

Skyline Casual Apparels Ltd.(10016)

Palashbari, Ashuria, Savar, Bangladesh

(23.929976N, 90.265198E)

24.MARCH.2014



ACC RD
on Fire and Building Safety in Bangladesh

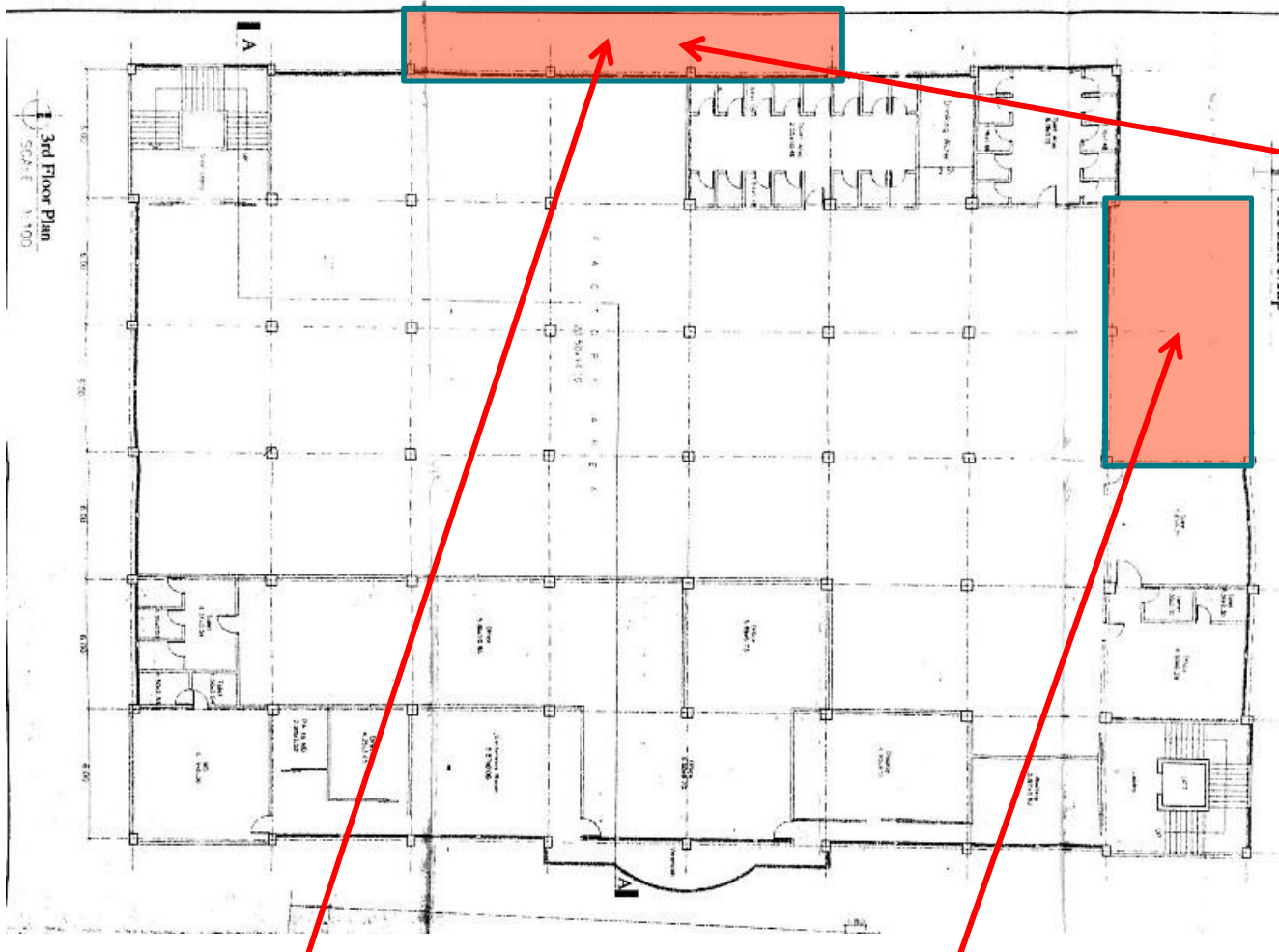


Identified Priority 1 Concerns

The back side of the main building appears to have cantilevered slabs at various levels that do not match the provided construction documentation and an extended section of floor, the adequacy of slab, column and foundation capacities are required to be investigated.

