

To,
The Executive Engineer-3
Slum Rehabilitation Authority,
Administrative Bldg.,
Anant Kanekar Marg,
Bandra (E), Mumbai - 400 051.

Subject : Application for revised LOI cum amended IOA S.R. Scheme on land bearing C.T.S.No. 1020(pt) of village Mulund (E), Mumbai Proposed Scheme u/s. 33(10)

NAME OF CHS : Girijabai Patil SRA CHS Ltd.

Architect/L.S. Details

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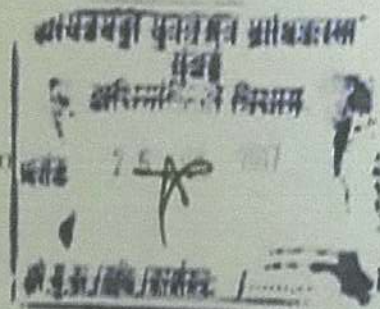
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Name of the Developer

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MUNICIPAL CORPORATION OF GREATER MUMBAI
MUMBAI FIRE BRIGADE

No. : **FB/HR/R-1/62**
Date: **11/07/17**

N.O.C. stipulating fire protection and firefighting requirements for the amendment to the proposed construction of High Rise Sale Residential Building under S.R. Scheme on land bearing C.T.S. No. 1020 (pt), situated at Mithagar Marg, Opp. LIC Colony, Mulund (E), Mumbai-81.

- Ref: i) Letter dated 08.06.2017, from M/s. S.S. Associates, Architects.
ii) M. F. B. No. HR/ R-VI/ 62, dated 08.06.2017.
iii) Architect has submitted scrutinized plans on 10.07.2017.

E.E.(S.R.A.)

In this case please refer to the NOC issued by this office vide No. FB/HR/ES/108, dated 09.07.2010, for the proposed construction of high rise residential building comprising ground floor partly on stilts + 1st floor for car parking + 21 upper floors (i.e. ground + 22 floors) with a total height of 69.90mtrs. from general ground level up to terrace level.

Now, Architect has submitted the amended plans for the approval of following amendments:

- i) Proposed one additional podium floor i.e. 2nd podium floor for surface car parking & fitness center.
- ii) Proposed to delete ramp & proposed 02 nos. of car lifts.
- iii) Revised the planning of the building & proposed to construct high rise residential building having part stilt & part ground floor + 1st & 2nd podium floors + 3rd to 23rd upper residential floors with a total height of 69.90mtrs. from general ground level up to terrace level as shown on plans.

Podium Floors:

Architect has proposed 1st & 2nd podium floors will be used surface car parking accessible by two car lifts. Podium floor is extended beyond the building on three sides.

The floor-wise user of the building is as under.

Floors	Users
Ground floor	08 nos. of shops + pit type stack car parking + meter room + wall mounted fire alarm system + pump room + U.G. Tank
1 st podium floor	Surface car parking accessible by two car lifts + Society office
2 nd podium floor	Surface car parking accessible by two car lifts + fitness center
3 rd to 7 th , 9 th to 14 th & 16 th to 21 th & 23 rd floors	06 nos. of flats on each floor
8 th , 15 th & 22 nd floors	05 nos. of flats + refuge area on each floor

Architect has proposed electric substation in open to sky area on Southwest corner.

Refuge areas provided are as under:

Refuge floor	Refuge area in sq. mtrs.		At the height of refuge floor in mtrs.
	Required	Provided	
8 th floor	91.00	91.04	24.30
15 th floor	91.00	91.04	44.25
22 nd floor	24.89	45.59	64.20

In addition to this terrace of the building will be treated as refuge area.

Refuge area beyond 4% shall be counted in FSI.

[Signature] 11-07-17

[Signature] 11/07/17
Dr. L. F.

OPEN SPACES:

The proposed building abuts on 18.30mtrs. wide Road on East side.

The open spaces around the building are as under.

