

# Government Of West Bengal Office Of The Divisional Fire Officer, Paschim Medinipur West Bengal Fire & Emergency Services Sepoy Bazar, P.O.:- Medinipur, P.S.:- Kotwali, Pin:- 721101

Memo no.:FSR/0125186231500274 Date: 18-12-2023

From:

Divisional Fire Officer, Paschim Medinipur West Bengal Fire & Emergency Services

To: SMT. PIYA MUKHERJEE, D/O LATE ARUN KUMAR BOSE REPRESENTED BY ATTORNEY TETRAS DEVELOPERS & CONSTRUCTIONS PRIVATE LIMITED

MOUZA - KERANITOLA, J.L. NO. - 171, R.S. AND L.R. DAG-469,470,L.R. KHATIAN- 22487,HOLDING NO.-611,VIDYASAGAR SARANI(LIBRARY ROAD), WARD NO.- 12 UNDER MIDNAPORE MUNICIPALITY,P.O.-MIDNAPORE, P.S.-MIDNAPORE, PIN-721101, DIST.-PASCHIM MEDINIPURPORE

Sub: Fire Safety Recommendation proposed construction of B+LG+UG+X storied Commercial Cum Residential Apartment under group of Residential Building in favor of Smt. Piya Mukherjee, D/O Late Arun Kumar Bose Represented By Attorney Tetras Developers & Constructions Private Limited at Mouza- Keranitola, J.L. No.- 171, R.S. And L.R. Dag-469,470,L.R. Khatian- 22487,Holding No.- 611,Vidyasagar Sarani(Library Road), Ward No.-12 Under Midnapore Municipality, P.O.- Midnapore, P.S.-Midnapore, Pin-721101, Dist.-Paschim Medinipur.

This is in reference to your application no. 0125186231500274 dated 07-09-2023 regarding the Fire Safety Recommendation proposed construction of B+LG+UG+X storied Commercial Cum Residential Apartment under group of Residential Building in favor of Smt. Piya Mukherjee, D/O Late Arun Kumar Bose Represented By Attorney Tetras Developers & Constructions Private Limited at Mouza- Keranitola, J.L. No.- 171, R.S. And L.R. Dag-469,470,L.R. Khatian-22487,Holding No.- 611,Vidyasagar Sarani(Library Road), Ward No.-12 Under Midnapore Municipality, P.O.- Midnapore, P.S.-Midnapore, Pin-721101, Dist.-Paschim Medinipur.

The plan submitted by you was scrutinized and marked as found necessary from Fire Safety point of view. In returning one set of plan with recommendation, this is issuing Fire Safety Recommendation in favor of the aforesaid building subject to the compliance of the following fire safety measure.

## Recommendation:

A.CONSTRUCTION:

- 1. The whole construction of the Proposed building shall be carried out as per approved plan drawings conforming the relevant building rules of local Municipality Body.
- 2. The floor area exceeds 750 m2 shall be suitably compartmented by separation walls up to ceiling level having two hours fire resisting capacity.
- 3. The interior finish decoration of the building shall be made low flame spread materials conforming I.S. specifications.

- 4. Provision of ventilation at the crown of the central core duct of the building shall be provided.
- 5. Arrangement shall have to be made for sealing all the vertical and horizontal ducts by the materials of adequate fire resisting capacity.

## **B.OPEN SPACE AND APPROACH:**

- 1. The open spaces surrounding the building shall conform the relevant building rules as well as permit the accessibility and maneuverability of Fire Appliances with turning facility.
- 2. The approach roads shall be sufficiently strong to withstand the load of Fire Engine weighting 45M.T.
- 3. The width and height of the access gate into the premises shall not be less than
- 4.4.5 mt. and 5.0 mt. respecting the abutting road.
- 5.Drive way should be free from any type of obstruction. No parking will be allowed on the drive way.
- 6.All the Passage way should be kept clear for free access.

