



Jerat Shirt Limited

Plot - 188/189, Nasirabad I/A, Baizid, Chittagong.
(22.387914N, 91.812415E)
9th March 2017





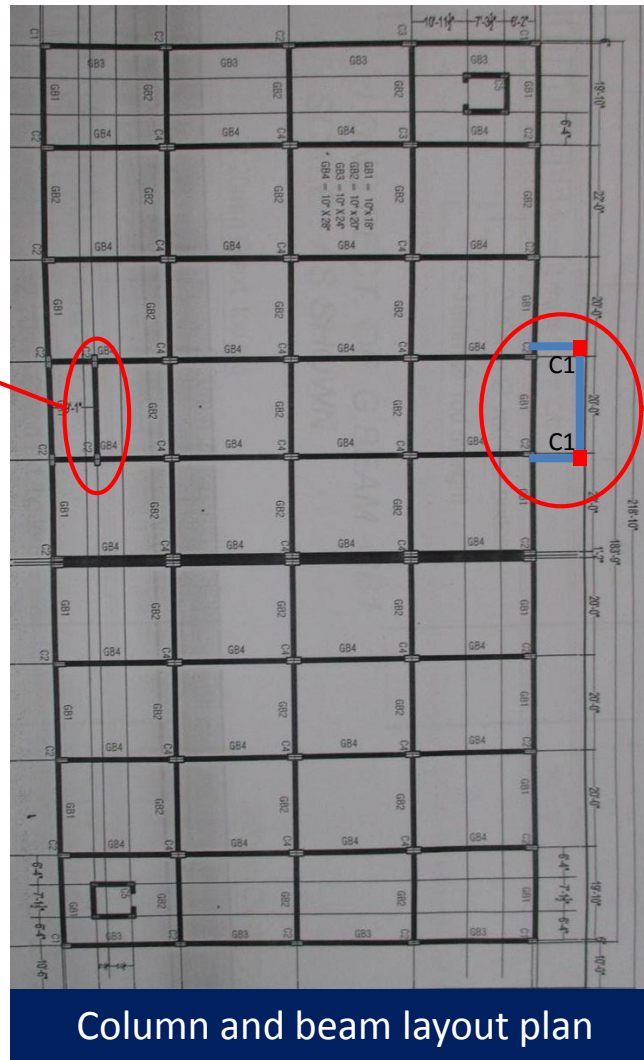
Observations



Mismatch's in as-built drawings of production building



Floor beam missing



Column and beam layout plan



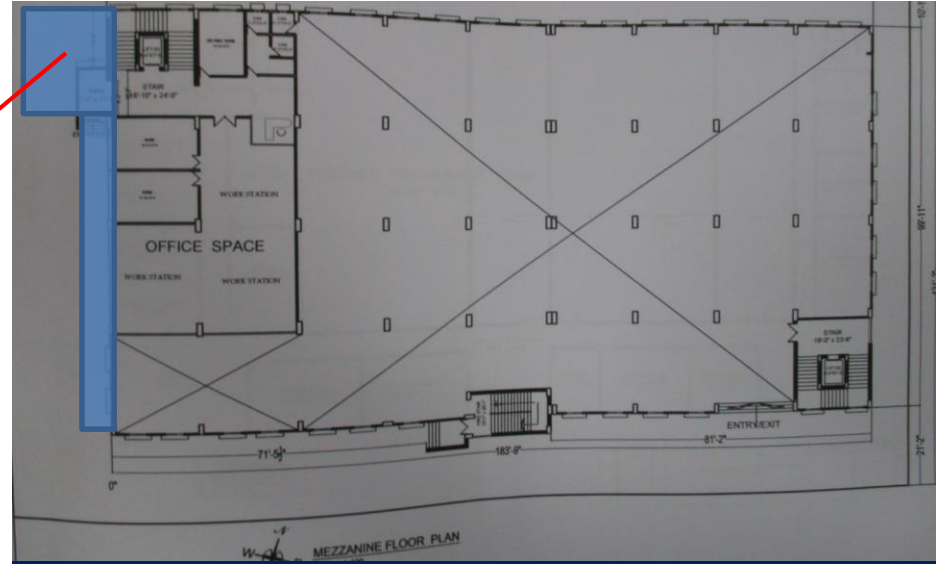
Additional stair columns

Two number of columns with beam at south side stair were not shown in drawing. Again, two additional columns with a beam were shown in drawings but not found on site. factory engineer to survey the structure and update the as-built drawings.

