



Aspire Garments Limited

491, Dhalla Bazar, Singair, Manikgonj

(23.800701, 90.238843)

24th December 2017





Observations



Loose concrete repair work around plumbing area

Observations: Main Building



Concreting repair work

Concrete repair work around ducting facility in toilet area appeared loosen. Falling hazard may occurred direct to personal. Building engineer is required to repair the loose material works to prevent falling hazard.

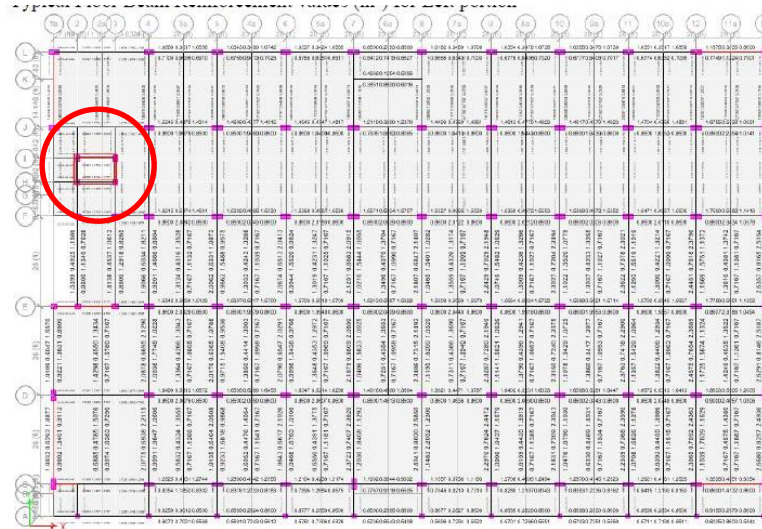


Observations: Main Building



Design report to be verified by Accord.

Observations: Main Building



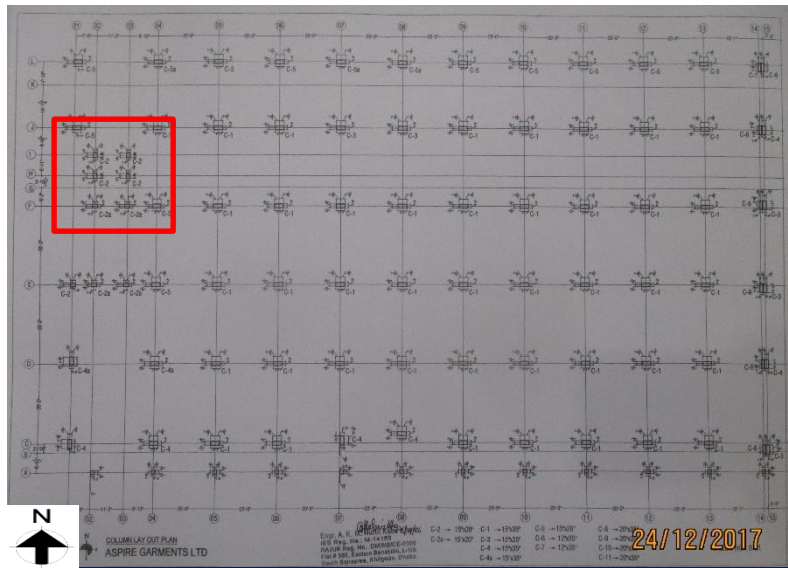
CONCLUSION:

The structure was modeled using 3-D computer program and designed for all possible load combinations. The following observations have been done.

- The top deflection of the structure was found within allowable limit.
- The foundations were designed based on the unfactored reactions of the columns.
- The thickness provided in pile cap is found satisfactory from the punching and beam shear point of view.
- The column sizes and reinforcements were checked by hand calculations with those obtained from ETABS.
- The foundations and the columns can bear the load coming from 6 storied garments building and the structure is found safe and stable for all possible load combinations.
- The reinforcement found in the shear wall is found satisfactory.

The AutoCAD drawings will reflect the final design of the structure.