## C.STAIRCASE:

- 1.The staircase of the building shall be enclosed type. Entire construction shall be made of bricks/R.C.C. type having Fire Resisting capacity not less than 4 hours.
- 2. The staircase of the building shall have permanent vents at the top and openable sashes at each floor level in the external walls of the building.
- 3. The width of the staircase shall be made as marked in the plan. Corridors and the exit doors shall conform the relevant Building Rules with up to date amendment.
- 4.All the staircase shall be extended up to terrace of the building and shall be negotiated to each floor.
- 5. Fire and smoke doors at the entrances of all the staircase enclosures as marked in the plan at each floor level shall be provided. The F.C.D. shall be of at least one hour Fire Resisting wire glass window fitted with self-closing type openable in the direction of escape.

## D.LIFT:

- 1. The walls of the lift enclosure shall be at least two hours Fire Resisting type.
- 2. Collapsible gate shall not be permitted.
- 3.One of the lift shall be designed for Fire Lift. The word "FIRE LIFT" shall conspicuously written at ground floor.
- 4.Lift and Lift Lobby shall be communicated to the basement and shall have to be pressurized as per guide line of N.B.C. part-IV, Annexure 'C'.

## **E.REFUGE AREA:**

- 1.The refuge area on calculating the area at the rate of 0.3 m2 / person on the basis of floor area but not less than 15 sq. mtr. each shall be provided on the external wall as cantilever projection or any other suitable floor levels of each building as shown shall be constructed.
- 2. The refuge areas shall be of fire resisting construction and protected with self-closing FCD at the entrance from the corridor or the staircase lobbies.
- 3. The position of refuge areas shall be such that they are negotiable by the fire service ladder from the ground floor level.

#### F.BASEMENT:

- 1.The Basement shall be adequately ventilated with aggregate cross sectional area of not less than 2.5% of the area spread evenly round the perimeter of the basement shall be provided in the form of grills.
- 2.Mechanical smoke venting arrangements shall be provided to all the basements conforming the relevant I.S. Specification & provision of N.B.C.- Part IV.
- 3. The exit from the basement shall be form open Air and form any points the travel distance shall not exceed 15 mtr. to reach any exit.
- 4.All the basements shall be protected with Automatic Sprinkler System conforming to I.S. 3844- 1989.
- 5. The staircases of basements shall be of enclosed type and pressurized having Fire resistance of not less than 4 hrs., to be entered at ground level only from the open air and in such positions that smoke from any Fire in the basement shall not obstruct any exit of upper floor of the building.
- 6. Mechanical extractors shall have an alternative source of supply.
- 7.Mechanical extractor shall have an internal locking arrangement so that extracting shall continue to operate and supply fans shall stop automatically with the actuation of Fire Detectors / Sprinklers.
- 8. Mechanical extractors shall be designed to permit 12 Air Changes per Hour in case of Fire or Distress Call.
- 9.Basement compartmentation shall be achieved as shown / marked in plan & protection shall be made as per provision of N.B.C-Part-IV.

## G.FIRE FIGHTING WATER:

Underground water reservoir having water Capacity 2,00,000 Lt. for fire and overhead water reservoir having capacity of 20,000 Lt. (as shown in the plan drawing) exclusively for fire fighting purpose with replenishing arrangements @ 1000 Ltrs./min. preferably from two different sources of water supply shall be provided. The water reservoirs shall have overflow arrangement with the domestic water reservoir as well as to avoid stagnancy of water. The water reservoir shall be kept full at all time.

## H.HYDRANT SYSTEM:

- 1.The building shall be provided with separate Wet Riser of each building of 150mm. Internal diameter pipe Line with single outlet landing valves at the staircase landings/half landings at the rate of one such riser for 1000 sq .m. of floor area. The system shall be so designed that shall be kept charged with water all the time under pressure and capable to discharge not less than 2850Lts./min. at the ground floor level outlet and minimum 900 Lts./min. at the top most outlet. In both cases the running pressure shall not be less than 3.5 Kgs/cm2. All other requirements shall conform I.S. 3844 1989.
- 2.Provision of Hose Reel in conjunction with wet Riser shall be made at each floor level conforming the relevant I.S. specification.
- 3.Ring Main Hydrant with provision of adequate numbers Hydrant shall be installed surrounding the project in accordance with relevant I.S. specification.
- 4. Fire service inlets shall have to be installed at the entrance of the premises.

# I.SPRINKLER INSTALLATION:

The automatic sprinkler installation shall be provided in Basement area, car parking area, screening areas, Common lobby along with all assembly of the said premises per I.S. 9972. Alarm Gong to be incorporated along with the sprinkler system.

