

Dress & Dismatic Co., Ltd. (10466)

1101 DIT rd., Malibagh Chowdhury para, Dhaka, Bangladesh

(23.752361N, 90.414463E)

15.MARCH.2014

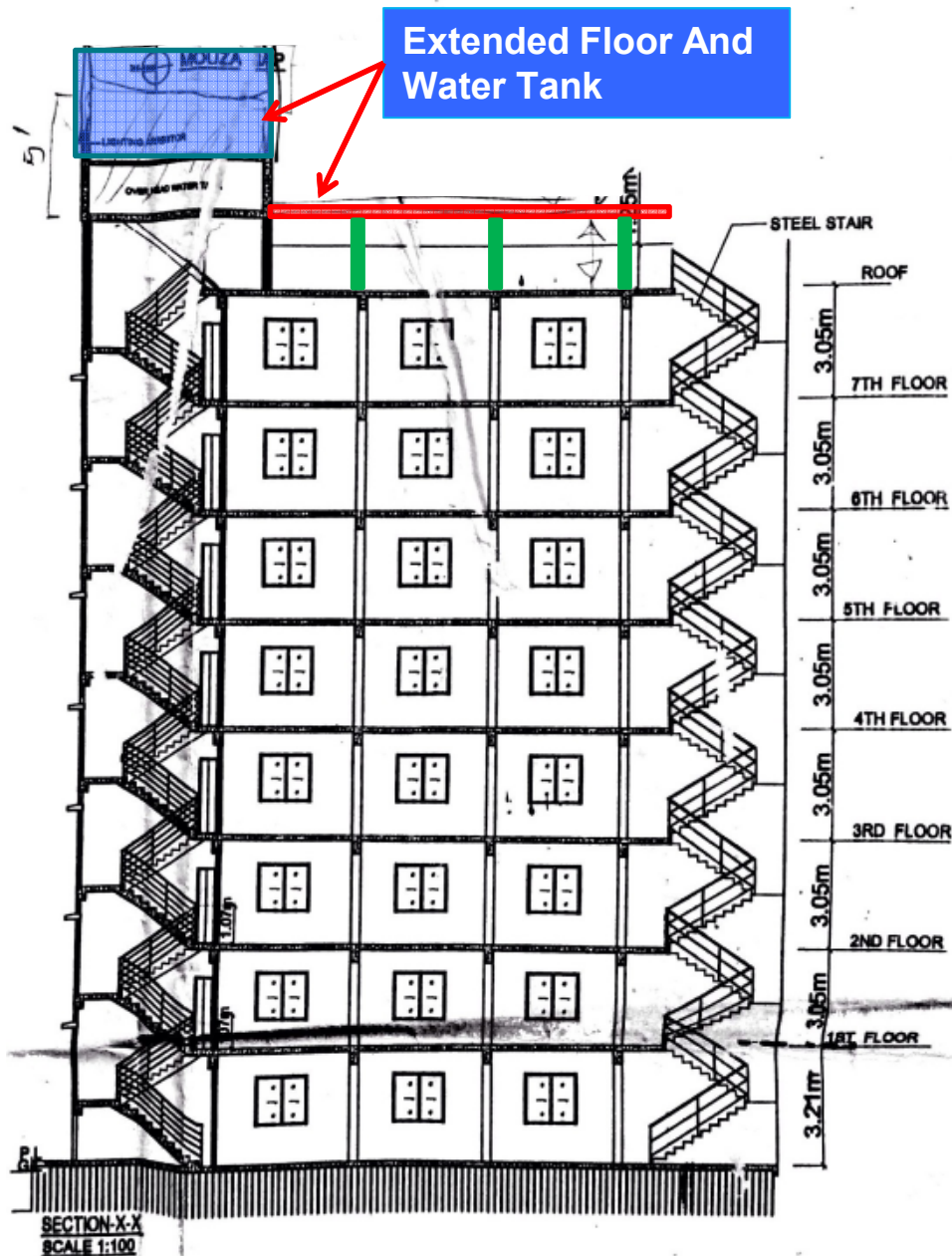
ACCORD
on Fire and Building Safety in Bangladesh



