Pacific Blue (Jeans Wear) Ltd.

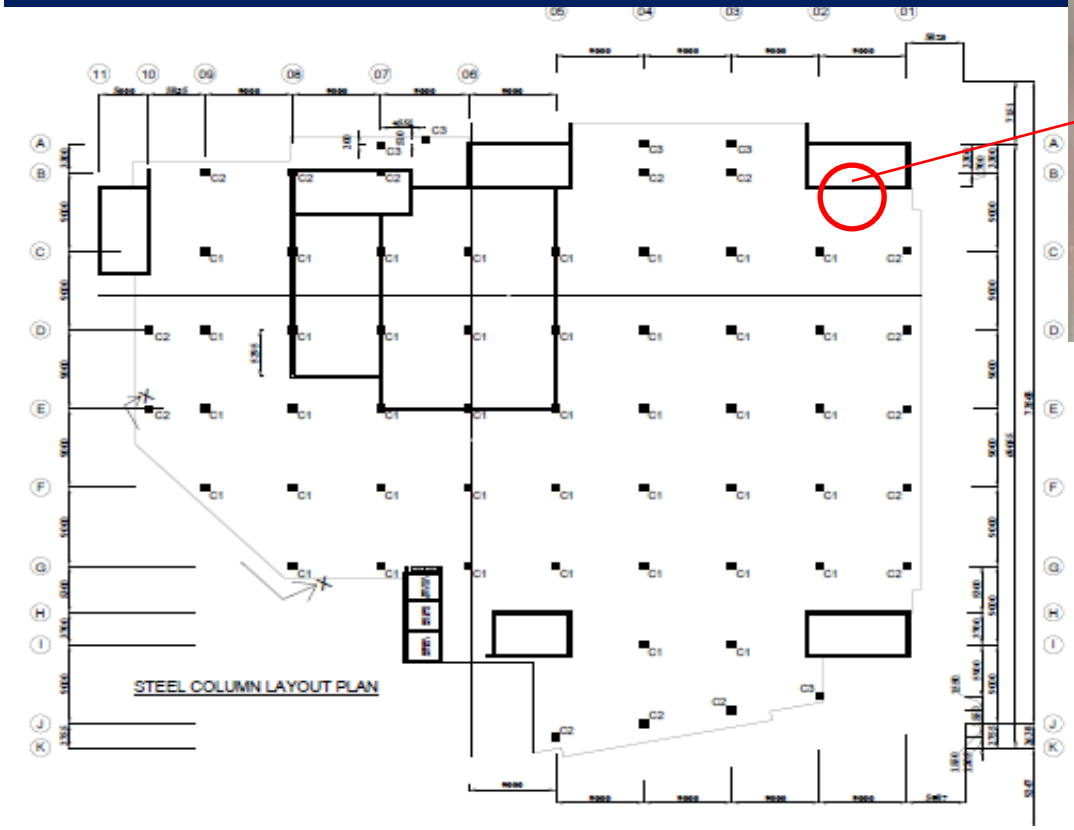
Radio Colony, Savar, Dhaka
(23.8589 N, 90.2624 E)
15 February 2022

