



Apparel Today Ltd. New

Gohailbari, 1 No. Shimulia Union, P.S: Ashulia, Upazila: Savar, Dist.: Dhaka

Coordinates: 23.987218N, 90.231273E

23 September 2019



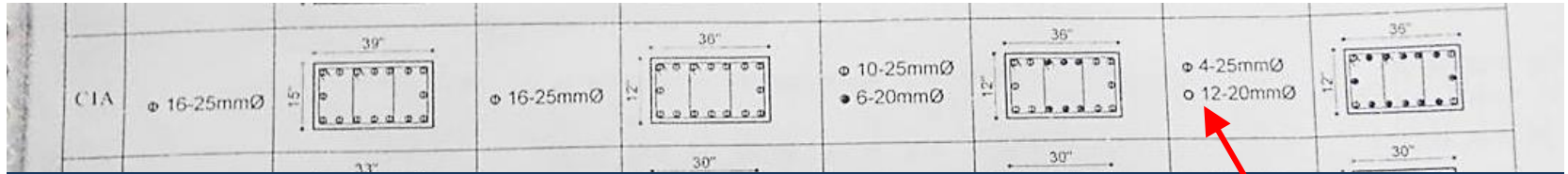


Observations



Mismatch in the as-built documents

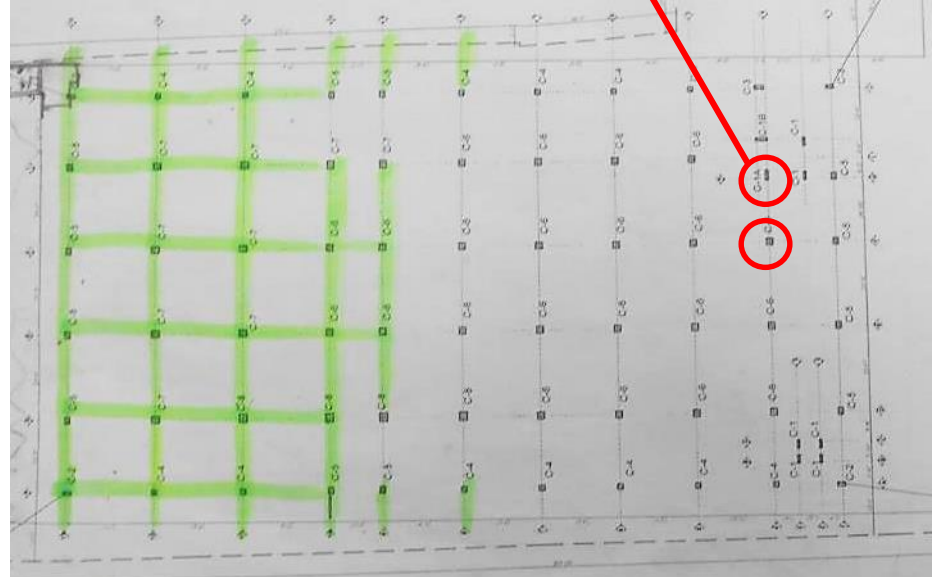
Observations: Main Building



16 rebar shown in C1A Column



14 rebar observed in C1A column at grid G-4



14 number of rebar was found in C1A column at grid G-4 where 16 rebar has been shown in the structural drawings. Also, in C6 column at grid F-4 rebar diameter was measured 25mm for 5 rebars instead of 12 rebars.

Observations: Main Building



Temporary lightweight staircase roof and the plastic water tanks have not shown in the as-built drawings.

Observations: Main Building



Floor Load Management Program

Observations: Main Building



Load plan of the building not produced yet. Also, load management program not implemented. Produce and actively manage a loading plan for all floor plates within the factory considering the floor capacity and column capacity.

Observations: Main Building



Water ponding on roof

Observations: Main Building



Water ponding was observed on the roof. Building engineer to develop proper drainage system with adequate slope on roof.

Observations: Main Building



Falling Hazard

Observation : Main Building



No safety guard or parapet was observed at roof. This area is prone to falling hazard.