Site Observations

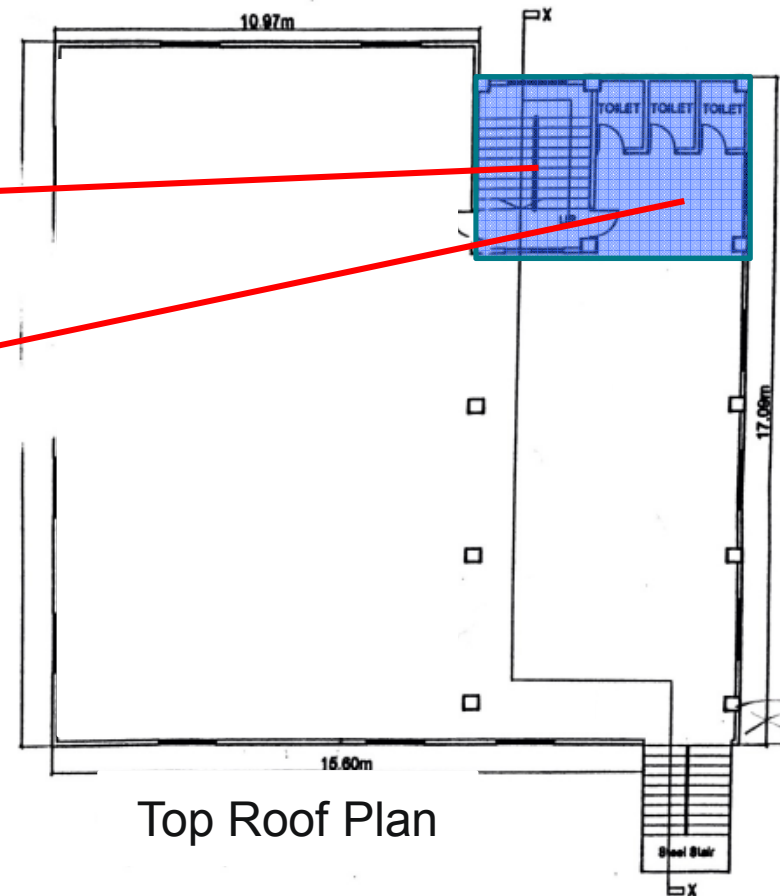
Extended concrete floor and water tank on the roof does not match submission drawing, a capacity check is required.

Priority 1 Concern



Extended concrete floor and water tank on the roof does not match submission drawing, foundation capacity check is required.

Priority 1 Concern



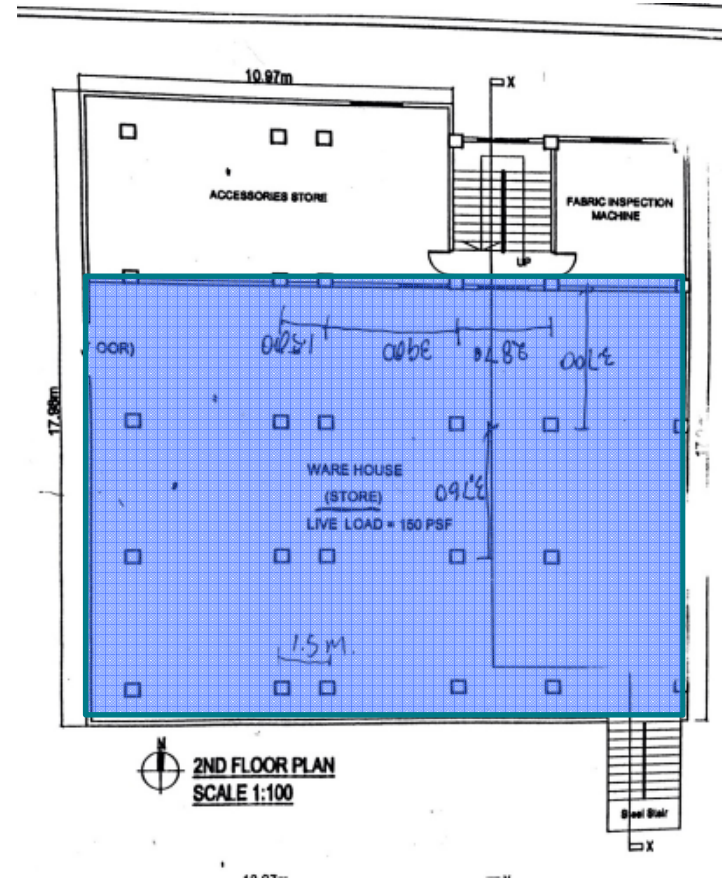
Top Roof Plan

Water tank on top roof does not match with structure drawing, foundation capacity check is required.