Observations

Overall stability of the building

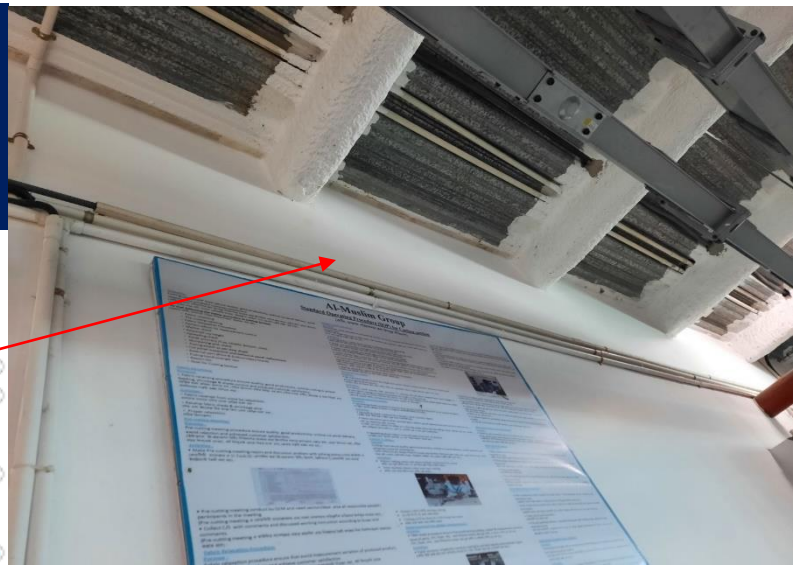
Observation

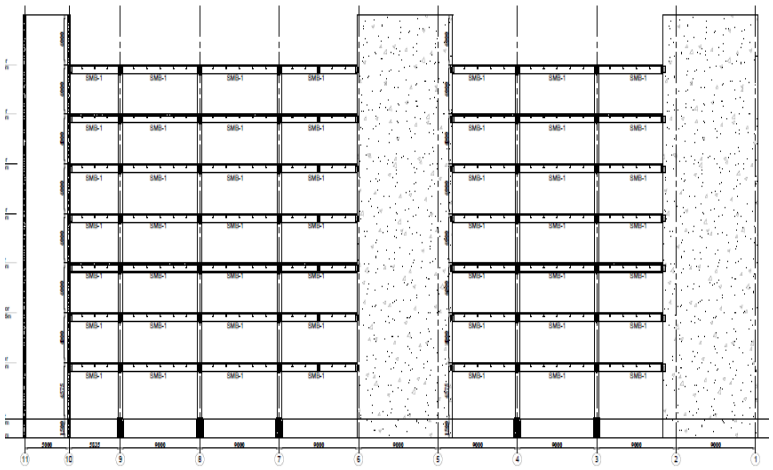
Steel beams in the several grids are connected to the shear walls. Design report was not available to determine the contribution of RC wall and diaphragm action in lateral stability system.



Column and RC wall layout plan

Building engineer is required to check the overall stability system and the connections.



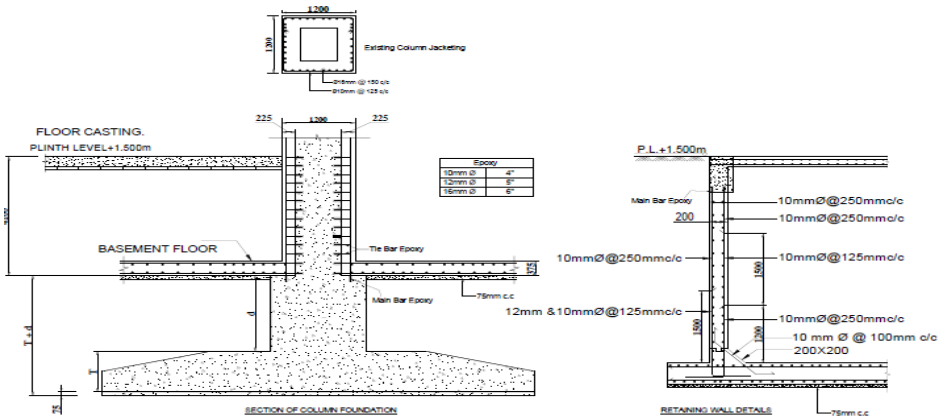


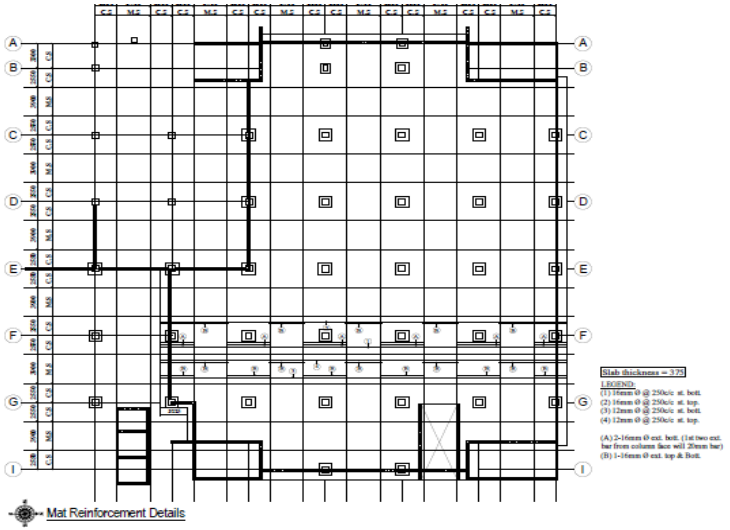
Connection between steel beam and RC wall