Building 1

Priority 1 Concern



Cantilevered Slab on the 1st to 7th floor at back side.

Extension floor on ground floor to 3rd floor.



Identified Priority 2 Concerns

Uncontrolled Heavy Storage Loading

Building 1



Uncontrolled heavy storage on 2nd and 3rd floors.

Priority 2 Concern



Fire proofing material for steel structure may be required.

Building 2

Priority 2 Concern

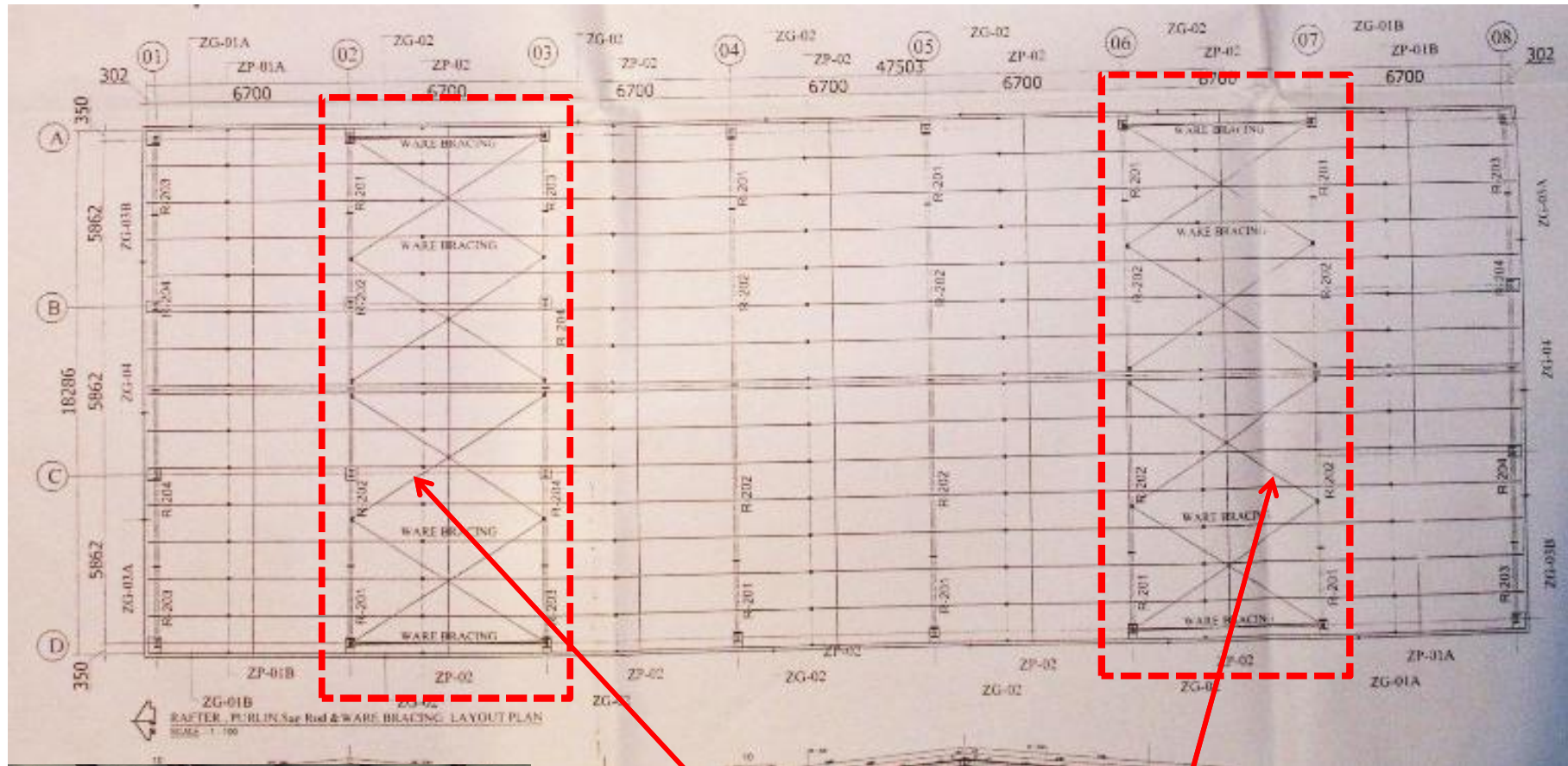


Fire proofing material for structural steel element may be recommended.

Steel stability bracing appears to be missing when compared with the structural drawings provided.