Uncontrolled Heavy Storage Loading



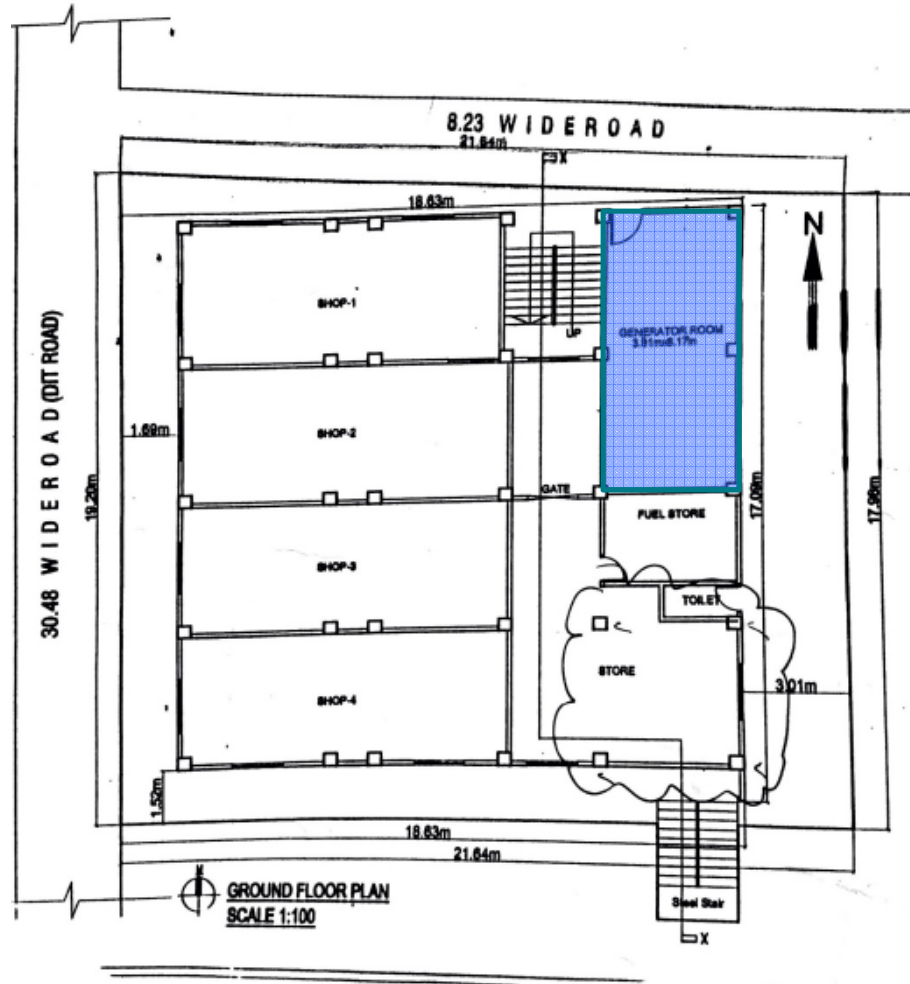
Priority 1 Concern



Uncontrolled heavy storage on 2nd floor. Immediately removal is required.