Sides	From building line to plot boundary	From building line to podium line	From podium line to plot boundary
North	6.50mtrs. to 13.71mtrs. including R.G. & Stack parking	6.00mtrs. to 11.90mtrs.	1.50mtrs. to 2.37mtrs.
South	6.00mtrs.	Podium flushed with building line	6.00mtrs.
West	7.40mtrs. to 14.77mtrs. including R.G.	6.07mtrs. to 7.78mtrs.	1.50mtrs. to 4.29mtrs.
East	3.07mtrs. to 3.79mtrs. + 18.30mtrs. wide Road	Podium flushed with building line	3.07mtrs. to 3.79mtrs. + 18.30mtrs. wide Road

THE DETAILS OF STAIRCASE & LIFT :

Staircase description	Width of staircase	Nos. of staircase	Open / Enclosed
Leading from ground to terrace floor	1.50 mtrs wide	01 No.	Enclosed
The proposed staircase of as shown in plans is enclosed type and is externally located & adequately ventilated to outside air.			

Lifts Type	Profile	Nos. of lifts
Passenger lifts	Leading from ground to top floor	03 Nos.
Car lift	Leading from ground to 2 nd podium floor	02 nos.
One of the lift shall be converted into fire lift as per norms. The lift lobby & common corridor at each floor level is directly ventilated to outside air as shown on the plan.		

The proposal has been considered favorably in view of the facts that:

- N.O.C. for the proposal was already issued u/n. FB/HR/ES/108, dated 09.07.2010.
- This is a proposal of S.R. Scheme falls under section 33(10) of DCR 1991.
- The I.O.A. for the said proposed High Rise Residential Building has been obtained u/r. no. SRA/ENG/2518/S/ML/AP, dated 16.04.2011 and plinth C.C. is issued on dated 16th Nov. 2016 (Xerox copy enclosed herewith).
- If podium is proposed it shall not extend 3m beyond building line. But in this case, Architect has extended the podium more than 3.00mtrs beyond the building line on North & West sides. Hence, E.E.(S.R.A.) is requested to scrutinize/verify the plans in the said context as per new DCR and is subject to the approval of C.E.O. (S.R.A.).
- Due to parking requirement, Architect has proposed pit car parking in the Stilt. Necessary arrangements shall be made for dewatering the water in monsoons.
- Automatic sprinkler system shall be provided in entire building including in each shop, in each habitable room of each flat at each floor level, in lift lobbies & common corridor at each floor level, in society office, fitness center, as well as in surface car parking area at two podium floors.
- Automatic smoke detection system shall be provided in each shop, each electric meter room & lift machine room & in electric shaft at every floor level with response indicator.
- Automatic Drencher system should be provided on the periphery of the each podium floor.
- Water spray projector system/sprinkler system shall be provided in the stack car parking area at stilt connecting every car especially in pit.

In view of above, as far as this department is concerned; there is no objection from fire safety point of view for the proposed construction of high rise residential building having part stilt & part ground floor + 1st & 2nd podium floors + 3rd to 23rd upper residential floors with a total height of 69.90mtrs. from general ground level up to terrace level, as per the details shown on the enclosed plans, signed in token of approval, subject to satisfactory compliance of the following requirements;

1. **ACCESS:**

- i) All access & fire tender access should be free of encumbrances.
- ii) Courtyard s shall be flushed with the road levels.
- iii) Entrance gate if provided shall be of not less than 6.00 meters width each shall be provided, at locations marked on the plan. Archways, if any over the entrance gates, shall have height clearance of not less than 4.50 mtrs.

2. **PROTECTION TO STRUCTURAL STEEL:**

- i) All the structural steel members i.e. columns, beams etc., shall be protected with the 02 hours fire resisting materials and methods as stipulated under IS 1942-1960 as application for residential building.
- ii) A certificate to that effect that the fire resistance protection has been provided as above shall be furnished from the Structural Engineer as the time of application for occupying the building.

