Rowa Fashions Limited Unit-2

Hatiab, Post-BOF, Gazipur Sadar

(24.050228, 90.417252)

2 September 2024

RSC RMG SUSTAINABILITY COUNCIL

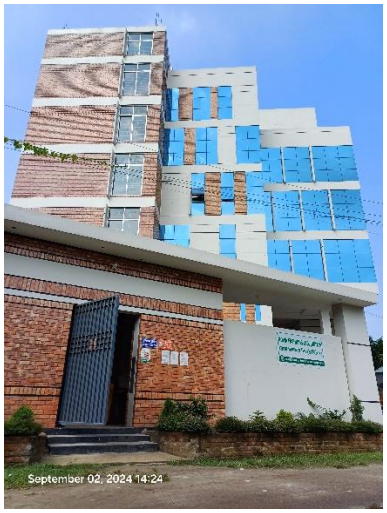
Level 5, Shanta Forum, 187, 188/B,
Bir Uttam Mir Shawkat Sarak, Tejgaon,
Dhaka- 1208, Bangladesh
PABX : +880 2 41081863-6
www.rsc-bd.org

1. Building Information

1. This is a six-storied (G+5) reinforced concrete (RC) building with a small underground pump room.
2. Single-storied RC Childcare building.
3. Single-storied RC Fire control room.
4. Single-storied RC Security post.

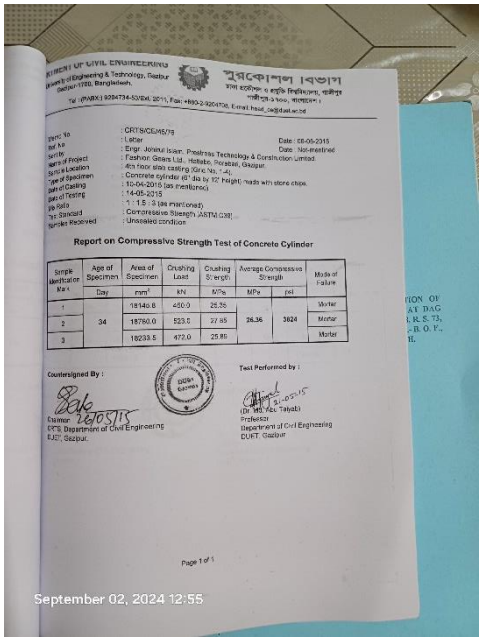
2. Observation

Observation-1: Lack of design documents. (Main Building)



Description: As per BNBC, every building or structure designed shall have its design documents prepared by the provision of Section 1.9.1. The design document shall include a design report, and a set of structural drawings, which shall be prepared in compliance with section 1.9.1.1 and section 1.9.1.2 as per BNBC.

As-built drawings, load plans, and some test reports were available at the time of inspection. However, the design report was not available, which is required to be prepared in compliance with section 1.9.1 (part-6, BNBC).



5.12.2 Frequency of Testing

5.12.2.1 Samples for strength tests of each class of concrete placed each day shall be taken not less than once a day, nor less than once for each 60 m^3 of concrete, nor less than once for each 250 m^2 surface area for slabs or walls.

5.12.2.2 On a given project, if the total volume of concrete is such that frequency of testing required by Sec 5.12.2.1 above would provide less than three strength tests for a given class of concrete, tests shall be made from at least three randomly selected batches or from each batch if three or fewer batches are used.

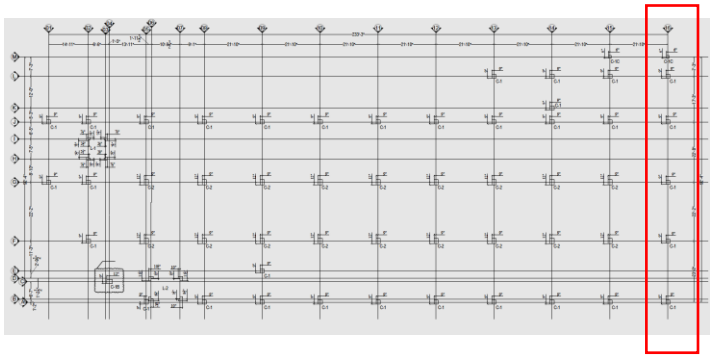
5.12.2.3 When the total quantity of a given class of concrete is less than 20 m^3, strength tests are not required when evidence of satisfactory strength is submitted to and approved by the Engineer.

5.12.2.4 A strength test shall be the average of the strengths of at least two 150 mm by 300 mm cylinders or at least three 100 mm by 200 mm cylinders made from the same sample of concrete and tested at 28 days or at test age designated for determination of f_c'.