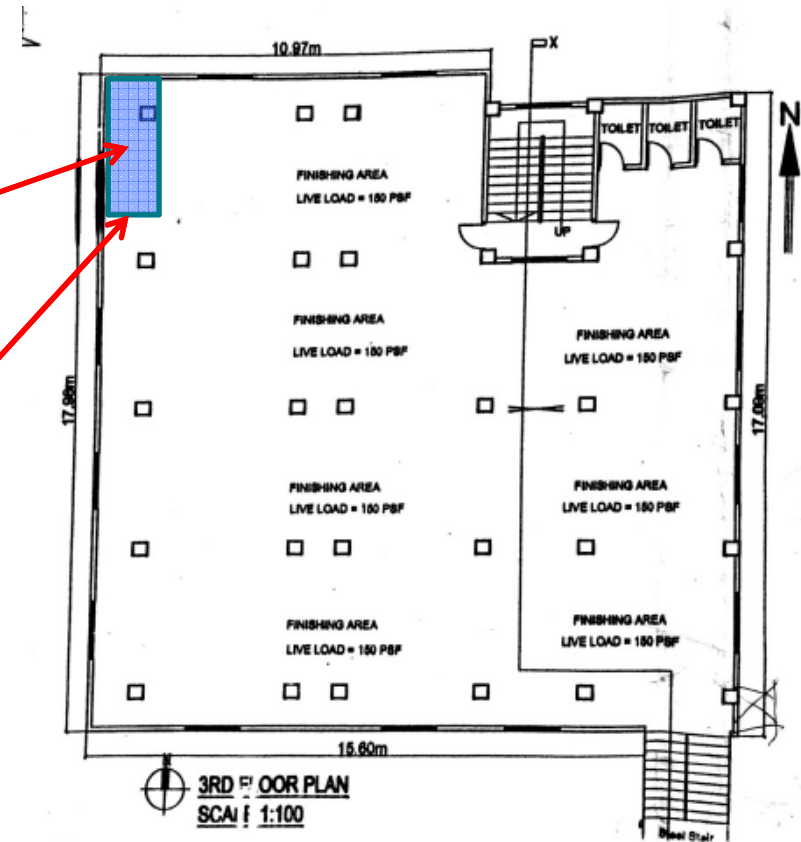
Slab capacity check is required

Priority 2 Concern



The original slab is designed for residential purpose, hence, a capacity check is required.

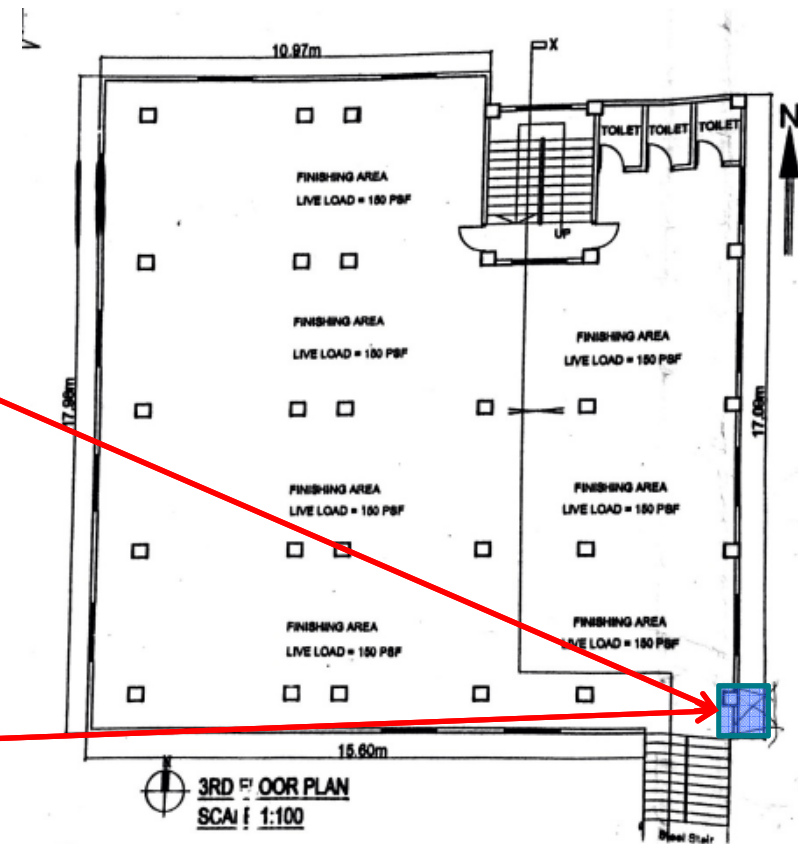
Priority 2 Concern



The original slab is designed for residential purposes, hence, a capacity check is required.