3. **COURTYARDS/OPEN SPACES**

- a. The entire open spaces shall be sufficiently hardened to bear the weight of fire engine weighing up to 48 M.T. each with a point load of 10 kgs/sq. cm.
- b. All the courtyards shall be in one plane and mandatory open space shall be clear of any obstructions including tree .
- c. Courtyards around the building shall be maintained free from encumbrances / encroachments.

4. **STAIRCASE:**

- a. The flight width of staircases shall be maintained as shown in the enclosed plans.
- b. The layout of main staircase shall be enclosed type as shown in the plan throughout its height and shall be approached (gained) at each floor level at least two hours fire resistant self closing door (45 mm. thickness) placed in the enclosed wall of the staircase.
- c. Externally located staircases adequately ventilated to outside air.
- d. Openable sashes or R.C.C. grills with clear opening of not less than 0.5 sq. mtrs. per landing on the external wall of the staircase shall be provided.
- e. No combustible material shall be kept or stored in staircase / passage.

TERRACE STAIRCASE:

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 mtr.
- 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 or shall be synchronize with fire detection and alarm system.

5. **CORRIDOR / LIFT LOBBY :**

- i) Corridor / lift lobby at each floor level shall be naturally ventilated as shown in plan.
- ii) The common corridor / lift lobby at each floor level shall be kept free from obstructions at all times.

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- iii) Self glowing/fluorescent exit signs in green color shall be provided showing the means of escape for entire building.
 - iv) Portable lights / insta lights shall be provided at strategic locations in the staircase and lift lobby.
7. **STAIRCASE AND CORRIDOR 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 fire fighting 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.
 - iii) Double throw switches should be installed to ensure that lighting in the staircase and the corridor do not get connected to two sources of supply simultaneously. A double throw switch shall be installed in the service room to terminate the stand-by-supply.
 - iv) Emergency lights shall be provided in the staircases/corridors.
8. **SHOP, FLAT ENTRANCE , KITCHEN DOORS & EXIT / ENTRANCE STAIRCASE:**
- i) Shop, Flat entrance and kitchen doors shall be of solid core having fire resistance of not less than one hour (solid wood of 45 mm thickness.)
 - ii) The fire resistance rating for staircase F.R.D., Lift lobby / protected lobby & the lift doors as per N.B.C. provisions.
9. **ELECTRIC CABLE SHAFTS, SERVICES & METER ROOM :**
- i) Electric cable shafts shall be exclusively used for electric cables and should not open in staircase enclosure.
 - ii) Inspection doors for shafts shall have two hours fire resistance.
 - iii) Electric shafts shall be sealed at each floor level with non combustible materials such as vermiculite concrete. No storage of any kind shall be done in electric shaft.
 - iv) Electric wiring/ cable shall be non-toxic, non-flammable, low smoke hazard having copper core / fire resistance for the entire building with provision of ELCB/MCB.
 - v) Electric meter room shall be provided at location marked on the plan. It shall be adequately ventilated & easily accessible.
 - vi) Low and medium voltage wiring running in shaft and in false ceiling should run in separate conduits;
 - vii) Water mains, telephone lines, intercom lines, gas pipes or any other service line should not be laid in the duct for electrical cables; use of bus bar/solid rising mains instead of cables is preferred.
 - viii) Preferably bus bar system shall be installed from ground to all upper floors main supply.
 - ix) Separate circuits for fire fighting pumps, lifts, staircases and corridor lighting and blowers for pressurizing system shall be provided directly from the main switch gear panel and these circuits shall be laid in separate conduit pipes, so that fuse in one circuit will not affect the others. Such circuits shall be protected at origin by an automatic circuit breaker with its no-volt coil removed.
 - x) Automatic smoke detector system shall be provided in each electric shaft on each floor along with response indicator which shall be connected to main consol panel board on ground floor level and each floor level.
 - xi) Master switches controlling essential service circuits shall be clearly labeled.
10. **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 non combustible materials.

11. **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, etc.