Observation : Main Building



Future extension of existing building

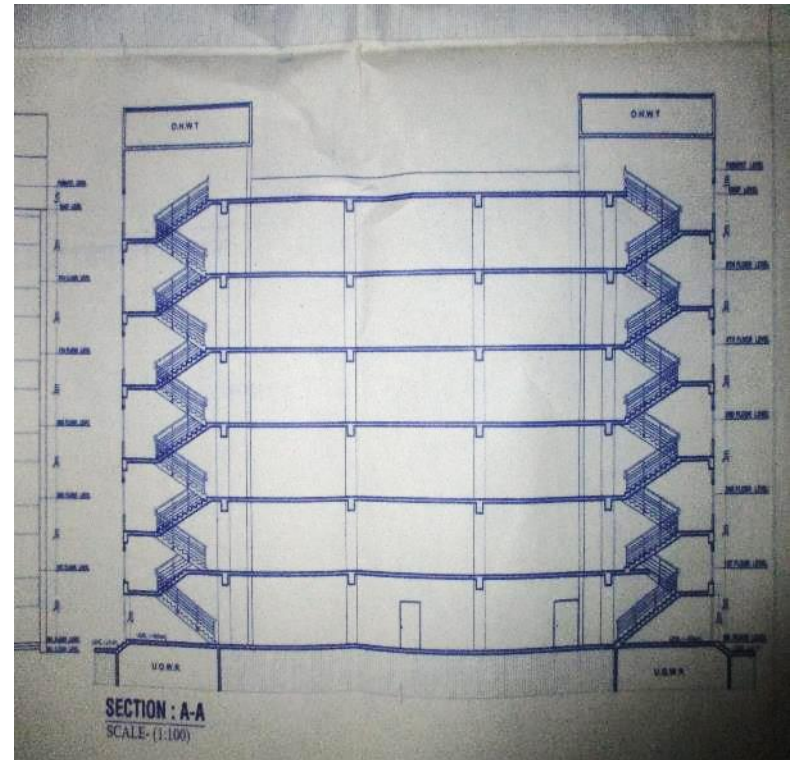
Observation : Main Building



Factory has permit drawings for 6 Storey factory building. Factory has a plan to extend the building vertically up to 6-Storey. The column capacity has been checked for existing condition (3-Storey).



Exposed rebar indicates possibility of vertical extension in future.



Permit drawing from local authority for 6 Storey factory building.

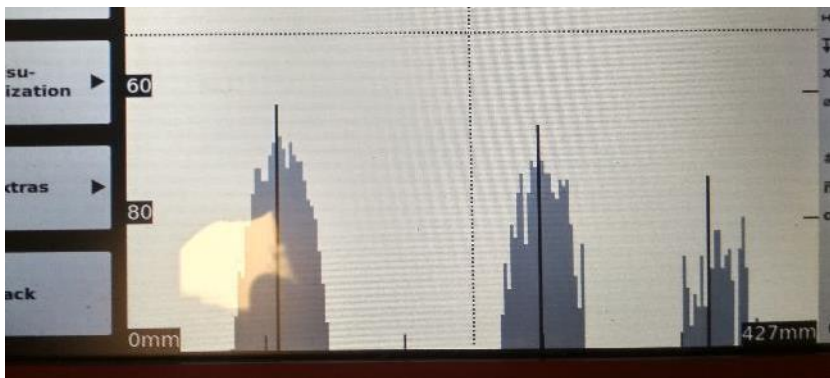
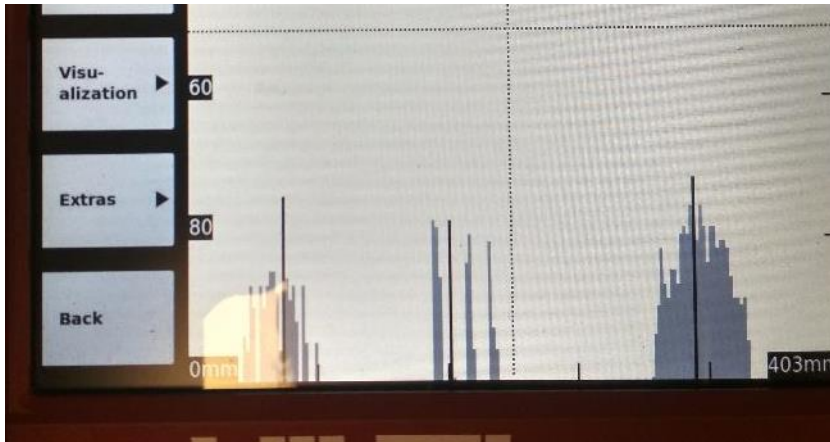
For any vertical extension, columns may have higher stresses. A Detail Engineering Assessment (DEA) considering BNBC provision to be completed prior commencement of further construction.