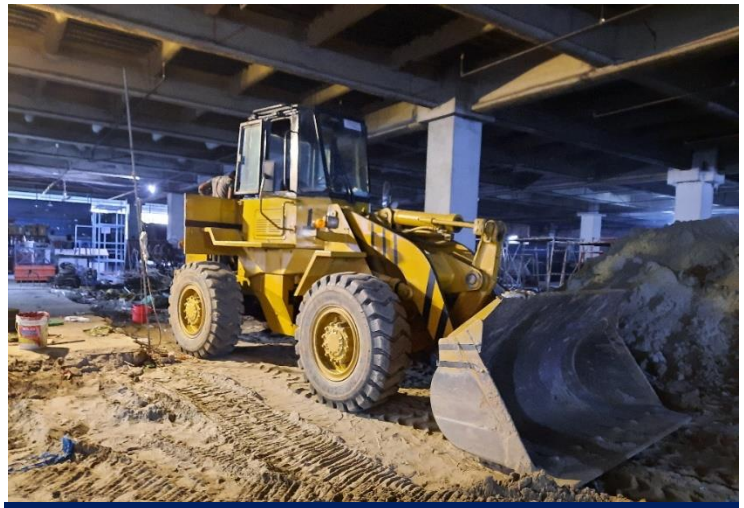
Observation

Construction of proposed basement below GB level

Observation







Earth excavation work and construction of additional floor is going on.

The factory is constructing a basement floor below the grade/ground beam level. Additional floor will add on the existing condition. Before construction of the additional basement floor, building engineer is required to check the foundation and column stress of the considering the additional floor loading. Also building engineer is required to check the capacity of the existing ground/grade beam to carry the load of ground floor slab. Building engineer also required to follow and prepare the documents according to the BNBC Part VII for Construction responsibilities & practice, Safety during construction works.

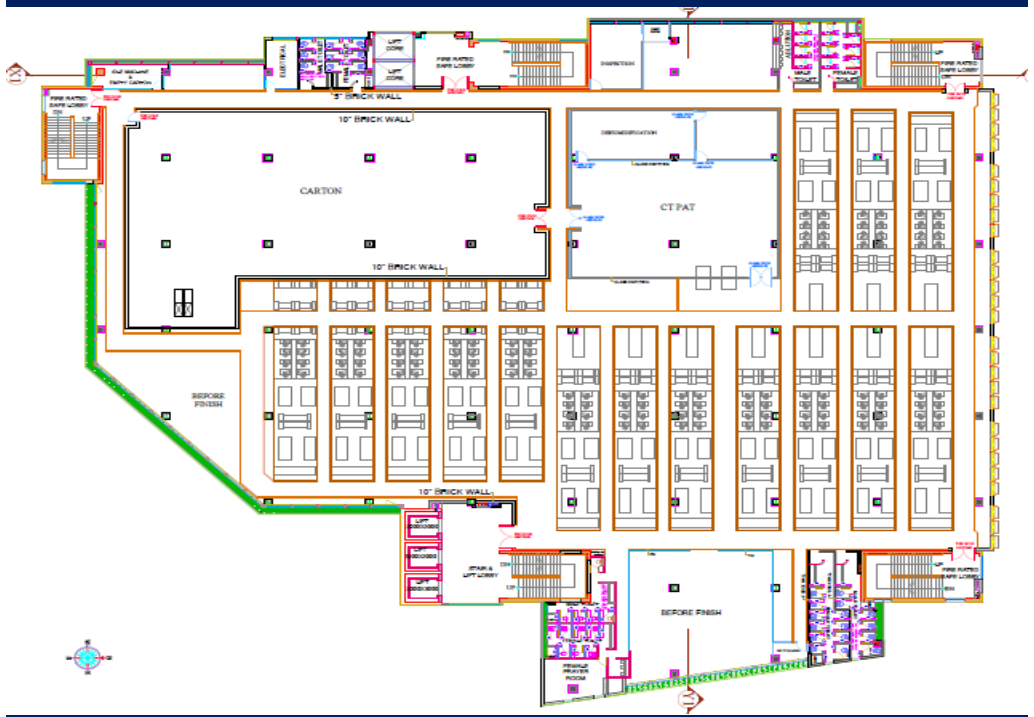
Observation

Absence of design report

Observation

Building-1

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 of part-6, BNBC.
However, design report was not available during inspection. The building engineer is required to prepare a design report in compliance with BNBC.