Snapshots from design report



Column layout plan

Observations: Main Building

Shear walls in lift core may have designed for lateral load resisting system. In As built drawing shear wall details was not included. No evidence of shear walls was observed on visual inspection. Building engineer is required to check the shear walls are actually being built or not. If not verify the design report considering only moment resisting frame against lateral loading.



Live load:

Live load is the load superimposed by the user or occupancy of the building but not including the environment load, as per Table- 6.2.3, BNBC- Page 6-22.

The building has been analyzed considering 100 psf as live load for sewing, cutting, finishing and stair case.

In Design report Live load is considered 5 Kpa (100 psf) on floors. Building engineer is required to review the design considering live load of 5 Kpa with Accord.

Observations: Main Building



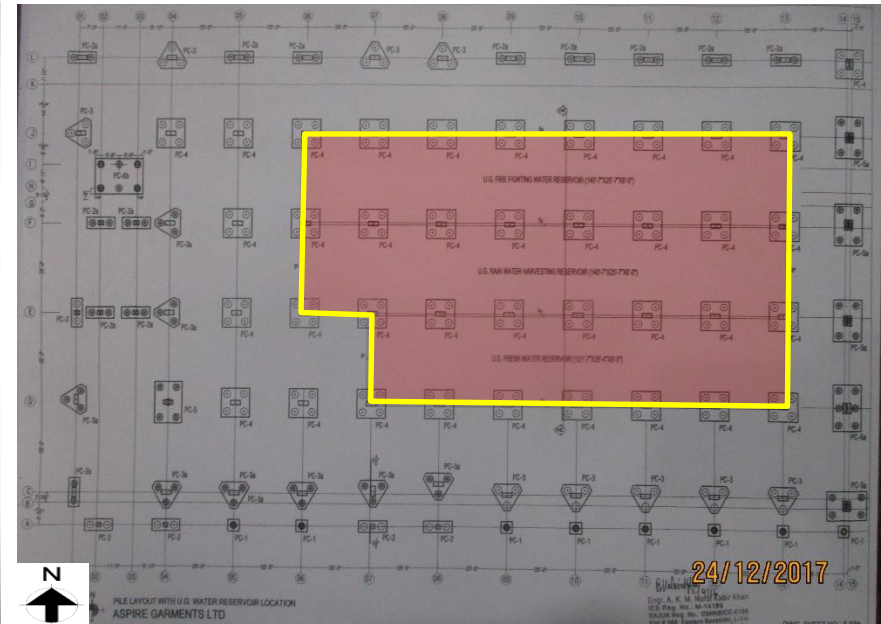
Implement floor loading management program

Observations: Main Building



Uncontrolled live loading

No load management programs were visible. Factory is required to implement load management program as per its floor loading capacity and Follow the load plans for all floors of the buildings and make sure that the workers understand the loading requirements.



Under Ground water reservoir plan



Uncontrolled live loading on suspended ground slab (Top Slab of U.G.W.R) is required to reduce.