Priority 2 Concern

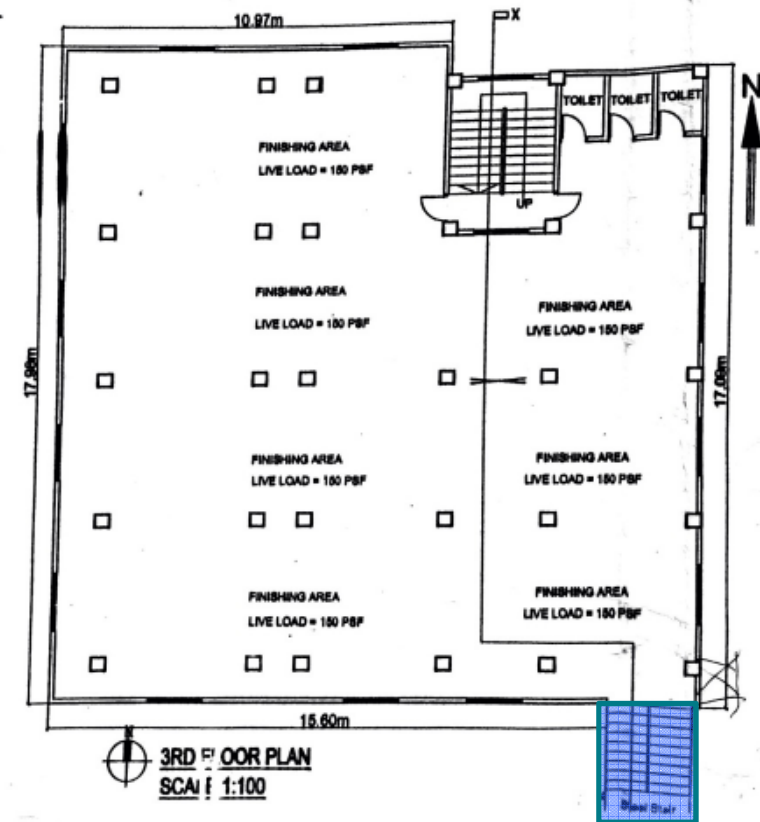


Extension cantilever slab on 2nd to roof floors does not match with structural drawings. Slab capacity checks are required.

Capacity check for steel escape stair



Priority 2 Concern



Capacity check for steel escape stair, especially at support connections.



