

Apollo Knit Wear (BD) Ltd.

Okeystar, Plot No. : 1-5/1, Road No. -7, Section No. -7

Pallabi, Mirpur, Dhaka

(+23.820820N, 90.363876E)

13.APRIL.2014



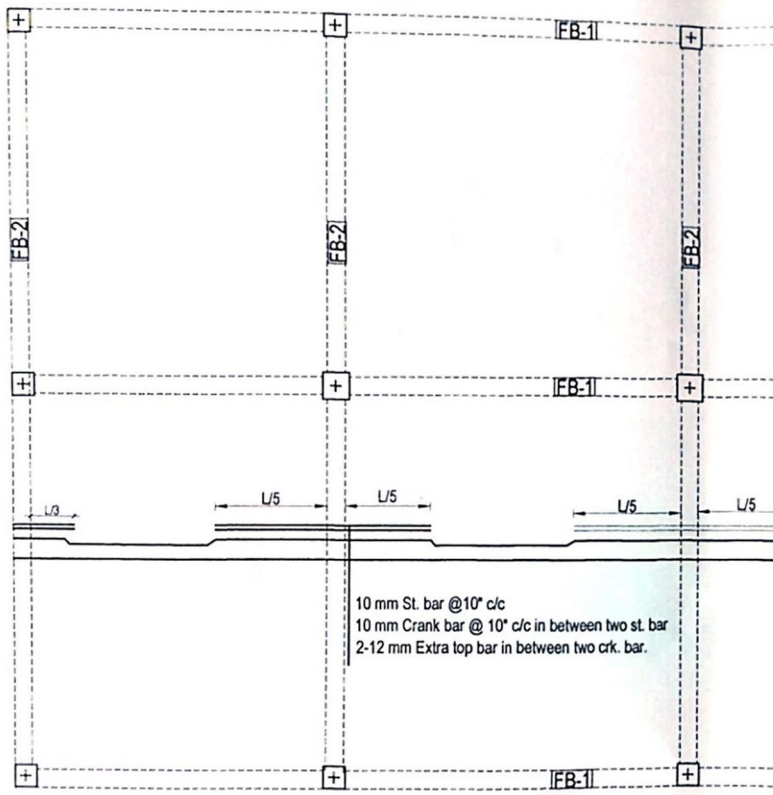
ACCORD
on Fire and Building Safety in Bangladesh



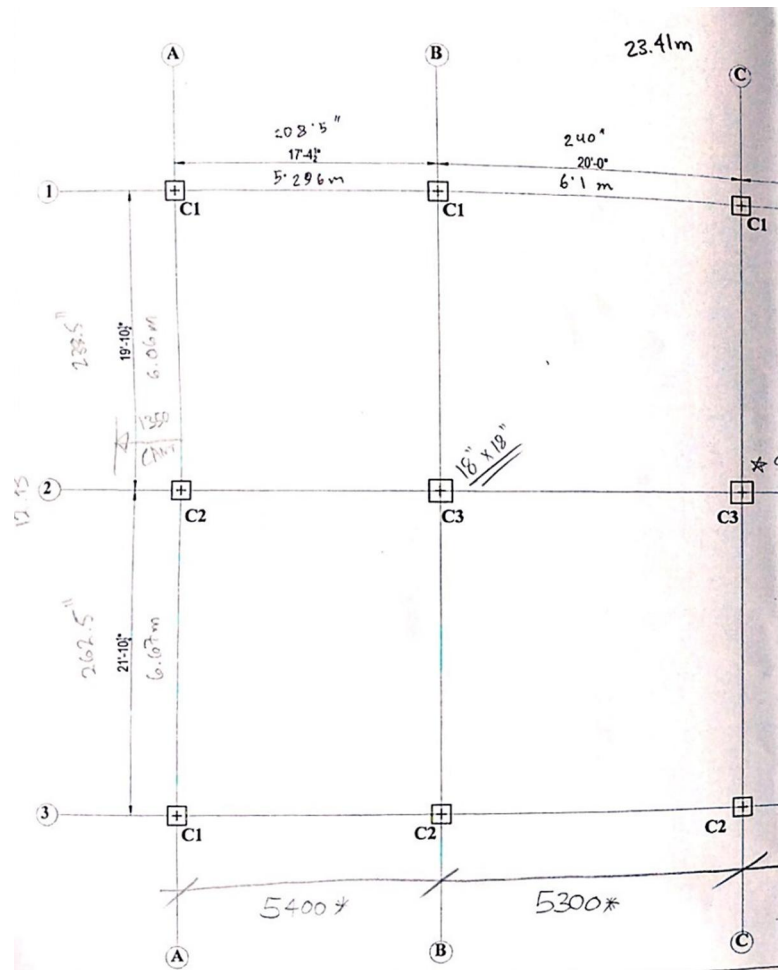
Identified Priority 1 Concerns

The structural as-built drawings provided to us did not match the site conditions and the actual building dimensions, such as:

- Different grid dimensions.
- Cantilevered floor slabs not shown on drawings.
- Brick aggregate used for construction instead of stone aggregate as noted on drawings.



