Textown Limited

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ACCORD
on Fire and Building Safety in Bangladesh

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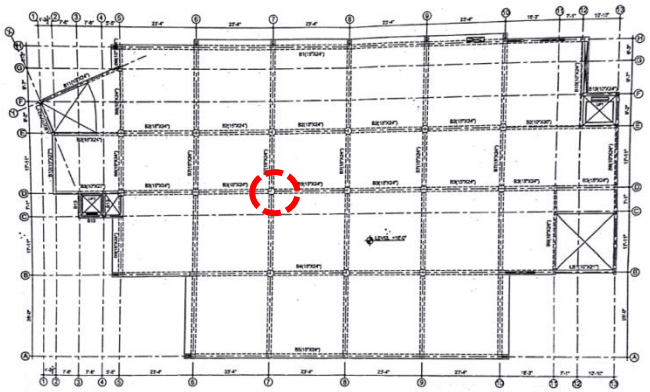
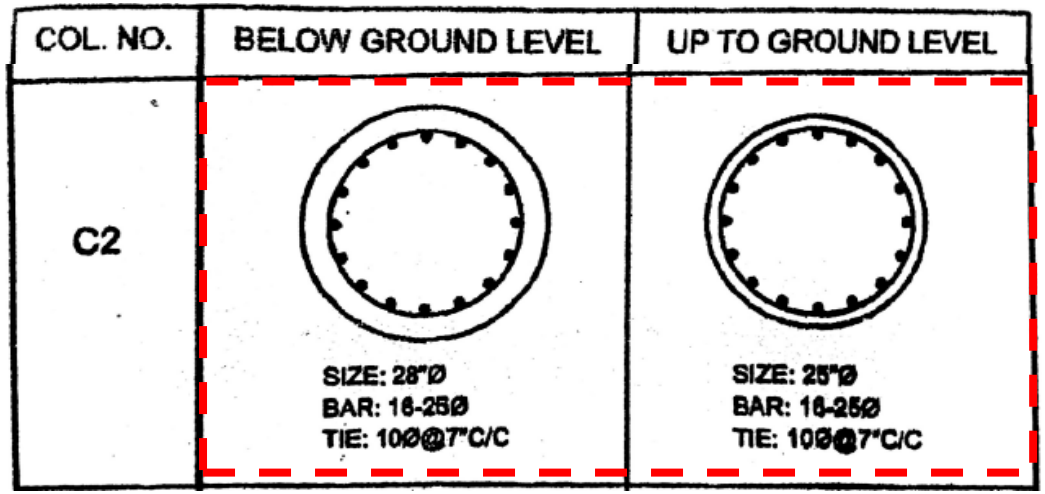
Identified Priority 1 Concerns

1st Priority 1 Concern



Based on the load rundown analysis following the live load intensity (4.78kPa) prescribed by design (the entire Building 01 is claimed to be designed for all floors achieving live load capacity of 100psf (4.78kPa)), the column portion below 1/F level seems to have a much lower F.O.S than the column portion below ground level (AMBER warning). If based on building code loading of 3.0kPa, the column in question reverts to YELLOW status.



Column Load Exceeds Allowable Limit by Code
Building 01

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2nd Priority 1 Concern

On Level 4 of Building 03, the room is used to store fabric. It was observed that many of the bags of fabric were quite heavy, and that the bags had been stacked to almost ceiling height.

The permissible live load for this building is 3.0 kPa only. It was calculated that the loading from the stacks of fabric had exceeded this permissible loading limit.

Excessive Storage Height a on Level 4 at Building 03

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Identified Priority 2 Concerns

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1st Priority 2 Concern

The staircase at the side of Building 03 is meant to be a fire escape staircase. This means that there is a potential for crowds of people to use this stair in the event of emergency. However, the stair was built from very small steel members, and had not been properly galvanised, and therefore had rusted very badly. The structural stability of this staircase is questionable, and appears unsafe for its intended purpose