Overall Stability System

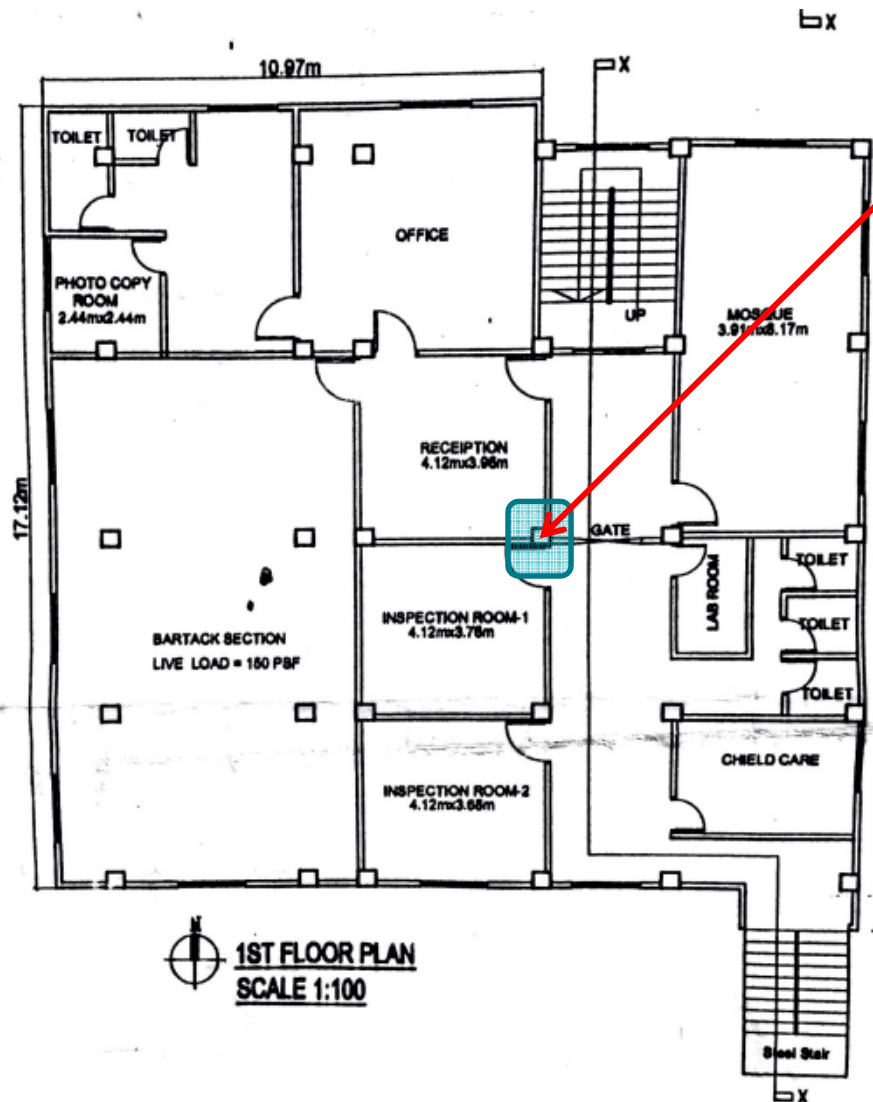


Concerns on the stability system for lateral loading and seismic loading. Façade brickwork with little capacity; lack of moment capacity in connection between columns and beams.



Further detail engineering assessment is required whether such system can resist the lateral load from wind & earthquake

Key Column Stress Check :



From the column stress check at the key column as shown, it is found that the apparent working stress is within the range of FOS of 1.25 to 1.50 which is an AMBER rating.

Internal Column Stress

Priority Actions

Problems Observed Summary

ITEM 1: (Priority 1) Adequacy of foundation to support extended floor and water tank.

ITEM 2: (Priority 1) Uncontrolled Heavy Storage Loading.

ITEM 3: (Priority 2) Adequacy of slab to support MEP loading and cantilever slab.

ITEM 4: (Priority 2) Capacity check for steel escape stair.

ITEM 5: (Priority 2) Stability System and Foundations.

Item 1 and actions

Adequacy of foundation to support extended floor and water tank.

Priority 1 (Immediate – Now)

- Engineering assessment of factory to be carried out and in particular foundation capacity aspects to be investigated in detail.

Priority 2 (within 6 – weeks)

- None required.

Priority 3 (within 6-months)

- None required.

Item 2 and actions

Uncontrolled Heavy Storage Loading on 2nd floor

Priority 1 (Immediate – Now)

- Immediately reduce stacking height of fabric rolls to ensure total load does not exceed 3.0kPa

Priority 2 (within 6 – weeks)

- Adopt some sort of signage/staff guidance to ensure that the maximum weight of storage is not exceeded .

Priority 3 (within 6-months)

- Maintain standards of quality control to ensure that storage procedures are correctly followed so that overloading problems do not arise in the future.

Item 3 and actions

Adequacy of slab to support MEP loading on ground floor and 3rd floor. Also and cantilever slab.

Priority 1 (Immediate – Now)

- None required.

Priority 2 (within 6 – weeks)

- Factory Engineer to review slab design and/or strengthening.

Priority 3 (within 6-months)

- None required.

Item 4 and actions

Check steel staircase capacity especially connections joint and stability.

Priority 1 (Immediate – Now)

- None required

Priority 2 (within 6 – weeks)

- Detail engineering assessment to be carried out in particular the steel column capacities and the connection capacities.

Priority 3 (within 6-months)

- Continue to implement loading plan. Detailed Engineering Assessment is to be completed.

Item 5 and actions

Stability System / Moment Frame Capacity

Priority 1 (Immediate – Now)

- None required

Priority 2 (within 6 – weeks)

- Detail engineering assessment to be carried out in particular stability and foundation aspects to be investigated in detail.

Priority 3 (within 6-months)

- None required