12. **LIFTS:**

A. PASSENGER LIFT :

- i) Walls enclosing lift shaft shall have a fire resistance of not less than two hour.
- 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) Fire lift shown in the plan shall be as per specifications laid down under the regulations, a toggle switch shall be provided to this lift for the use of Firemen.
- v) Threshold of non combustible material shall be provided at the entrance of each landing door.

B. FIRE LIFT:

- i) Walls enclosing lift shafts shall have two hours fire resistance.
- ii) The shafts shall have permanent vent equal 0.2 sq.mtr. clear area under the Lift Machine room.
- iii) Landing doors and lift car doors shall be of steel shuttered type with one hour fire resistance. No collapsible shutters shall be provided.
- iv) To enable fire services personnel to reach the upper floor with the minimum delay, one fire lift shall be provided and shall be available for the exclusive use of the firemen in an emergency and the directly accessible to every dwelling of each floor.
- v) The lift shall have a floor area of not less than 1.4 sq. mtrs. with a minimum dimension of 1.12 mtrs. It shall have loading capacity of not less than 545 k.g. (8 persons lift) with automatic closing doors.
- vi) There shall be an alternate electric supply of an adequate capacity apart from the normal electric supply the building and the cables run in a route safe from fire, i.e. within the lift shaft. In case of failure normal electric supply, it shall automatically trip over to alternate supply.
- vii) 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 priority control device. When the switch is off, the lift will return to normal working. This lift can be used by the occupants in normal times.
- viii) The words 'Fire lift' shall be conspicuously displayed in florescent paint on the lift landing door at each floor level & Threshold of non combustible material shall be provided at the entrance of each landing door.

C. CAR LIFT :

- i. All the structural steel members of the car lift well i.e. columns, beams etc shall be protected with the fire resisting/ retardant materials and methods as stipulated under relevant IS specification. A certificate to that effect shall be furnished from chartered structural Engineer.
- ii. The electrical cables used internally shall be fire retardant and heat resistant of capacity 105 degree centregade.
- iii. Emergency stop switch shall be installed inside the auto parking system at the top of the car lift, near the driving unit and 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.
- iv. Blue & 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.
- v. Threshold of non combustible material shall be provided at the entrance of each landing door.

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13. **CAR PARKING:**

- i) Car parking shall be permitted in the designated area.
- ii) Drainage of the car parking area of all the levels shall be laid independent from that of the buildings & it shall be provided with catch pit & fire trapped before connecting the building drainage or Municipal drainage.
- iii) Drainage of the car parking areas at all the levels shall be so laid as to prevent any overflow in the staircase, lift shaft etc.
- iv) The parking area shall not be used for dwelling purpose & repairing / maintenance purpose, at any time. Dwelling use of naked light/flame, repairing / maintenance of vehicles shall be strictly prohibited in the parking area.
- v) Repairing / servicing of cars, use of naked light shall not be permitted in the car parking areas.
- vi) The drive way shall be properly marked & maintained unobstructed
- vii) The Automatic Sprinkler System provided to the entire surface car parking area.

A) **PODIUM CAR PARKING FLOOR:**

- i) All the sides of the stilted / covered car parking shall be kept open except parapet walls of not more than 1.2 meters height.
- ii) Drencher system on the top of each podium parking floor shall be provided.
- iii) The driveways shall be properly marked and maintained unobstructed, proper illuminated signage shall be provided for escape route, etc at prominent location.

B) **STACKED CAR PARKING : (One level in pit & two levels above ground)**

- i) Structural design : The SA-FAMCP shall be constructed of structural steel construction.
- ii) Vertical deck separation For SA-FAMCP having multi-car parking level, vertical separation between the upper & lower decks by using the non-perforated and non combustible materials. (structural steel plate) shall be provided. This is to minimize direct impingement of flame to the car in the upper deck and also to prevent dripping of any possible leaking fuel to the lower deck.
- iii) Elements of the stacked car parking structure shall have 1 hr. fire resistance.
- iv) Each car parking deck shall have 1 hr. fire resistance.
- v) Parking area shall be accessible by trained staff when carrying out the maintenance work.
- vi) The parking system is to be ceased during the maintenance operation.
- vii) Stack car parking shall be protected with double line sprinkler system/ Medium velocity water spray projector.

