Dhakarea Ltd (Extension)

Plot 23-27, (New) DEPZ Extension Zone, Ganakbari, Ashulia, Savar

(23.949793, 90.281419)

22 January 2024

Structural Inspection Report

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:

Building-4 **:** Four (G+3) storied building.

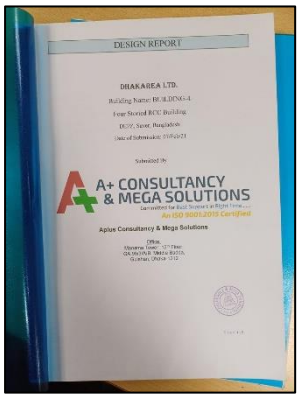
Fire Pump Room **:** Single storied building.

Disel Shed **:** Single storied shed.

2. Observations

Observation-1: Inadequate number of material test report (Building-4).

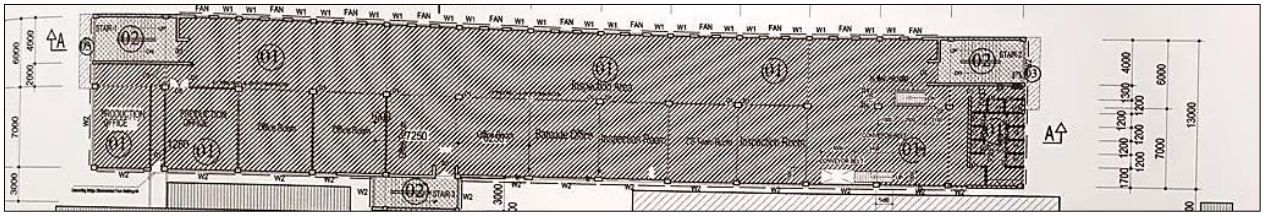
Building-4



Design report

Description: 14 sets of concrete cylinder test report were available where 5 sets from columns. Also, out of 14 sets 7 sets have no average results. However, the number of cylinder test reports doesn't satisfy the frequency of testing requirement of BNBC. So, the building engineer is required to verify in-situ material strength of the building by taking minimum 4 number of concrete cores from lower tier columns.

Observation-2: Live load limit doesn't comply with the BNBC requirements. (Building-4)



Existing Floor Loading Condition for this Floor

No	Item	Load psf	ID No.	Symbol	Descriptions
1	Sample Production Area, Toilet Block etc.	42	01		Sample Production Area, Toilet Block etc.
2	Stair.	80	02		Stair.
3	Old Machine Room	63	03		Old Machine Room

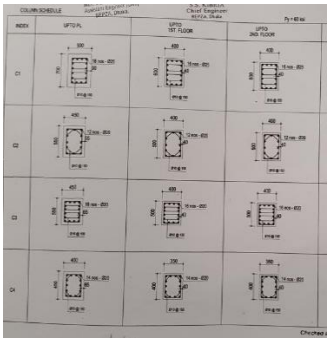
Description: In the prepared live load plan, 2 kPa (42 psf) live load has been considered for production area where 3 kPa is minimum requirement as per BNBC 2006. The building engineer is required to revise the design report based on updated floor live load plan and in-situ material strength. Submit design documents to the RSC for review.

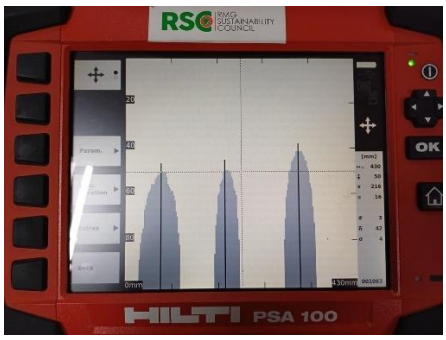
Observation-3: Structural Connection between Building-4 & Fire Pump Room

Connection between Building-4 & Fire Pump Room

Description: Structural connection between Building-4 and Fire Pump room is found at ground level. The building engineer is required to consider the connection in the design documents.

Observation-4: Mismatch between drawing & on-site condition. (Building-4)





Description: During inspection, 3 rebars were found by ferro-scanning in one face of C4 type column instead of 4 rebars. Also, a steel conveyor belt was found in the building which has no design documents. The building engineer is required to re-check and confirm the rebar number as well as prepare the drawing of steel conveyor belt.

Observation-5: Mismatch between drawing & on-site condition. (Fire Pump Room)

Description: The column grid and floor heights do not match with the prepared drawing. The building engineer is required to survey the structure and prepare as-built drawing accordingly.

Observation-6: Lack of design documents for Steel Disel Shed.

Description: The building engineer is required to survey the structure and prepare an accurate as-built drawing as per site condition. Also, prepare a full set of design documents including the adequacy check of the truss and connection. Submit the design documents to the RSC for review.

3. Action Plan

Item No.	Observation	Action Plan	Timeline
1.	Inadequate number of material test report (Building-4)	The building engineer is required to verify in-situ material strength of the building by taking minimum 4 number of concrete cores from lower tier columns. Incorporate the equivalent strength in the design report.	within 6 weeks
2.	Live load limit doesn't comply with the BNBC requirements (Building-4)	The building engineer is required to update the floor live load plan and revise the design report based on in-situ material strength. Submit design documents to the RSC for review.	within 6 weeks
3.		Carry out suggested remedial works if required.	within 6 months
4.	Structural Connection between Building-4 & Fire Pump Room	The building engineer is required to consider the structural connection in the design. Otherwise, separate the structures	within 6 weeks
5.	Mismatch between drawing & on-site condition. (Building-4)	The building engineer is required to survey the whole structure including the conveyor belt and update the accurate as-built drawing accordingly.	within 6 weeks
6.	Mismatch between drawing & on-site condition. (Fire Pump Room)	The building engineer is required to survey the whole structure and prepare accurate as-built drawing accordingly.	within 6 weeks
7.	Lack of design documents for Steel Disel Shed.	The building engineer is required to survey the structure and prepare as-built drawing accordingly. Also, prepare a full set of design documents. Submit design documents to the RSC for review.	within 6 weeks
8.		Carry out suggested remedial works if required.	within 6 months