

Chancellor Garments Ltd. (relocated)

295/JA/4/A, Rayer bazar, Dhaka-1209, Bangladesh.

(23.74213, 90.36168)

7 March 2024



1. Building Information

Building-1: This is an eight-storied (G+7) reinforced concrete building.

Building-2: It is a five-storied (G+4) prefabricated steel structure.

Building-3: It is a two-storied (G+1) prefabricated steel structure.

2. Observations:

Observation-1: Lack of information in as-built drawing. (Building-1)



Rooftop RC structure



Rooftop RC O.W.R

Description: During the inspection, no structural information regarding Rooftop RC O.W.R and the common room was available in the as-built architectural and structural drawing. The building engineer is required to update as-built drawings incorporating all details of this Building.

Observation 2: Absence of design documents. (Building-1)



Building-1

Description: As per BNBC, every building or structure designed shall have its design documents prepared in accordance with 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. At the time of inspection, design report was not available which is required to be prepared in compliance with BNBC.

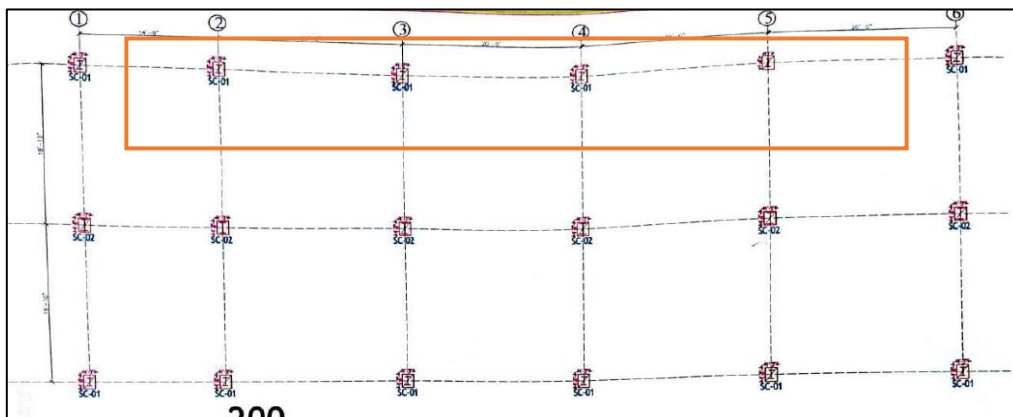
Observation-3: Lack of Lateral Stability in external steel stair. (Building-1)



External steel stair without any vertical and horizontal bracing

Description: There is an external steel stair adjacent to Building-1 from ground to 7th floor without any vertical and horizontal bracing along long direction. Therefore, lateral stability of this stair is along long direction is questionable. The building engineer is required to check the lateral stability of the structure.

Observation-4: High-stress level in ground floor column. (Building-2)



Highly stressed columns in the layout

Description: Cursory calculation indicates the high-stress level in ground floor columns (marked area) considering the live load 3 kPa for the typical floor, 1.5 kPa for the roof, and minimum steel strength 250 MPa. Factory engineer is required to review the design, loads and column stresses for the marked columns and carry out a Detail Engineering Assessment (DEA). Maintain the floor live load of 2 kPa on each floor.

Observation-5: Discrepancies in as-built drawing. (Building-2)



Main beam flange size measured 150 mm



Typical framing system



Typical main beam and sub-beam layout plan

Description: During the inspection, the main beam flange size was measured at 150 mm. However, in the as-built drawing, it was shown 200 mm. In addition, the sub-beam orientation doesn't match with the existing condition. Building engineer is required to update the as-built drawing incorporating all structural details of this Building.

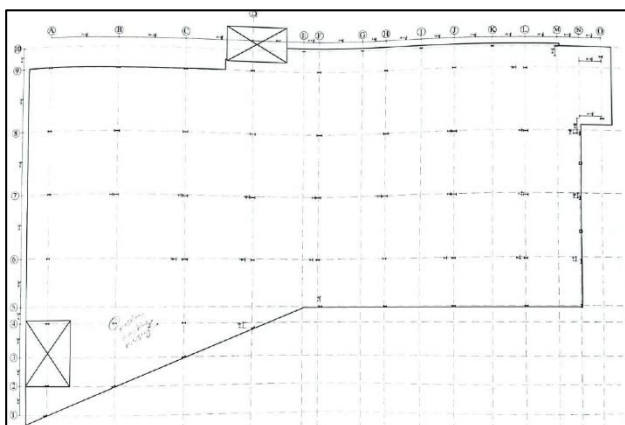
Observation 6: Absence of design documents. (Building-2)



Building-2

Description: As per BNBC, every building or structure designed shall have its design documents prepared following 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. At the time of inspection, a design report was not available which is required to be prepared in compliance with BNBC.

Observation-7: Lack of information in as-built drawing. (Building-3)



Column Layout plan



Typical framing of the structure

Description: During the inspection, only the sub-structure drawing for Building 3 was available. The building engineer is required to prepare a full set of as-built drawings incorporating both substructure and superstructure and all details of this Building.