14. **FIRE FIGHTING REQUIREMENTS**

a) **Under Ground Water Storage Tank:**

An underground water storage tank of 1,50,000 liters capacity shall be provided, as per the design specified in the rules with baffle wall and fire brigade collecting breaching. The layout of which shall be got approved from H.E.'s department prior to erection. The tank shall be connected to sprinkler system.

The tank shall be provided in such a manner that its manholes are accessible to fire appliances and depth of the tank from manhole level shall not be more than 7 mtrs. The tank shall be flushed with the courtyards and the roof slab of the tank shall be reinforced suitably to bear the load of fire engines weighing up to 48 m. tones each with a point load of 10 kgs./sq. cms.

b) **Overhead Water Storage Tank:**

A tank of 30,000 liters capacity shall be provided on staircase shaft at the terrace level, the layout of which shall be got approved from H. E.'s departments prior to erection. The tank shall be connected to wet risers through a booster pump through a non-return valve gate valve.

c) **Wet- riser cum down comer:**

Wet riser cum down comer of internal dia. of 15 cms. of G.I. 'C' Class pipe shall be provided in the duct adjoining the each staircase with double hydrant outlet & hose reel at each floor in such a way as not to reduce the width of the common corridor. Pressure reducing discs or orifices shall be provided at lower level, so as not to exceed the pressure of 5.5 kgs. per sq. cms. 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 to the wet riser. Wet riser outlet and hose reel at a distance of 100 ft. shall be provided on periphery of all podium floors.

d) **Fire Service Inlet :**

- 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 to (a) The wet riser (b) Sprinkler system (c) drencher system & (d) Water spray projector system/double line sprinkler system.
- ii) Breeching connection inlet shall be provided to refill U.G. tank.
- iii) Operating switches of fire pumps shall be also provided in glass fronted boxes at ground floor.

e) **Automatic Sprinkler System:**

Automatic sprinkler system shall be provided in entire building including in each shop, in each habitable room of each flat at each floor level, in lift lobbies & common corridor at each floor level, in society office, fitness center, as well as in surface car parking area at two podium floors, as per the standards laid down by T.A.C. or relevant I.S. specifications.

f) **Water spray projector system/sprinkler system:**

Water spray projector system/sprinkler system shall be provided in entire stack car parking area as per T.A.C. or relevant I.S. specification.

g) **Drencher System: (for all podium parking floors)**

Automatic Drencher system should be provided on the periphery of the each podium floor and should be connected to the main sprinkler pump as per the standard laid down in relevant I.S. Specifications.

h) **Automatic Smoke Detection System :**

Automatic smoke detection system shall be provided in each shop, each electric meter room & lift machine room and in electric shaft at every floor level with response indicator; same should be connected to main consol panel on ground floor level, as per IS specification.

i) **Fire pump, Booster pump, Sprinkler pump & Jockey pump:**

- i) Wet-riser cum down comer shall be connected to a fire pump at ground level of capacity of not less than 2400 liters/min. capable of giving a pressure of not less than 3.2 kgs/ sq. cms. at the top most hydrant.
- ii) Booster pump of 900 liters/min. capacity giving a pressure of not less than 3.2 kgs./ sq. cms. at the top most hydrant out let of the wet-riser shall be provided at the terrace level.
- iii) 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 independent circuit.
- v) Operating switches for booster pumps shall be also provided in glass fronted boxes in lift lobbies on each floor at prominent place.
- vi) Operating switches of fire pumps shall be also provided in glass fronted boxes at ground floor.