Observation : Main Building



Discrepancy in the as-built documents

Observations: Utility Building



8 rebar was found by ferro-scanning

SCHEDULE OF COLUMN SIZE AND REINFORCEMENT				
COLUMN ID	BELOW GROUND LEVEL		GROUND TO 1ST FLOOR	
	NOS.OF REINFORCEMENT	COLUMN SIZE	NOS.OF REINFORCEMENT	COLUMN SIZE
C1	● 8-20mmØ		● 8-20mmØ	
C2	● 8-20mmØ		● 8-20mmØ	
C2	● 10-20mmØ		● 10-20mmØ	

10 rebar has been shown in the drawing for C2 column at roof level.

8 rebar was found by ferro-scanning where 10 rebar has been shown in the drawing

Observations: Utility Building



Lack of structural detailing of steel stair

Observations: Utility Building



Connection between steel stair and Utility Building

Undocumented steel stair adjacent to utility building was observed on site. Structural details of stair was not available on drawings.



Steel stair adjacent to Utility Building

Observations: Utility Building



As-built documents

Observations: Boiler Room



As-built documents wasn't available for the Boiler room. The factory is required to produce full set of as-built drawing for the structure.

Observations: Boiler Room



Lateral stability of steel shed

Observation : Dining and Wastage Shed



The connections of the shed appear to be non-engineered. The factory is required to check the connections adequacy for uplift forces and lateral stability of the structures for wind loading.

Observation : Dining and Wastage Shed



Priority Actions



Problems Observed

B#1 (Main Building):

Item 1: Mismatch in the as-built documents .

Item 2: Floor Load Management Program.

Item 3: Water ponding on roof.

Item 4: Falling hazard.

Item 5: Future extension of existing building.

B#2 (Utility Building):

Item 6: As-built documents.

Item 7: Lack of structural detailing of steel stair

B#3 (Boiler Room):

Item 8: Lack of as-built documents.

Shed#1 (Dining and wastage shed):

Item 9: Lateral stability of steel shed.



Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Mismatch in the as-built documents (Main Building)	The factory engineer is required to update the as-built architectural and structural drawings.	6-weeks
2	Floor Load Management Program. (Main Building)	The factory engineer is required to produce floor loading plan for each floor considering floor & column capacity.	6-weeks
3	Floor Load Management Program. (Main Building)	Implement floor load management program.	6-weeks
4	Water ponding on roof. (Main Building)	Develop proper drainage system on roof with adequate slope.	6-months
5	Falling hazard. (Main Building)	The factory is required to install railing or parapet wall on the roof to prevent falling hazard.	6-weeks
6	Future extension of existing building. (Main Building)	Incase of any extensions or modifications of the existing building, Detail Engineering Assessment (DEA) needs to be carryout following BNBC provision.	6-months
7	Future extension of existing building. (Main Building)	Carry out remedial works from outcome of Detail Engineering Assessment where necessary before commencement of further construction.	6-months



Item No.	Observation	Recommended Action Plan	Recommended Timeline
8	Discrepancy in the as-built documents. (Utility Building)	Building engineer is required to survey the structure and update the as-built drawings as required.	6-weeks
9	Lack of structural detailing of steel stair. (Utility Building)	The factory engineer is required to check the connections and suggest the proper remedial actions.	6-weeks
10	Lack of structural detailing of steel stair. (Utility Building)	Implement remedial actions suggested by the factory engineer.	6-months
11	As-built documents (Boiler Room)	The factory engineer is required to produce as-built architectural and structural drawings.	6-weeks
12	Lateral stability of steel shed. (Dining and wastage shed)	The factory engineer is required to carry out Engineering Assessment to check the stability of the structure against lateral forces following BNBC.	6-weeks
13	Lateral stability of steel shed. (Dining and wastage shed)	Implement the recommendations of engineering assessment report.	6-months