Construction debris at roof top

Observations: Main Building



Construction derbies were piled upon roof top

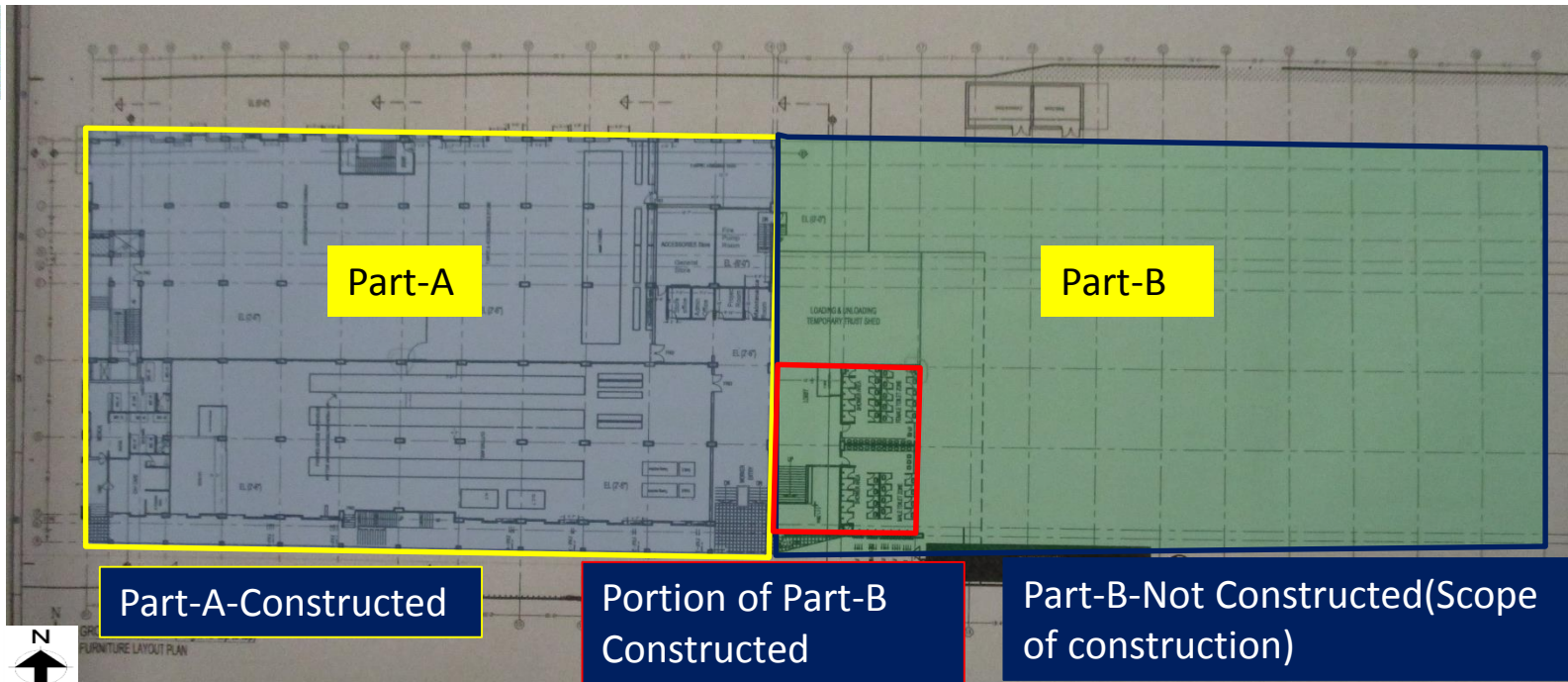
Uncontrolled construction debris piled upon on roof top. Building engineer is required to check whether the piled derbies exceeds the design load capacity or remove the debris.

Observations: Main Building



Future extension to be carried out

Observations: Main Building



Exposed rebar indication of further construction

A scope of Horizontal extension to be carried out in future. For any kind of extension building engineer is required to evaluate structural member adequacy following BNBC provision.



Observations: Main Building



Exposed rebar to weather

Observations: Main Building



Rebar exposed to weather

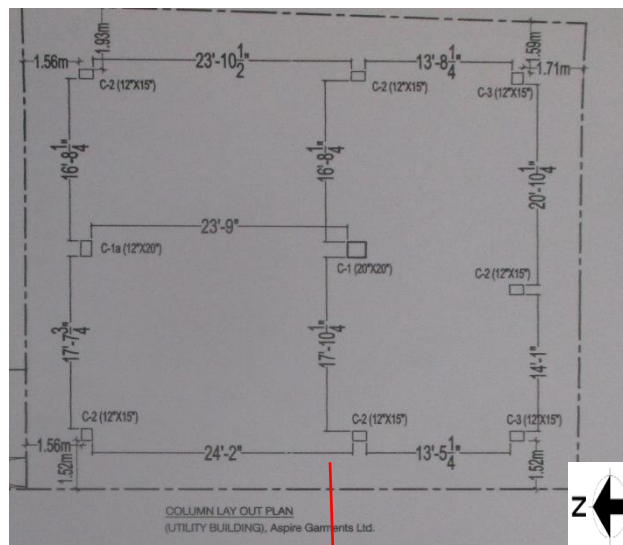
Part-B of the building will be constructed in future. Rebar kept exposed without any corrosion protection.

