built-in circuit breaker shall be provided to the D.G. Set.
- xvi) Rubber pad shall be provided to the D.G. Set for absorbed vibrations if any.
- xvii) The D.G. Set area shall be kept prohibited and no unauthorized shall be allow to enter the area.
- xviii)Structural stability of the building regarding absorption of the vibration of D.G. Set shall be checked by Structural Engg. before installation of the D.G. Set.
- xix) Two foam type fire extinguishers of 9.00 ltrs. Capacity each with ISI certification mark coupled with 4 buckets filled with dry, clean sand shall be kept in the D.G. Set.

9. ESCAPE ROUTE LIGHTINGS:

i) The staircase and corridor lighting shall be on separate circuits and shall be independently connected so that they could be operated by one switch installation on the ground floor easily accessible to firefighting staff at any time irrespective of the position of the individual control of the light points, if any.

ii) Staircase and corridor lighting shall also be connected to alternate supply.

10. ENTRANCE DOORS & EXIT / ENTRANCE STAIRCASE:

- i) Entrance door of each occupancy, including flat entrance & kitchen doors (if provided) shall be of solid core having fire resistance of not less than one hour.
- ii) The fire resistance rating for staircase F.R.D., Lift lobby / protected lobby & the lift doors shall be as per N.B.C. provisions.
- iii) Rolling shutter provided for shops shall be having fire resistance of not less than one hour.

11. <u>LIFT :</u>

A. **PASSENGER LIFT:**

- i) Walls enclosing lift shaft shall have a fire resistance of not less than two hours.
- ii) Shafts shall have permanent vent of not less than 0.2 sq. mtrs in clear area immediately under the machine room.
- iii) Landing doors and lift car doors of the lifts shall be of steel shuttered with fire resistance of one hour. No collapsible shutter shall be permitted.
- iv) One lift of the building shall be converted into fire lift and shall be as per specifications laid down under the regulations.
- v) Threshold of non-combustible material shall be provided at the entrance of each landing door.

B. FIRE LIFT:

- i) To enable fire services personnel to reach the upper floors with the minimum delay, one lift of the building shall be provided, and shall be available for the exclusive use of the firemen in an emergency.
- ii) The electric supply shall be on a separate service from electric supply mains in a building and the cables run in a route safe from fire, that is, within the lift shaft. Light & fans in the elevators having wooden paneling or sheet steel construction shall be operated on 24-volt supply.
- iii) Fire lift should be provided with a ceiling hatch for use in case for emergency. So that when the car gets stuck up, it shall be easily openable.
- iv) In case of failure of normal electric supply, it shall automatically changeover to alternate supply. For apartment houses, this changeover of supply could be done through manually operated changeover switch. Alternatively, the lift shall be so wired that in case of power failure, it comes down at the ground level and comes to stand-still with door open.
- v) The operation of fire lift should be by a simple toggle or two button switch situated in glass-fronted box adjacent to the lift at the entrance level. When the switch is on, landing call points will become inoperative and the lift will be on car control only or on a priority control device. When the switch is off, the lift will return to normal working. so, this lift can be used by the occupants in normal times.
- vi) The words 'Fire lift' shall be conspicuously displayed in fluorescent paint on the lift landing doors at each floor level.
- vii) The speed of the fire lift shall be such that it can reach the top floor from ground level with in one minute.

viii)Fire lift shall be constructed as per prevailing Indian & International standard.