## J.FIRE PUMP:

- 1. One no. Jokey pump( electric) capacity 180 LPM,
- 2. One no. Main pump capacity 2850 LPM.,
- 3. One no. Diesel driven Stand by pump of capacity 2850LPM.
- 4.One no. separate sprinkler pump of capacity 2850LPM. And
- 5.Lower levels in high rise buildings 60 m or above in height are likely to experience high pressure and therefore, it is recommended to consider multi-stage, multi-outlet pumps (creating pressure zones) or variable frequency drive pumps or any other equivalent arrangement.
- 6.If any one set of pumps shall be provided for each 100 hydrants or part thereof, with a maximum of two sets. In case of more than one pump set installation, both pump sets shall be interconnected at their delivery headers.

All the pump designed so as to supply water 900 LPM at a pressure of 3.5kg/cm2 at the furthest point. Only diesel driven arrangement for stand by fire pump shall be ensured. All the pumps shall be incorporated with both manual and auto starting facilities. The suction of pumps shall preferably of positive type or in case of negative suction the system shall be wet riser-cum down comer with suitable terrace pump with overhead tank. All other requirements shall conforming I.S. 12469-1988.

K.Multi-Layer Automated Mechanized Car Parking System:

- 1.Structural design: The M.L.C.P. shall be constructed of structural steel construction.
- 2.Vertical Deck Separation: For M.L.C.P. having Multi Car Parking level, vertical Fire separation between the upper and lower decks by using a 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. Proper drainage system shall have to be provided for accidental leaking of oil from the car and sand bed shall be provided at the ground level.
- 3. Fire Engine Access way: Access way shall be provided for the Fire Engine to gain access to the car park entrance and exit
- 4. Fire Hydrant: Fire hydrants are to be provided in accordance with Cl. 4.4
- 5.Natural Ventilation: -Each car parking deck shall be provided with at least 50% external ventilation openings of the perimeter wall areas and uniformly distributed.
- 6.Sprinkler & Detection System: Open Modular Type Sprinkler along with detectors shall be provided in all M.L.C.P. areas as per relevant I.S. Specification. Cross zone wise sprinkler system shall have to be implemented.

Operating System: - Both Mechanical and Manual type operating system shall have to be provided.

# L.AUDITORIUM & HALL:

- 1.No more than 7-10 no. seats and middle row 14 no. seats in a row as shown in the plan drawing. No seat shall be more than 15 Mt. from the point of exit. Seats shall be securely fastened to the floor. All the exits must lead to the point of final exit or points of entry to protected routes.
- 2.All the exits shall be clearly visible and readily accessible. Gang way shall not be less than 1.2 Mt. as marked in the plan. All the exits as marked in the plan drawing shall be maintained strictly.
- 3.Seats without dividing arms shall have there capacity determine by allowing 450 mm. wide and 600 deep per person and if seats shall have push back capacity will be 760 mm. deep and 500 mm. wide.
- 4. The stage decoration shall be of non-flammable materials. Fabrics and papers if used such purpose shall be treated with an effective flame proofing materials. Auditorium stage roofing having a screen of highly combustible construction shall have a ventilator in or above it openable for the stage floor by hand and also opening by fusible link or some other

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approved automatic heat actuated device and to give a free opening equal to at least one eight the area of the floor the stage.

- 5. The stage and the auditorium shall be effectively cut-up from the assembly areas or protected with a standard system of automatic high velocity sprinkler.
- 6. Every place of assembly in which projection of picture by light is made shall have there projection apparatus enclosed in a Fire resisting fixed booth according to good practice of as per relevant I.S. specification.
- 7.Automatic smoke vents be installed above the auditorium with vent are equal to not less than 3-1/3 percent of the floor area of the auditorium including the sum of the floor areas of all balconies, galleries, tiers. It may be desirable to provided a large number of small vents rather than as mall number of large vents. Air Changer shall have to be maintained as per N.B.C. Part IV.