Observations- Production Building

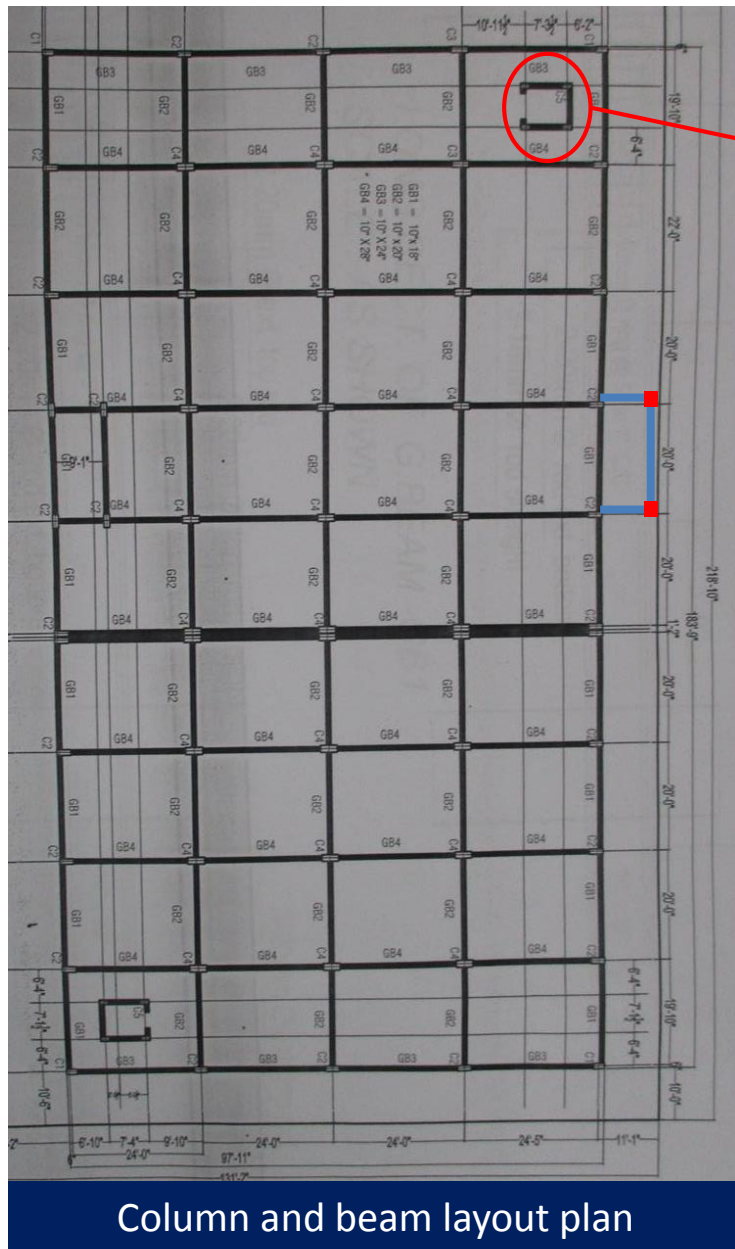


The porch and the cantilever beam and slab not shown in as-built drawings.