12. AUTOMATED MECHANIZED CAR PARKING TOWER:

- i) All the structural steel members of the mechanized car parking block i.e. columns, beams shall be protected with the fire resisting / retardant materials and methods as stipulated under relevant I.S. specification. A certificate to that effect that the fire resistance protection has been provided as above shall be furnished from the chartered Structural Engineer.
- ii) The cars shall be separated by perfect partition of 4.50 mm thick steel pallets between two cars to prevents spread of fire from one level to next level.
- iii) The mechanized car-parking block has door at the bottom and covered opening at the top to create natural drafts, to prevent spreading of fire.
- iv) The electrical cables used internally shall be fire retardant, and heat resistant of 105 degree centigrade.
- v) Emergency Stop switch shall be installed inside the auto parking system, at the top of the tower, near the driving unit, outside the tower on operation panel & on the main control panel for activation in case of any emergency, for the power cut off to the main motor and all operations to stop.
- vi) Stopper shall be installed on each pallet for the maximum position to which the car can be driven onto the pallet.
- vii) Blue and Red display lamps indicating whether system is ready to accept the car shall be installed at the entry point of the car. When the red lamp is on, car should not enter into the tower.
- viii)Automatic water spray projector system conforming to the standard laid down by T.A.C. and relevant I.S. specification shall be provided with sprinkler heads at each level below each pallet on engine side.
- ix) Fire detectors (Heat) shall be installed below each pallet to detect any increased temperature beyond 80 degrees centigrade Control Panel on the ground floor.
- x) A Wet -riser of internal dia. of 10 cm. G.I. 'C' Class pipe shall be provided on external platform with staircase on alternate car cage level with single hydrant outlet and connected to the fire service outlet on the external face of the building directly fronting the courtyards shall be provided to connect the mobile pump of the fire service to the wet riser.
- xi) Separate M.S. staircase of 01.20 mtrs. width having 01.00 mtrs. wide platform with Railing on shall be provided at alternate car parking level.
- xii) The car engine shall be shut off at ground level before parking at higher level.
- xiii)Only trained operator certified by company installing car towers shall operate car parking.
- xiv)The proposed car parking tower & building shall be segregated by 04 hrs. fire resistance wall.

13. FALSE CEILING (if provided):

False ceiling if provided in the building shall be of non-combustible material. Similarly, the suspenders of the false ceiling shall be of no combustible materials.

14. MATERIALS FOR INTERIOR DECORATION/FURNISHING:

The use of materials which are combustible in nature and may spread toxic fume/gases should not be used for interior decoration/furnishing.

15. FIRE FIGHTING REQUIREMENTS:

A) <u>UNDERGROUND WATER STORAGE TANK:</u>

An underground water storage tank of 1,50,000 liters capacity shall be provided at location marked on the plan as per design specified in the rules with baffle wall and fire brigade collecting breaching. The design shall be got approved form H.E.'s department prior to erection.

B) OVERHEAD WATER STORAGE TANK:

A tank of 30,000 liters capacity shall be provided on the terrace level of the building as shown on the plan. The design shall be got approved form H.E.s department prior to erection. The tank shall be connected to the wet riser through booster pump through a non-return valve and gate valve.

C) <u>WET RISER CUM DOWN COMER:</u>

Wet riser cum down comer of internal diameter of 15 cms. of G.I. 'C' Class pipe shall be provided with double hydrant outlet and hose reel on each floor as shown on the plan. Pressure reducing discs or orifices shall be provided at lower level so as not to exceed the pressure of 5.5 kgs/sq.cm.

D) <u>FIRE SERVICE INLET:</u>

- i) A fire service inlet on the external face of the building near the tank directly fronting the courtyards shall be provide to connect the mobile pump of the fire service independently to (a) The wet riser, (b) Sprinkler system & water spray projector system.
- ii) Breeching connection inlet shall be provided to refill U.G. tank.

E) <u>AUTOMATIC SPRINKLERS SYSTEM:</u>

Automatic sprinkler system with separate Sprinkler riser of suitable size of G.I. 'C' Class pipe shall be provided in each shop, society office, fitness centre in each habitable room of each flat, in lift lobby/common corridor at each floor level as well as car parking area on ground floor of the building. The automatic sprinkler system shall be installed as per the standard laid down by T.A.C. and relevant I.S. specifications.

F) FIRE PUMP, SPRINKLER PUMP, JOCKEY PUMP & BOOSTER PUMP:

- i) Wet riser shall be connected to a fire pump at ground level of 2400 litres / min capacity giving a pressure of not less than 3.2 kgs / sq. cms. at the topmost hydrant with suitable jockey pump.
- ii) Booster pump of capacity of 900 liters / min. having a pressure of not less than 3.2 kgs. / sq. cms. at the hydrant outlets of the wet riser shall be provided at the terrace floor level.
- iii) An independent sprinkler pump of suitable capacity along with jockey pump shall be provided for automatic sprinkler system.
- iv) Electric supply (normal) to these pumps shall be on independent circuit.
- v) Only surface mounted pump or vertical turbine pump shall be installed for firefighting system. (Submersible pumps not permitted)
- vi) Switch of booster pump shall be provided at terrace floor as well as ground floor of the building.

G) WATER SPRAY PROJECTOR SYSTEM:

Water spray projector system shall be provided for entire car parking tower with sprinkler heads at each level below each pallet on engine side as per the standard laid down as per relevant I.S. specifications.

H) <u>FIRE FIGHTING REQUIREMENT AT THE CONSTRUCTION STAGE OF</u> <u>BUILDING:</u>

Following fire protection arrangement shall be provided & same shall be maintained in good working condition at all the times.