## M.ELECTRICAL INSTALLATION AND DISTRIBUTION:

- 1. The electrical installation including Transformers, Switch Gear, Main & Meters etc. and the distribution system of the premises shall be made satisfying the code of practice for Fire Safety in general building as laid down in I.S. specification.
- 2. The vertical and horizontal electrical ducts shall be sealed at each floor level by fire resisting materials.
- 3. The electrical installation shall be adequately protected with CO2/D.C.P. Fire Extinguishers conforming I.S. specification.
- 4.All electrical installation viz. Transformer, Switch Gear,LT/HT rooms shall be protected with both auto detection and suppression systems as per suitability.
- 5.For every 230V wiring above false cealing660 grade insulated cable shall be used Transformer Switch Gear H.T.,L.T. and others electrical rooms shall be at the ground floor level the other electric rooms shall be at least 4 hrs.fire resisting capacity adequate ventilation arrangement shall have to be made in all the rooms,Dry and explosion proof type Transformer shall be installed.

## N.Alternative Power Supply:-

Arrangement for alternative power supply shall have to be made to supply power with the help of a generator to operate at least the Fire Pump, Deep Tube-Well Pump, Fire Alarm System etc. and also for illuminating the Staircase, Corridors, Lobbies etc. and other places of assembly of the building in case of normal power failure.

## O.AUTO DETECTION AND ALARM SYSTEM:-

- 1.Auto Fire Detection System with the help of Heat and Smoke Detectors shall be installed in all places of below and preferably above false ceiling of the building. The system shall also be made in place of rooms where valuable articles have been kept. The other requirements of the system shall be made in accordance with I.S. specification.
- 2. The suppression system shall be made with Fire Extinguishers particularly in Computer, Electrical processing and Data Room and in all rooms of irreplaceable articles.
- 3. Public Address System linked between all floors and Control Room shall have to be established.
- 4.All the installation shall also satisfy the I.S. Specification 2189 as amended and the code of practice as laid down in N.B.C.Part IV.

## P.GAS BANK (If any):

1.Liquefied Petroleum Gas (LPG) store shall be on the ground level of the said building area which to be constructed at least 2mt. distance between an installation and any building, public place, roadways, and other surroundings. The installation shall be protected from excessive weathering by sun, rain etc. and from tampering by unauthorized person. A

lean-to roof with expanded metal on angle iron frame work on the sides is considered suitable for this purpose.

- 2.Adequate ventilation at ground level i.e. 100 mm. above of gas bank, open to atmosphere and below ceiling level at least 500 mm. long & 300 mm. height (covering minimum 25 percent of wall area) to the outside air shall be provided.
- 3.Cylinders shall be located on a concrete or brick floor, raised minimum 100 mm. from ground level in case of outdoor installations.
- 4.FLP fittings, approved by statutory authorities shall be provided for electrical use.
- 5. The doors of the LPG storage room to be made with non-inflammable materials which shall open outwards & shall have louvers/wire mesh to ensure visibility & ventilation.
- 6.L.P. Gas detector/sensor to be installed at the gas bank area.
- 7. Auto suppression system shall have to be provided inside the gas bank as per relevant I.S. specification.

# Q.Kitchen Protection (If any):

- 1. The kitchen should be adequately ventilated.
- 2. The entire kitchen areas should be protected with automatic water sprinklers extended from the existing water base system in the building. However, no sprinklers should be provided within 3 m of cooking equipment and kitchen hood. Temperature rating of sprinklers should be 30°C above the anticipated maximum temperature within the kitchen. Sprinklers installed inside exhaust ducts should be of temperature rating of 141°C.
- 3. First aid fire-fighting equipment of approved class should be installed as per provisions of IS: 2190-2010.
- 4.Cleaning of kitchen exhaust ducts should be done periodically to ensure that carbon soot does not accumulate in the duct to avoid chances of outbreak of fire.
- 5.Installed detectors and sprinklers should be checked periodically to ensure that the sensors detecting equipment are not coated with grease and other suspended particular matter and thus their sensing capabilities are desensitized.
- 6.Grease strip should be available for efficient and regular cleaning of concrete or paved floors of kitchen and also drainage areas.
- 7. The exhaust should terminate outside the building with a fan or duct with a minimum horizontal clearance of 3 m from the outlet.
- 8. Haphazard storage of items should be strictly prohibited.

## R.Public Address System :-

Public address system linked between all floors and Control Room shall have to be established in the ground floor of the buildings.

S.Pressurization system:-

Pressurization system shall have to be provided at the Stairs of Hotel building part, Residential part as well as MLCP part of the entire project.