As-built Structural Drawing



Site surveyed dimensions

Priority 1 Concern

Identified Priority 2 Concerns

- At the fourth floor level, we observed storage of yarn and material over cantilevered sections. This was observed at both the south and west walls.
- The steel fire escape staircase seemed to have been improperly designed and constructed.



Priority 2 Concern

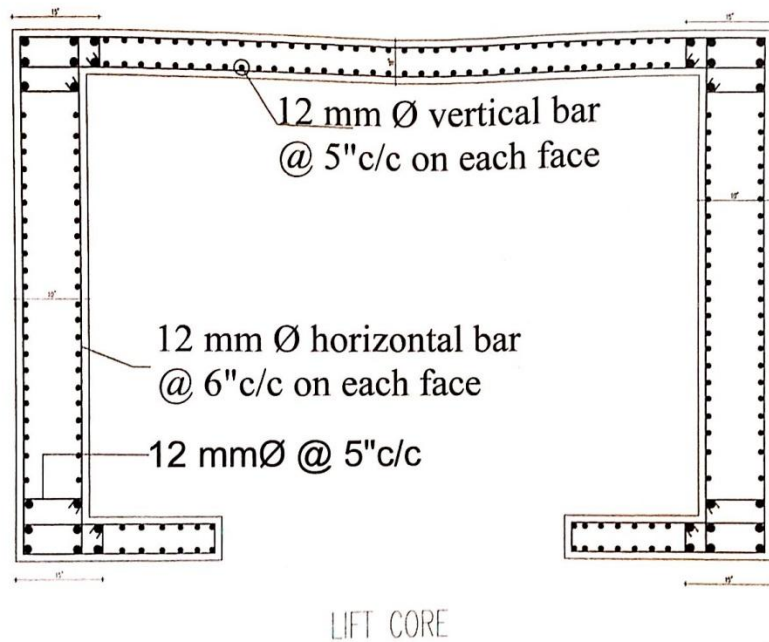
Rolls of yarn observed stockpiled over cantilevered portion of 4th floor slab at South wall (shown above) and West wall. Additionally, the cantilevered slab is not shown on the as-built structural drawings.



Priority 2 Concern

Steel fire escape staircase at East elevation seems to have been improperly designed and constructed. Columns welded in-situ and are not plumb. Column was interrupted at 6th storey. Bracing and anchorage to building inadequate.

Overall Stability System



Structural as-built drawings detail concrete lift shafts. This shaft would provide overall stability against torsional loading.

Masonry infill on all four sides with concrete corner columns was observed instead.

We require that these items be investigated as part of a Detailed Engineering Assessment



Water Ingress at Roof Level



No waterproofing membrane was visible on the roof of the building. This means that any cracks in the surface finishes on the roof will allow water to seep into the concrete slab beneath the finishes, and cause long-term soaking of the slab. However the existing roof is temporary as an extra story is being built. The new roof should have a membrane.

Priority Actions

Problems Observed Summary

ITEM 1: The structural as-built drawings provided to us did not match the site conditions and actual building dimensions. Such as different grid dimensions, cantilevered floor slabs not shown on drawings, brick aggregate used for construction instead of stone aggregate as noted on drawings.

ITEM 2: At the fourth floor, we observed storage of yarn and material over cantilevered sections.

ITEM 3: The steel fire escape staircase seemed to have been improperly designed and constructed.

Item 1 and actions

As-built drawings did not match permit drawings or site conditions

Priority 1 (Immediate – Now)

- Update structural drawings to suit actual site conditions.

Priority 2 (within 6 – weeks)

- Carry out a DEA as noted in the Item 2 actions; concentrating on dimensional differences, a lack of any recognisable lateral support system and the use of a different concrete aggregate.

Priority 3 (within 6-months)

- Implement and complete any recommendations resulting from the DEA.

Item 2 and actions

Storage of yarn on cantilevered portion of slab.

Priority 1 (Immediate – Now)

- N/A

Priority 2 (within 6 – weeks)

- Carry out a Detailed Engineering Assessment on the cantilevered portion of slab

Priority 3 (within 6-months)

- Display and enforce loading plans

Item 3 and actions

Steel staircase improperly detailed.

**Priority 1
(Immediate – Now)**

- N/A

**Priority 2
(within 6 – weeks)**

- Conduct Engineering Assessment on the steel fire escape staircase.

**Priority 3
(within 6-months)**

- N/A