- i) Dry riser of minimum 15 cm diameter pipe with hydrant outlets on the floor constructed with fire service inlet to boost the water in the dry riser & maintenance should be in accordance with good practice.
- ii) Drums of 200 liters capacity filled with water & two fire buckets shall be kept of each floor.
- iii) Water storage tank of minimum 20,000 liters capacity shall be kept at site ready to use in case of emergency, which may be used for other construction purpose also.

I) EXTERNAL HYDRANTS:

Courtyard hydrants shall be provided within the confines of the site of the wet riser on ground floor for every 30.00 mtrs. distance around the building.

J) HOSE & HOSE BOXES:

Hose Box, with two hoses of 15mts. length of 63mm dia along with branch shall be provided near wet riser landing valve on ground floor as well as alternate floor level.

K) <u>ALTERNATE SOURCE OF POWER SUPPLY:</u>

An alternate source of LV/HV supply from a separate substation OR from a D.G. set with appropriate changeover switch shall be provided for fire lifts, fire pump, booster pump, sprinkler pump, jockey pump, staircase and corridor lighting circuits, detection and fire alarm system. It shall be housed in separate cabin.

L) <u>PORTABLE FIRE EXTINGUISHERS:</u>

- i) One dry chemical powder (ABC type) fire extinguisher of 9 kgs. capacity having B.I.S. certification mark and two buckets filled with dry clean sand shall be kept in pump room, electric meter room & lift machine room.
- ii) One dry chemical powder (ABC type) fire extinguisher of 9 kgs. capacity having B.I.S. certification mark shall be kept each shop, society office, fitness centre, on every floor level at prominent place.
- iii) One dry chemical powder (ABC type) fire extinguisher of 9 kgs. capacity having B.I.S. certification mark and two buckets filled with dry clean sand shall be kept near each car parking tower on ground floor.

M) MANUAL FIRE ALARM SYSTEM:

The building shall be provided with manual fire alarm system with main control panel at ground floor level and pill-boxes and hooters at each upper floor level in accordance with B.I.S. specification.

N) <u>AUTOMATIC SMOKE DETECTION SYSTEM:</u>

Automatic smoke detection system shall be installed in each shop, society office, fitness centre, electric meter room, in lift machine room & in pump room of the building as per IS specifications with main console panel at ground floor level.

O) PANEL BOARD OF FIRE-FIGHTING SYSTEM:

Fire alarm system, public address system, Alternate supply, etc. panels shall be installed on ground floor at the location shown in the plans & which shall be manned 24 hours.

16. <u>SIGNAGES</u>:

- i. Self-Glowing / Fluorescent exit signs in 'Green' color shall be provided in passage area of the building showing the direction of Escapes / Staircase / Exits etc.
- ii. All the exit routs shall be marked with fluorescent/radium painted & exits signs at strategic locations.

17. PUBLIC ADDRESS SYSTEM:

The building shall be provided with public address system as per the rules with main control operator at console panel at ground floor.

18. TRAINED FIRE STAFF/SECURITY GUARDS:

The trained fire staff / Security guards having basic knowledge of firefighting & fix firefighting installation shall be posted in the building.

19. FIRE DRILLS / EVACUATION DRILLS:

Fire Drills and evacuation drills shall be conducted regularly and log of the same shall be maintained.

20. <u>REFUGE AREA:-</u>

Refuge area provided on $8^{\text{th}} \& 15^{\text{th}}$ floor level shall be conforming to the following requirements:

i) <u>Manner of refuge area:</u>

- a) The refuge area shall be so located that it shall preferably face the access road /wider open space of the building.
- b) The refuge area shall be provided with railing / parapet of 1.20 mt.
- c) The refuge area shall have a door which 'shall be painted or fixed with a sign in luminous paint mentioning "REFUGE AREA"
- d) The lift/s shall not be permitted to open into the refuge areas.
- e) The refuge area provided within building line shall be accessible from common passage/ staircase.

ii) <u>Use of refuge area:</u>

- a. The refuge area shall be earmarked exclusively for the use of occupants as temporary shelter and for the use of Fire Brigade Department or any other organization dealing with fire or other emergencies when occur in the building and also for exercises/drills if conducted by the Fire Brigade Department.
- b. The refuge areas shall not be allowed to be used for any other purpose and it shall be the responsibility of the owner/occupier to maintain the same clean and free of encumbrances and encroachments at all times.

iii) <u>Facilities to be provided at refuge area</u>

Adequate emergency lighting & drinking water facility shall be provided.

iv)<u>Terrace floor as a refuge floor:</u>

- a. The necessary facilities such as emergency lighting, drinking water etc. shall be provided.
- b. The access door/s from the enclosed staircase/s to the terrace floor shall have louvers at top half portion of the door. The entrance doors to the terrace shall be painted or fixed with sign painted in luminous paint mentioning "REFUGE AREA".

v) Excess refuge area shall be counted in FSI.