Observations: Main Building



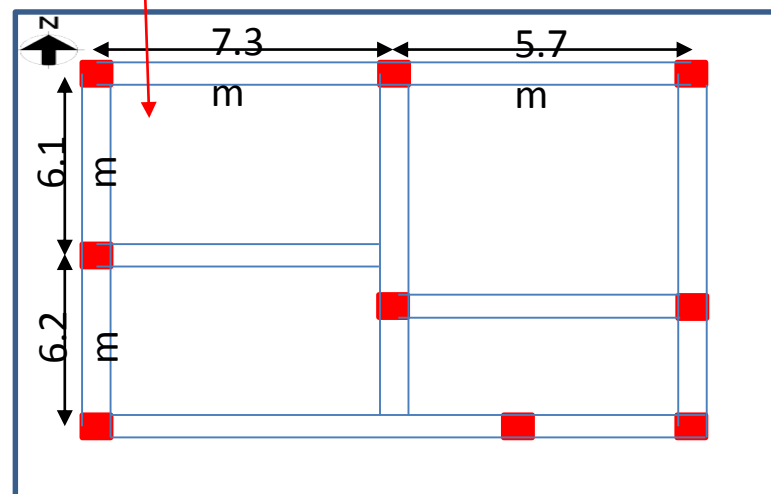
Produce as built drawings for utility and other ancillary structures.

Observations: Utility Building & other ancillary sheds



As built drawings of utility building was not reflecting with site condition

Column & Beam Layout was not matched with provided drawing.



Column & Beam Layout

Observations: Utility Building & other ancillary sheds



Wastage go-down & security room



Canopy adjacent to main building



Boiler & compressor room

No as built documents were available for ancillary structures.

Observations: Utility Building & other ancillary sheds



Check the lateral stability of the ancillary sheds

Observations: Utility Building & other ancillary sheds



Observations: Utility Building & other ancillary sheds



Problems Observed

Main Building:

- 1: Loose concrete repair work around plumbing area.
- 2: Design report to be verified by Accord.
- 3: Implement floor loading management program.
- 4: Construction debris at roof top.
- 5: Future extension to be carried out
- 6: Exposed rebar to weather.

Utility Building & other ancillary sheds:

- 7: Produce as built drawings for utility and other ancillary sheds.
- 8: Check the lateral stability of the ancillary sheds.



Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Loose concrete repair work around plumbing area	Building engineer is required to investigate the locations and carry out sustainable repair works.	Immediate - Now
2	Design report to be verified by Accord	Design report is required to be reviewed by Accord. Considering all the lateral loads and design live load.	6-weeks
3	Design report to be verified by Accord	Verify in-situ concrete stresses considered in design report either by 100mm dia. cores from min. 4 no. or existing credible cylinder test report.	6-weeks
4	Design report to be verified by Accord	Continue to implement load plan.	6-months
5	Implement floor loading management program	Produce and actively manage a loading plan for all floor plates within the factory giving consideration to floor capacity and column capacity.	6-weeks
6	Implement floor loading management program	Continue to implement load plan.	6-months
7	Construction debris at roof top	Remove the construction debris from the roof top.	6-weeks
8	Future extension to be carried out	For any kind of extension building engineer is required to carry out Detail Engineering Assessment(DEA) considering BNBC provision.	6-months



Item No.	Observation	Recommended Action Plan	Recommended Timeline
9	Exposed rebar to weather	For both durability and serviceability, rust proof paint or any appropriate method is recommended.	6-weeks
10	Produce as built drawings for the utility and ancillary sheds	Prepare as built drawings for the utility building and ancillary sheds.	6-weeks
11	Check the lateral stability of the ancillary sheds	Building engineer is required to check the lateral stability of the ancillary sheds.	6-weeks
12	Check the lateral stability of the ancillary sheds	Carryout remedial works where necessary.	6-months