Building 2

Priority 2 Concern



Longitudinal roof steel bracing is missing when compared with the structural drawings. No vertical stability bracing provided either

Overall Stability System



Building 1 – We have concerns with the stability system for lateral normal and seismic loading - façade brickwork with little capacity - lack of moment capacity in connection between columns and beams.

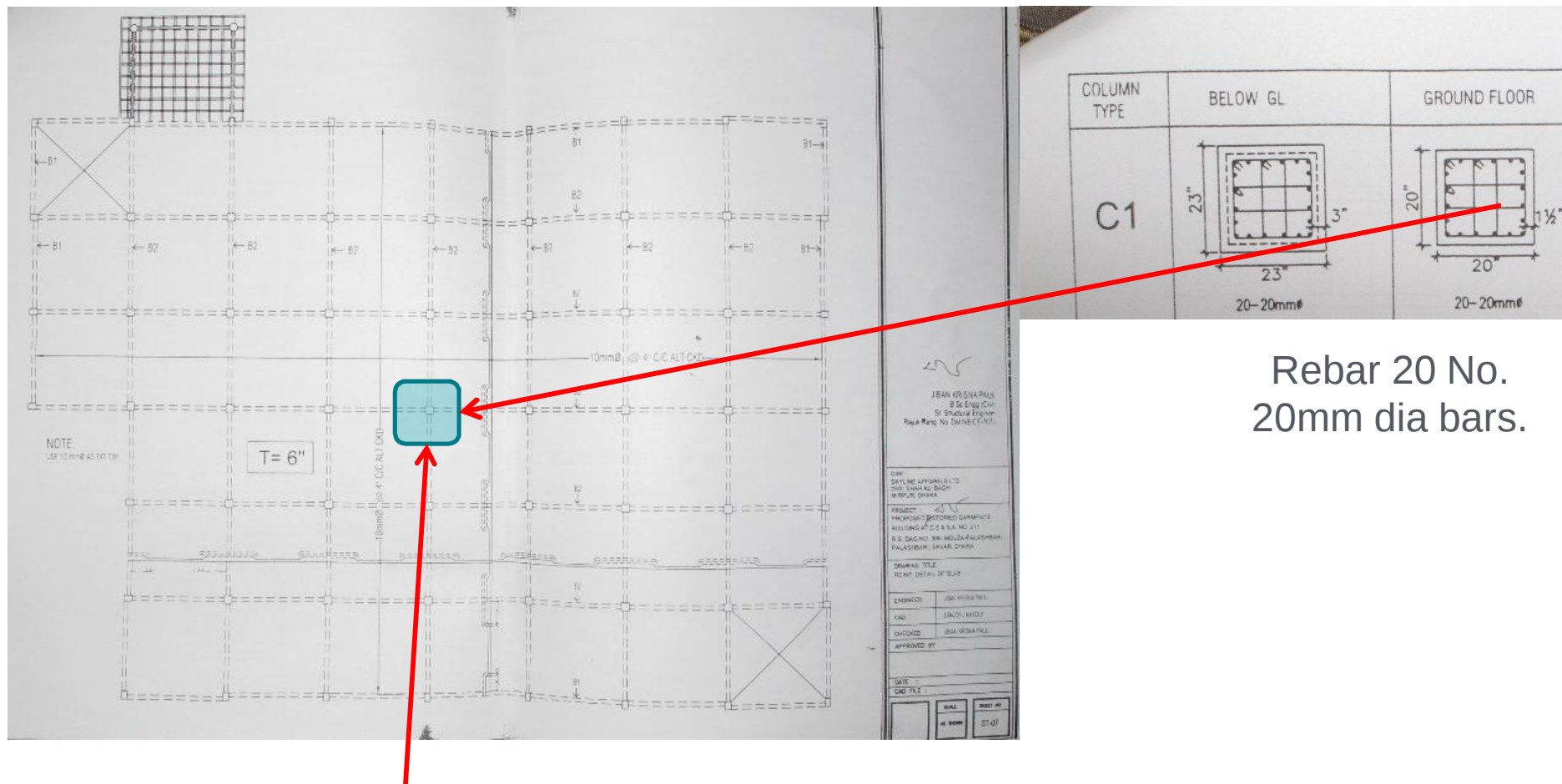
A Detail Engineering Assessment is required to consider whether such a system can resist normal and seismic lateral loads.