21. OTHER NOC / PERMISSIONS:

Necessary permissions / NOC for licensable trade activity, addition / alteration / interior works, etc / shall be obtained from competent Municipal Authority and CFO's department.

22. <u>ELEVATION FEATURES</u>:

Elevation feature/treatment shall be given as per the MCGM guidelines, DCPR-2034 and circular u/no. u/no. Ch. Eng./D.P./ 30449/Gen. Dtd. 03.01.2017 and Ch. Eng./D.P./110/Gen. Dtd. 30.01.2020.

Earlier, Party had paid Scrutiny Fees of Rs. 2,15,000/- vide Receipt No. CHE/BP/75371/22 dated 17/01/2022, on the total gross built up area of 3530.84 sq. mtrs. as certified by the L.S.

Earlier, Architect has certified height of the building as 31.99 mtrs. & total built up area 3530.84 sq. mtrs. for the said residential building & as per schedule II of section 11(1) of Maharashtra fire prevention & life safety measure act 2006, has paid **Fire Service Fee** of 40,000/- vide receipt No. CHE/CFO/75591/22 dated 18/01/2022.

Now, Party had paid Scrutiny Fees of Rs. 4,65,510/- vide Receipt No. 10/5/2023/004572 dated 10/05/2023 on the total gross built up area of 6,331.18 sq. mtrs. as certified by the L.S.

Now, Architect has certified height of the building as 62.50 mtrs. & total built up area 6,331.18 sq. mtrs. for the said residential building & as per schedule II of section 11(1) of Maharashtra fire prevention & life safety measure act 2006, has paid **Fire Service Fee** of 60,000/- vide receipt No. 17/5/2023/004947 dated 17/05/2023.

However, E.E.S.R.A. is requested to verify the total built-up area & 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 Govt. of Maharashtra approved Licensing Agency
- 2. The width of abutting road & open spaces is mentioned in plans as submitted by the Architect attached herewith and these parameters shall be certified by the Architect.
- 3. E.E.S.R.A. shall verify the proposal in context with the relevant Regulations of DCPR-2034.
- 4. The schematic drawings/plans of automatic sprinkler system, automatic smoke detection system, wet riser system, public address system, manual fire alarm system shall be submitted to CFO department.

- 5. The area, size, etc. for the sprinkler system, detection system, fire alarm system, wet riser system, public address system, Fire duct, electrical duct etc. to be verified & examined by MEP Consultant.
- 6. Separate necessary permission for any licensable activity shall be obtained from concerned authorities of MCGM/CFO's department, till then shall not be allowed to use.
- 7. There shall be no any tree located in the compulsory open spaces or in the access way near the Entrance gates.
- 8. This recommendation letter is issued only from Fire Protection & Fire-Fighting requirements point of view on behalf of the application from Architect. If any matter pertaining to authenticity or legality shall be cleared by concerned Owner/Occupier/Developer/ Architect, etc
- 9. The plans approved along with this approval are issued from Fire Risk & Life Safety point of view only. Approval of these plans does not mean in construction anv wav of allowing of the building. It is Architect/Developers responsibility to take necessary prior approval from all concerned competent authorities for the proposed construction of the building.
- 10. As per section 3 of Maharashtra Fire Prevention and Life Safety Measures Act 2006, it is the liability of Owner/Occupier to provide the Fire Protection measures & Fixed Fire Fighting Safety system installations and shall be maintained in good working order & in efficient condition all the time, in accordance with the provisions of Maharashtra Fire Prevention and Life Safety Measures Act or the rules.
- 11. This approval is issued without prejudice to legal matters pending in court of law, if any.

VINAYAK	Digitally signed by VINAYAK
MOTIRAM	MOTIRAM MAINKAR
MAINKAR	Date: 2023.05.17 19:01:02 +05'30'

ANIL VASANT PARAB Date: 2023.05.17 23:48:20 +05:30'

Divisional Fire Officer (Scrutinized & Primary Approval by)

Dy. Chief Fire Officer (Final Approval by)

Copy to:- E.E.S.R.A.