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vii) All above pumps should be surface mounted or vertical turbine type (submersible pump not permitted) pump along with adequate size of pump room.

j) **External Hydrants:**

Courtyard hydrants shall be provided at distance of 30.00 mtrs each within the confines of the site of the wet riser-cum-down comer. Hose box with two non percolating ISI marked hoses (length not less than 15 mtrs) & branch shall be equally distributed on ground floor & each podium floor as well as on each floor near the hydrant outlet.

k) **Alternate source of power supply:**

An alternate source of L. V./H. V. supply from a separate sub-station or D.G. Set with appropriate change over switch shall be provided for fire pump, fire lift, staircase, corridor lighting circuits, sprinkler pump, jockey pump and fire alarm system, detector systems, etc. It shall be housed in a separate cabin.

l) **Portable fire extinguishers :**

- a. Dry chemical powder type fire extinguisher of 06 kgs. capacity having I.S. certification mark and two bucket filled with dry clean sand shall be kept at the entrance of electric meter room as well as in lift machine room.
- b. Dry chemical powder type fire extinguishers of 06 kgs capacity having I.S.I. certification mark and four bucket filled with dry clean sand shall be kept for every 100 sq. mtr. area of parking at stilt on ground & each podium floor.
- c. One dry chemical powder type fire extinguisher of 06 kgs. capacity having I.S.I. certification mark shall be kept on each floor level at prominent place & refuge area.

m) **Fire Fighting Requirements At The Construction Stage of Building:**

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

- a) Dry riser of minimum 10 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.
- b) Drums of 2000 ltrs. capacity filled with water & two fire buckets shall be kept of each floor for every 100 sq. mtrs area.
- c) Water storage tank of minimum 20,000 ltrs. capacity shall be kept at site ready to use in case of emergency, which may be used for other construction purpose also.

16. **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 area.

17. **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. The layout of fire alarm system shall be in accordance with I.S. specification.

18. **SIGNAGES:**

Self-glowing/fluorescent exit signs in green color shall be provided showing the means of escape for the building.

19. **TRAINED OCCUPIERS:**

Occupiers of the building shall be trained Fire prevention and to extinguish fire in initial stage, supervision on Maintenance of fix fire fighting system & portable extinguishers, Mock evacuation drills etc.

20. PANEL BOARD OF FIREFIGHTING 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 hrs.

21. FIRE DRILL/EVACUATION DRILLS / PLAN: -

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

22. ELECTRIC SUB-STATION (DRY TYPE) :

- a) Only dry type substation/transformers shall be installed.
- b) Entire installation of substation including switchgear room, capacitors, transformer etc. shall be confirmed to the Indian Electric Act/Rules in practice.
- c) Cables in the cable trenches shall be coated with fire retardant material.
- d) Automatic built-in circuit breakers shall be provided in the substation/transformer.
- e) The door of the sub-station shall be of two hours fire resistance.
- f) The capacity of the sub-station shall be as per service provider's requirement.
- g) All parts of switch gear and transformer are to be examined frequently and carefully for signs of overheating, tracking etc.
- h) The substation/transformer area shall be kept prohibited and no unauthorized person shall be allowed to enter in the area.
- i) Ventilation shall be provided at the ceiling level.
- j) H.V./L.V. cable ducts shall be as per Indian Electricity Rules.
- k) The danger signage on the substation with the electric voltage load.
- l) Two dry chemical power type (Class ABC type) fire extinguishers of 09 kgs. Capacity each with BIS certification mark coupled with four buckets filled with dry clean sand and shall be kept on the sub-station.

23. REFUGE AREA:

Refuge area provided on 8th, 15th & 22nd floor, as shown in plan & shall be conforming to the following requirements:

- i) Manner of refuge area
 - a) The refuge area shall be so located that it shall preferably face the wider open space on the side of the building perpendicular to the main access road.
 - b) The refuge area shall be provided with railing/ fire rated glass / 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) Use of refuge area :
 - 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.
 - c. Adequate emergency lighting facility shall be provided.
Terrace floor as a refuge floor:
 - 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 (above 4%) shall be counted in FSI.

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iv) **Terrace floor as a refuge floor:**

- 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".

23. All the fire safety measures stipulated earlier vide N.O.C. u/n. FB/HR/ES/108 dated-09.07.2010 issued by this office shall be treated as cancelled.