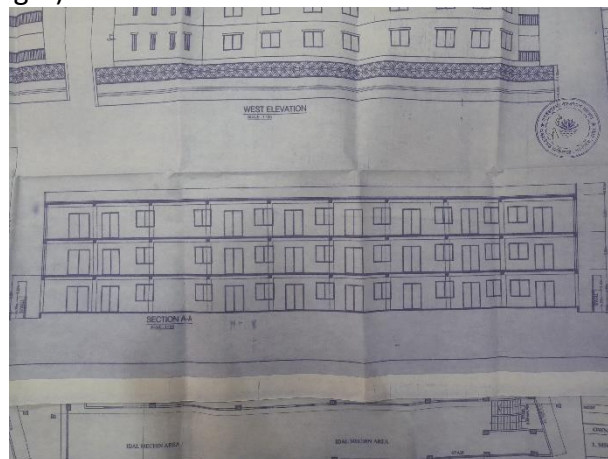
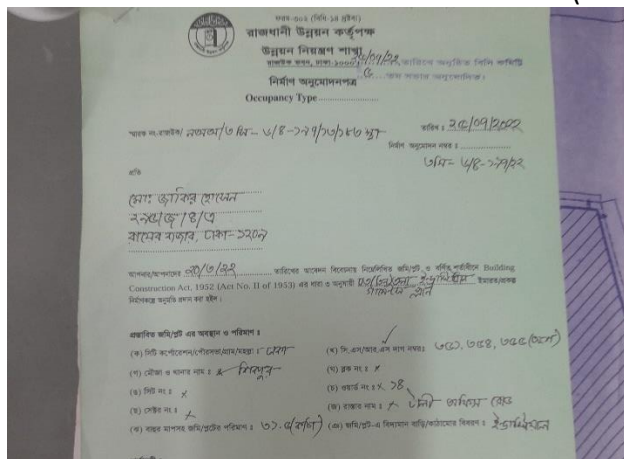
Observation-8: Absence of design documents. (Building-3)



Building-3

Description: As per BNBC, every building or structure designed shall have its design documents prepared following 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. At the time of inspection, a design report was not available which is required to be prepared in compliance with BNBC.

Observation-9: Possible vertical extension. (Building-3)



Permit drawing- 3 storey

Description: The building has a permit drawing for 3 storied and the factory is intended to conduct vertical extension in future. However, the building currently existed as two storied. The building engineer is required to prepare a Detail Engineering Assessment (DEA) report before the start of vertical extension.

Observation-10: Lack of geotechnical investigation report. (Building-2 & 3)



Building-2



Building-3

Description: During inspection, no geotechnical investigation report was available for buildings 2 and 3. The building engineer is required to prepare a geotechnical investigation report to identify the bearing capacity of soil for a foundation adequacy check.

Observation-11: Bolt missing and connection gap. (Building-2 & 3)



Description: During the inspection, missing bolts and significant gaps were observed in the beam-column joint at several locations. The building engineer is required to install the missing bolts and fill the connection gaps with seam plates.

3. Action Plan:

Observation	Action Plan	Timeline
Lack of information in as-built drawing. (Building-1)	The building engineer is required to update the as-built drawing incorporating all architectural details of this building.	within 6 weeks
Absence of design documents. (Building-1)	Building is required to prepare a set of design reports in compliance with BNBC.	within 6 weeks
	Implement remediation work if required.	within 6 months
Lack of Lateral Stability of steel stair. (Building-1)	A building engineer is required to check the lateral stability of the steel stair.	within 6 weeks
	Implement remediation work if required.	within 6 months
High Stress level in ground floor column. (Building-2)	Maintain the floor live load 2 kPa at each floor.	Immediate
	Factory engineers are required to review the design, loads and column stresses for the marked columns and carry out a Detail Engineering Assessment (DEA).	Immediate
	The Grade of steel of structural members are required to be confirmed by material test.	Immediate
	Produce and actively manage the loading plan according to the floor capacity.	within 6 weeks
	Implement remediation work if required.	within 6 months
Discrepancies in as-built drawing. (Building-2)	Building engineer is required to update as-built drawing incorporating all architectural details of this building.	within 6 weeks
Absence of design documents. (Building-2)	Building is required to prepare a set of design report in compliance with BNBC.	within 6 weeks
	Implement remediation work if required.	within 6 months
Lack of geotechnical investigation report. (Building-2)	Factory is required to prepare geotechnical investigation report to identify the bearing capacity of soil for foundation adequacy check.	within 6 weeks

Bolt missing and connection gap (Building-2)	Building engineer is required to repair the gap in connections with a suitable method and install the missing bolt where necessary.	within 6 weeks
Lack of information in as-built drawing. (Building-3)	Building engineer is required to update as-built drawing incorporating all architectural details of this building.	within 6 weeks
Absence of design documents. (Building-3)	Building is required to prepare a set of design report in compliance with BNBC.	within 6 weeks
	Implement remediation work if required.	within 6 months
Possible vertical extension. (Building-3)	Factory engineer is required to prepare a Detail Engineering Assessment (DEA) report prior conducting any vertical extension.	within 6 weeks
	Implement remediation work if required.	within 6 months
Lack of geotechnical investigation report. (Building-3)	Factory is required to prepare geotechnical investigation report to identify the bearing capacity of soil for foundation adequacy check.	within 6 weeks
Bolt missing and connection gap (Building-3)	Building engineer is required to repair the gap in connections with a suitable method and install the missing bolt where necessary.	within 6 weeks