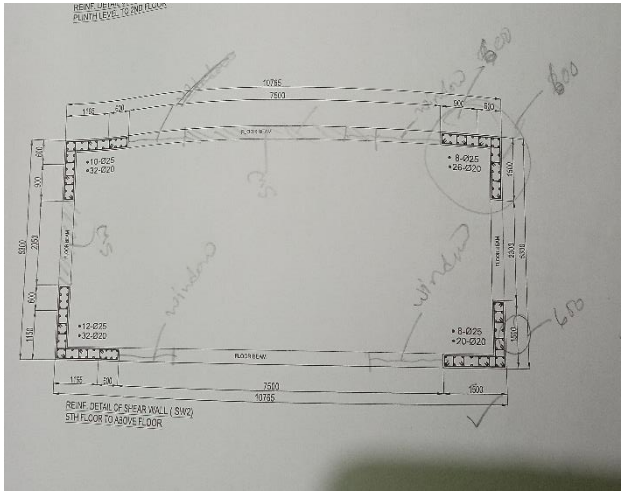


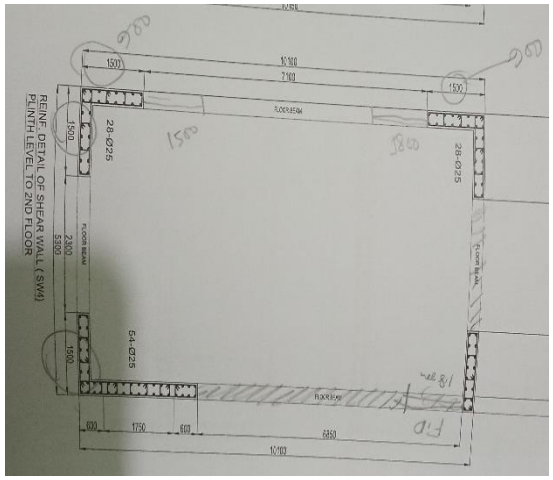
Typical floor layout plan

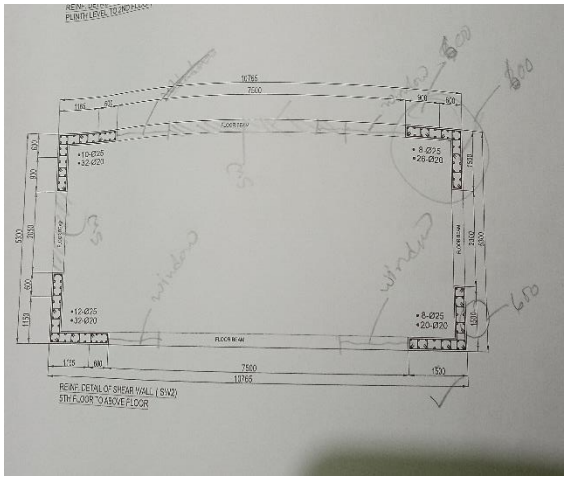
Observation

Inconsistency in shear wall drawings & details

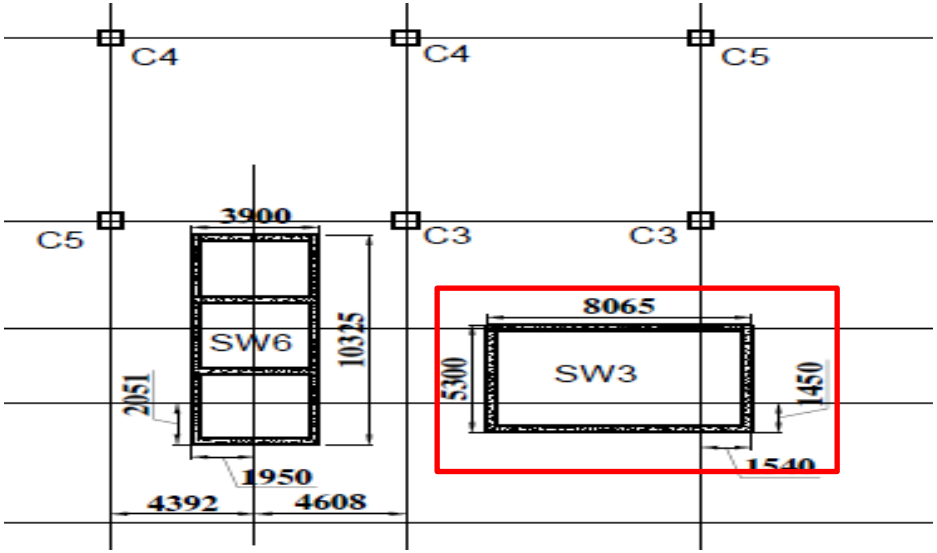
Observation







Inconsistency in dimension of lift shear wall core

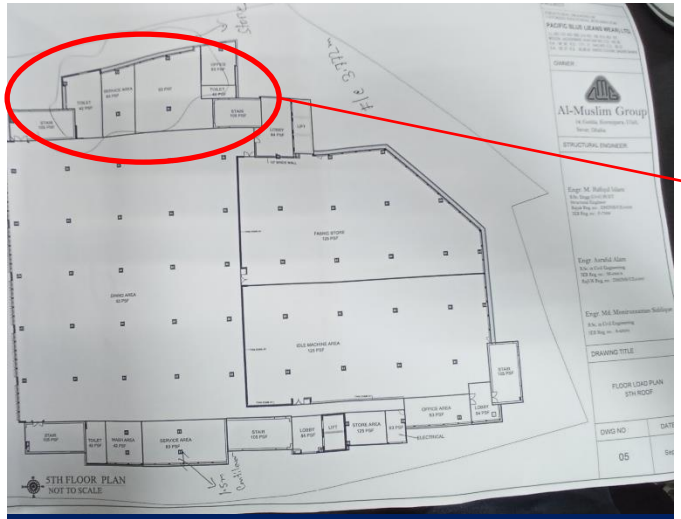


No details of SW-3

Dimension of lift core doesn't match with the existing condition. Structural details of SW-3 not shown in the structural drawings. The building engineer is required to survey the structural components and produce accurate structural details & as built drawings.

Observation

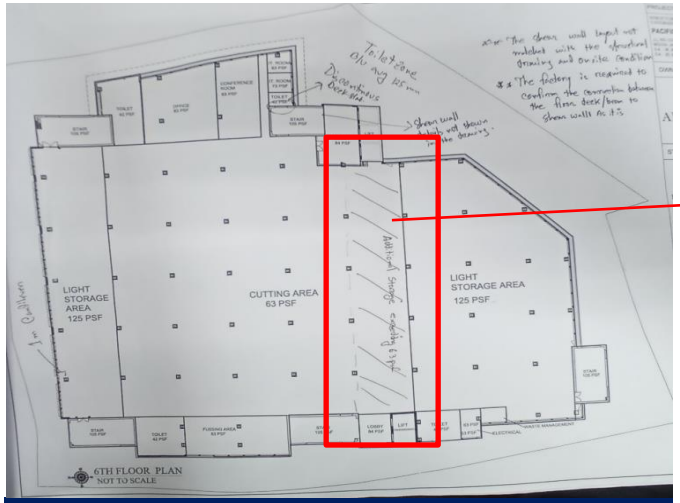
Load plan not followed properly



5th floor plan (production) 3 kPa considered in the load plan

Onsite storage observed on the 5th floor

On the 5th and 6th floor storage was observed on production area (3kPa). The building engineer is required to check the occupancies and update the floor live loading plan for all floors based on BNBC requirements and manage the floor loading accordingly.



6th floor plan (production) 3 kPa considered in the load plan

Onsite storage observed on the 6th floor.

Observation

Problems Observed

Item 01: Overall stability of the building.

Item 02: Construction of proposed basement below GB level.

Item 03: Absence of design report.

Item 04: Inconsistency in shear wall drawings & details.

Item 05: Load plan not followed properly.

Priority Actions

Item No.	Observation	Recommended Action Plan	Recommended Timeline
01	Overall stability of the building.	Building engineer is required to check stability of the existing structure taking into consideration the adequacy of the connections.	6-weeks