Earlier, the party has paid scrutiny fee of Rs.91,500/- vide receipt No. 1640983 dated 24.06.2010 (SAP Doc. No. 1000623546) on the total built up area of 9105.00 sq. mtrs. as certified by the Architect.

Now, the party has paid scrutiny fee of Rs.3,71,120/- vide receipt No.42400003025 & 26, dated 10.07.2017 (SAP Doc. No. 1003009469) on the total built up area of 10758.50 sq. mtrs. as certified by the Architect.

However, E.E.(S.R.A.) 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:

- i) The fire fighting installation shall be carried out by licensed approved agency.
- ii) The area calculation shown in the enclosed plan shall be checked by the E.E.(S.R.A.)
- iii) E.E.(S.R.A.) requested to scrutinized the plans as per amended DCR & verify civil work and all other requirements pertaining to civil Engineering side including access road, open spaces, corridors, staircases, amendments, height, refuge area in sq. mtrs. & floor occupancy of the building. E.E.(S.R.A.). is also requested to verify open space as per the Directives of Hon. M.C.'s office order No. MGC/A/6647 dated 23.12.2013 & orders of Hon. Supreme Court. 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 C.C. shall not be permitted.
- iv) E.E.(S.R.A.) shall verify the proposal in context with Hon. M.C.'s circulars issued u/n. Ch.E./32545/DP-Gen dated 24/02/2015 & u/no. Ch.E/34194/DP/Gen dated 10/03/2015 and verify the compliance as per the above said circulars. If the same is not complied with, this proposal shall be referred back to this department for issuing fresh NOC.
- v) This N.O.C. is issued from fire risk point of view only.
- vi) 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.
- vii) Necessary permission for any licensable activity shall be obtained from concerned department & M.C.G.M.'s / C.F.O.'s department till then shall not be allowed to use.
- viii) There shall be no tree located in compulsory open spaces.
- ix) The area size to consult with MEP Consultant for the sprinkler system, detection system, fire alarm system, wet riser system, public address system, electrical duct, etc. to be verified & examine.
- x) If any matter in this case, violets DCR 1991 then this proposal shall be referred back to this department for issuing fresh NOC.
- xi) This NOC is issued without prejudice to legal matters pending in court of law, if any.

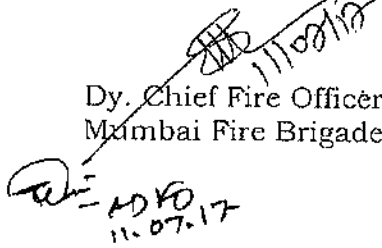
- xii) No any addition/alteration shall be done in the structure of the flats/building without the previous consent of all the concerned/occupier as per the provision of Section 7 of MOFA.
- xiii) This NOC is issued only from Fire Protection & Fire-Fighting requirements point of view & issued on the request letter from M/s. Vision, Architects. Any authorized or legal matter shall be cleared by Owner/ Occupier/ Developer/Architects etc.
- xiv) The plans approved along with this N.O.C. are approved from Fire Risk / Fire Safety point of view only. Approval of these plans does not mean in any way of allowing construction of the building. It is Architect / Developer's responsibility to take necessary prior approval from all concerned competent authorities for the proposed construction of the building.
- xv) If podium is proposed it shall not extend 3m beyond building line. But in this case, Architect has extended the podium more than 3.00mtrs beyond the building line on North & West sides. Hence, E.E.(S.R.A.) is requested to scrutinize/verify the plans in the said context as per new DCR and is subject to the approval of C.E.O. (S.R.A.).
- xvi) Due to parking requirement, Architect has proposed pit car parking in the Stilt. Necessary arrangements shall be made for dewatering the water in monsoons.

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Dy. Chief Fire Officer
Mumbai Fire Brigade

Copy to: M/s. S.S. Associates, Architects.

Dy. Chief Fire Officer
Mumbai Fire Brigade


11-07-17