Building 2 – We have concerns with the stability system for this building under seismic loading as well as the concern regarding the lack of roof and wall bracing.



Key Column Check Load Run Down

Key Column Stress Check :



Load rundown at the key column, it is found that the column stress is within the range of FOS equals from 1.25 to 1.50 which is a **AMBER** rating.

Internal Column Stress

Priority Actions

Problems Observed Summary

ITEM 1: (Priority 1) Adequacy of Cantilevered Extensions on building 1 to support loading.

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

ITEM 3: (Priority 2) Fire proofing material for all structural steel elements.

ITEM 4: (Priority 2) Lack of steel roof and wall bracing compared with structural drawings.

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

Item 1 and actions

Adequacy of sections of cantilevers and the corner extension to building 1 to support loading

Priority 1 (Immediate – Now)

- Factory Engineer to review design, loads, column stresses for all floors and confirm suitability for applied loads by way of a Detailed Engineering Assessment.

Priority 2 (within 6 – weeks)

- Verify in situ concrete stresses either by cores or existing cylinder strength data for affected beams and columns.
- Detailed Engineering Assessment to be completed.
- Produce and actively manage loading plan for all floor plates giving consideration to floor capacities and column capacity

Priority 3 (within 6-months)

- Develop and continue to implement loading plan

Item 2 and actions

Uncontrolled Heavy Storage Loading on 2nd and 3rd floor.

Priority 1 (Immediate – Now)

- None required.

Priority 2 (within 6 – weeks)

- Reduce stacking height of fabric rolls to ensure total load does not exceed 3.0kPa
- Adopt some sort of signage/staff guidance to ensure that the maximum weight of storage is not exceeded by way of a floor loading plan.

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

Fire proofing for steel structure.

Priority 1 (Immediate – Now)

- None required.

Priority 2 (within 6 – weeks)

- Fire proofing material for structural steel element may be required – investigate further.

Priority 3 (within 6-months)

- Maintain standards of maintenance.

Item 4 and actions

No steel roof and wall bracing compared with structural drawings for building 2.

Priority 1 (Immediate – Now)

- None required.

Priority 2 (within 6 – weeks)

- Install steel bracing as per the structural drawings.

Priority 3 (within 6-months)

- None required.

Item 5 and actions

Stability System / Moment Frame Capacity

Priority 1 (Immediate – Now)

- None required

Priority 2 (within 6 – weeks)

- A Detailed Engineering Assessment is to be carried out and in particular will require stability and foundation aspects to be investigated in detail.

Priority 3 (within 6-months)

- None required