02	Overall stability of the building.	Carryout remedial works arise from Engineering Assessment where necessary.	6-months
03	Construction of proposed basement below GB level.	Factory to ensure that the contractors are following H&S measures and takes all precautions as per BNBC part VII to safeguard all persons that can be affected by the under-construction Building/site works.	6-weeks
04	Construction of proposed basement below GB level.	Prior to construction of the additional basement floor, the building engineer is required to carryout DEA considering the additional floor loading.	6-weeks
05	Construction of proposed basement below GB level.	Building engineer is required to check the capacity of the existing ground/grade beam to carry the load of ground floor slab.	6-weeks
06	Construction of proposed basement below GB level.	Carryout remedial works arise from Detail Engineering Assessment where necessary.	6-months

Item No.	Observation	Recommended Action Plan	Recommended Timeline
07	Absence of design report.	Prepare a set of design documents including Detail Engineering Assessment (DEA) report as per BNBC (part-6, section 1.9.1).	6-weeks
08	Absence of design report.	Carry out remedial actions suggested in Detail Engineering Assessment.	6-months
09	Inconsistency in shear wall drawings & details.	The building engineer is required to survey the structure and produce accurate as-built drawings.	6-weeks
10	Load plan not followed properly.	The building engineer is required to check the occupancies and update the floor live loading plan for the building based on BNBC loading requirements and capacity of building floor, column & foundations.	6-weeks
11	Load plan not followed properly.	Implement the floor loading plan (by posting in each floor level, providing signage and maintaining loadings)	6-months