T.AIR CONDITIONING SYSTEM (If any):-

- 1.The A.H.U. shall be separated for each floor with the system. Air Ducts for individual floors.
- 2.Arrangement shall be made for isolation at the strategic locations by incorporating auto dampers in the Air Conditioning System.
- 3.The system of auto shut down of A.H.U. shall be incorporated with the Auto Detection and Alarm System. The Air Handling Units room shall not be used for storage of any combustible First Aid Fire Fighting arrangement in the style of

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portable Fire Extinguishers, Fire Buckets etc. in all floors and vulnerable locations of the premises shall be made in accordance with I.S. 2190-1992.

U.Small Gears: IS: 903-1993:-

Hose box, 15 M length Permolin delivery hose, Gun Metal short branch of half inch dia. One set at each half landing hydrant should be installed.

V.FIRST AID FIRE FIGHTING SYSTEM: -

First Aid Fire Fighting arrangement in the style of portable Fire Extinguishers, Fire Buckets etc. in all floors and vulnerable locations of the premises shall be made in accordance with I.S. 2190-1992.

## W.GENERAL RECOMMENDATIONS:-

- 1. Fire License shall have to be obtained for proposed storing and processing with L.P.G. and other highly combustible articles.
- 2. Fire Notice for Fire Fighting and evacuation from the building shall be prepared and be displayed at all vulnerable places of the building.
- 4. Floor numbers and directional sign of escape route shall be displayed prominently.
- 5. The employees and security staffs shall be conversant with installed Fire Fighting Equipments of the building and to operate in the event of Fire and Testing.
- 6.Arrangement shall be made for regular checking, testing and proper maintenance of all the Fire Safety installation and equipments installed in the building to keep them in perfectly good working conditions at all times.
- 7.A crew of trained Fireman shall be maintained round the clock for safety of the building.
- 8. Mock Fire practice and Evacuation Drill shall be performed periodically with participation of all occupants of the building.
- 9.Certificate is to be obtained from the Director General, West Bengal Fire & Emergency Services certifying about the satisfactory services, performance of all the Life and Fire Safety arrangements installation of the building. On compliance of all the above Life and Fire Safety Recommendation, the Director General, West Bengal Fire & Emergency Services shall be approved for necessary inspection and testing of all the installation, Fire Safety Certificate in favor of the occupancy shall be issued on being satisfied with the tests and performances of safety aspects of installation of the building.
- N.B.: Any deviation and changes the nature of use of the building in respect of the approved plan drawing, without obtaining prior permission from this office, this Fire Safety Recommendation will be treated as cancelled.

Signature Not Verified
Digitally Signed.
Name: Bam Kumar Chowthury
Date: 18-Dec-2023 19-47:09
Reason: Approved

Member Convener Kharagpur TEC, Paschim Medinipur West Bengal Fire & Emergency Services



# MIDNAPORE MUNICIPALITY

## **OFFICE OF THE COUNCILLORS**

Estd:-1865

MIDNAPORE, DIST- PASCHIM MEDINIPUR, PIN-721101.

Phone: (03222)275384, email-midnapurmunicipality@gmail.com

Memo No.....417.5 / WIS

Dated: 30-11-22

Sri/ Smt. Piya Mukherjee S/O, W/O- Kalyan Mukherjee At- Vidya Sagar Sarani Ward No- 12 Paschim Midnapore

**Sub:** Permission given for Sinking of D.T.W with Jet Pump /

6 No. Hand Tubewell.

Ref: Your application date: 22/11/2022

With reference to the subject cited above, this is to inform him/her that permission for sinking of D.T.W with Jet Pump/ 6-No. Hand Tubewell in his/her holding No.611 in Vidya Sagar Sarani in Ward No: 12 vide this office M.R.No. 2571 dated: 28/11/2022 is given for the above purpose.

He/She is requested to inform this office after completion.



Vice-Chairperson
Midnapole Mimalpality
Midnapore Municipality

Date:

Memo No:

Copy to:

a) Shri M.Bera (S.A.E), W.W.Deptt, Midnapore Municipality.

b) Shri T.Chakraborty (W.W.I), Midnapore Municipality for information and necessary action.

Chairman
Midnapore Municipality