Description: The number of concrete cylinder test reports didn't meet BNBC's frequency of testing requirements (section 5.12.2). The design strength for the beam is 3500 psi but no design strength was mentioned in the drawing for columns.

Moreover, some cores (beam & column) were taken but no test reports were available. The building engineer is required to verify in-situ concrete strength to confirm the design strength.

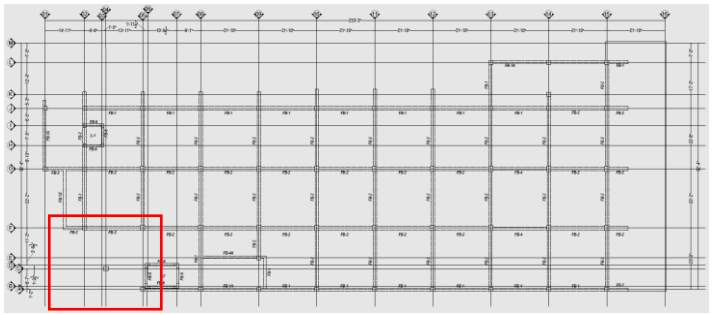
Observation-2: Mismatches in structural drawings. (Main Building)



Typical column layout

Utility portion columns only ground level

Description: In the provided as-built drawing column layout and schedule shows that marked columns (Utility portion) run from top to bottom. But practically these columns are only at ground level.



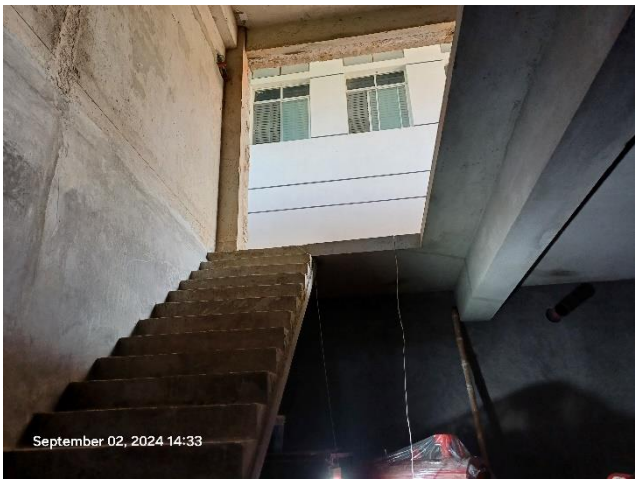
Description: The first-floor beam layout is different than shown in the provided drawings.

The building engineer is required to survey the full structure and prepare complete as-built structural drawings. Also, provide construction drawings as the reference for the foundation.

Observation-3: Standing water on the roof. (Main Building)

Description: Standing water was observed almost all over the roof. The building engineer is required to improve the drainage system on the roof with proper slopes & provide an adequate number of water outlets.

Observation-4: Falling Hazard. (Main Building)



Description: Falling hazard was observed in the underground pump room at the utility portion. Building engineer is required to take necessary measures to avoid possible falling hazards.

Observation-5: Column susceptible to vehicle impact. (Main Building)

Description: Column at the ground floor loading/unloading area was found susceptible to vehicle impact. The building engineer is required to provide barriers around the column to prevent vehicle impact.

Observation-6: Lack of as-built drawing. (Childcare building, Fire control room, and Security post)

Childcare building

Fire control room

Security post

Description: As-built drawings of the Childcare building, Fire control room, and Security post were not available on-site at the time of inspection. The building engineer is required to prepare as-built drawings for the ancillary structures.

3. Action Plan:

Sl No	Observation	Action Plan	Timeline
01	Lack of design documents. (Main Building)	The building engineer is required to prepare a design report in compliance with section 1.9.1 (part-6, BNBC).	within 6 weeks
02		Verify in-situ concrete strength either by 100 mm diameter cores or existing credible cylinder test reports.	within 6 weeks
03		Carry out suggested remedial works if required.	within 6 months
04	Mismatches in structural drawings. (Main Building)	The building engineer is required to survey the full structure and prepare complete as-built structural drawings.	within 6 weeks
05	Standing water on the roof. (Main Building)	The building engineer is required to improve the drainage system on the roof with proper slopes & provide an adequate number of water outlets.	within 6 months
06	Falling Hazard. (Main Building)	Building engineer is required to take necessary measures to avoid possible falling hazards.	within 6 weeks
07	Column susceptible to vehicle impact. (Main Building)	Building engineer is required to provide barriers around the columns to prevent vehicle impact.	within 6 weeks
08	Lack of as-built drawing. (Childcare building, Fire control room, and Security post)	Building engineer is required to prepare a full set of structural drawings in compliance with section 1.9.1.2, part 6 of BNBC.	within 6 weeks