Escape Staircase is in Poor Condition

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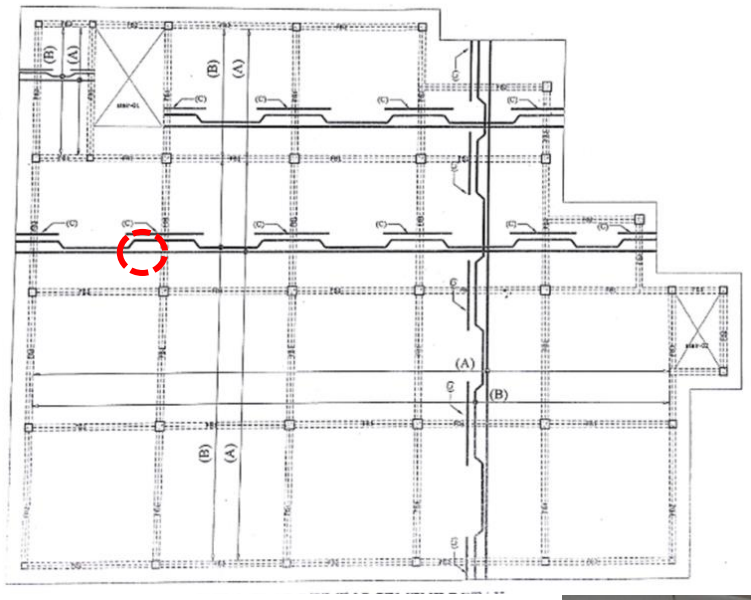
Identified Priority 3 Concerns



1st Priority 3 Concern

Similar to Building 01, the capacity of the column above ground level appears to possess a smaller FOS in design than the portion of column below G/F level. Although it is only a YELLOW warning, a full review of loads and concrete design strength should be carried out. The portion of the column below G/F possesses sufficient capacity to maintain material stresses to very low limits.

Column Load Exceeds Allowable Limit by Code
Building 02

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Problems Observed Summary

ITEM 1: (1st Priority 1) Preliminary load takedown calculation in Building 01 using the prescribed design live loads indicate a low factor of safety of design

ITEM 2: (2nd Priority 1) Storage height of fabric in storage rooms on 4/F appear to be excessive in Building 03

ITEM 3: (1st Priority 2) Existing escape staircase at Building 03 is in very poor condition, and appears unsafe to satisfy emergency loading conditions

ITEM 4: (1st Priority 3) Preliminary load take-down calculation in Building 02 using the prescribed design loads indicate a slightly low factor of safety of design

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Item 1 and actions

Preliminary load takedown calculation in Building 01 using the prescribed design live loads indicate a low factor of safety of design

Priority 1 (Immediate – Now)	• Factory Engineer to review design, loads and columns stresses in entire building • Verify insitu concrete stresses either by 100mm dia. cores or existing cylinder strength data for the structure. • A Detail Engineering Assessment of Factory to be commenced, see attached Scope
Priority 2 (within 6 – weeks)	• Produce and actively manage a loading plan for all floor plates within the factory • Detail Engineering Assessment to be completed
Priority 3 (within 6-months)	• Continue to implement load plan

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Item 2 and actions

Storage height of fabric in storage rooms on 4/F of Building 03 appears to be excessive

Priority 1 (Immediate – Now)	• Immediately reduce stacking height of fabric to ensure total load does not exceed 3.0kPa
Priority 2 (within 6 – weeks)	• Mark the maximum allowable height of fabric stacking to ensure full compliance
Priority 3 (within 6-months)	• None requried

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Item 3 and actions

Storage height of yarn in isolated locations may exceed allowable live load limit.

Priority 1 (Immediate – Now)	• None requried
Priority 2 (within 6 – weeks)	• Consider the renewal of this staircase, using suitable corrosion-resistant materials, and of a design suitable for emergency and panic loading.
Priority 3 (within 6-months)	• None requried

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Item 4 and actions

Preliminary load take-down calculation in Building 02 using the prescribed design loads indicate a slightly low factor of safety of design

Priority 1 (Immediate – Now)	• None requried
Priority 2 (within 6 – weeks)	• None requried
Priority 3 (within 6-months)	• Factory Engineer to review design, loads and columns stresses in area identified above. • Verify insitu concrete stresses either by 100mm dia. cores or existing cylinder strength data • Produce and actively manage a loading plan for all floor plates within the factory giving consideration to floor and column capacity