Floor layout plan

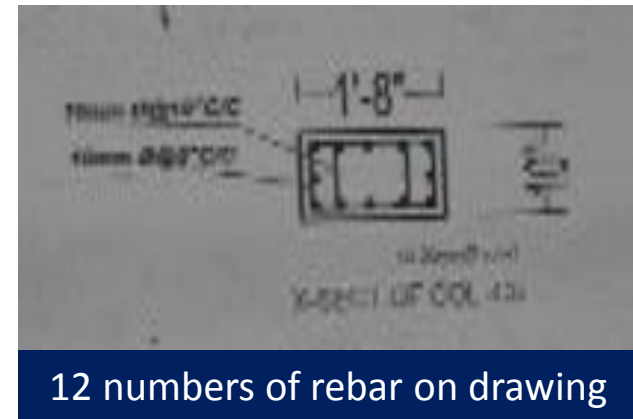
Observations- Production Building



Column and beam layout plan



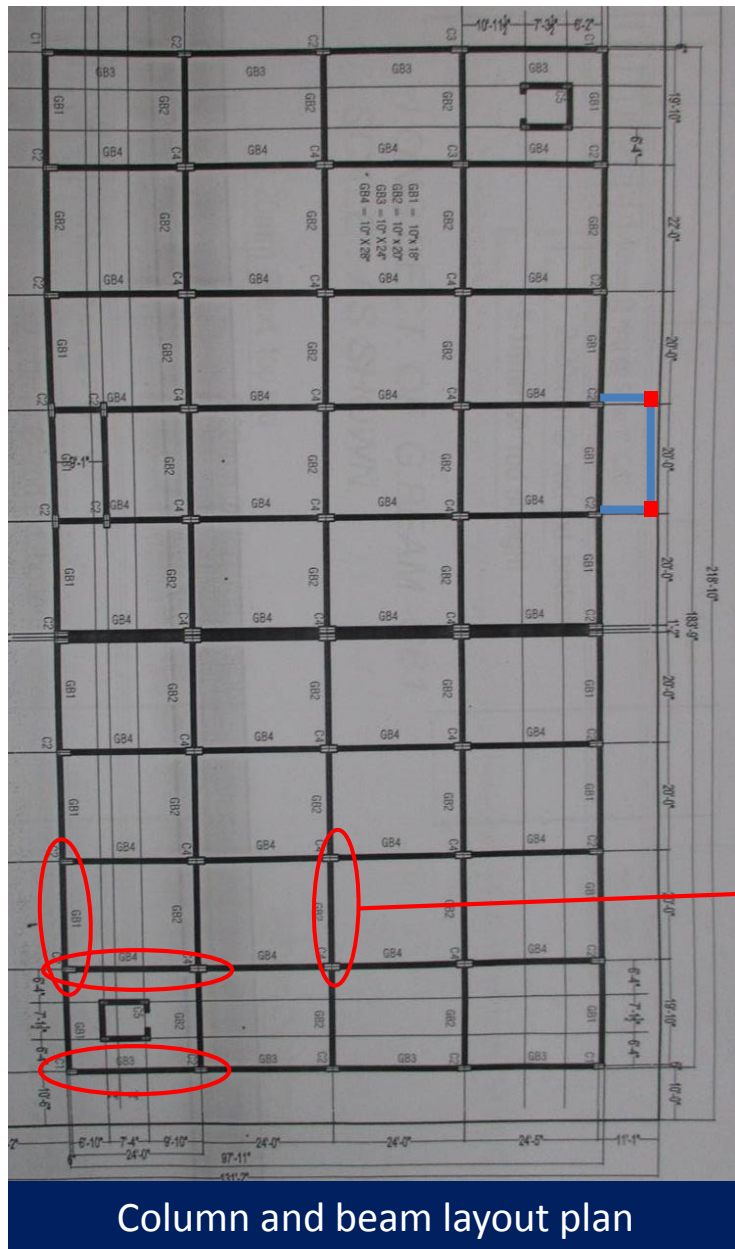
10 numbers of rebar found on column C5



12 numbers of rebar on drawing

10 numbers of rebar were found inside for the column C5 where drawing shows 12 numbers.

Observations- Production Building

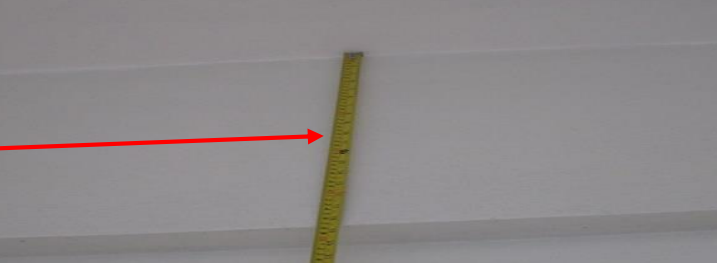


3-20mm Ø top rod straight
2-20mm Ø top rod straight
2-16mm Ø middle rod straight
10mm Ø ring @ 5' to 7' C/C
3-20mm Ø rod ext. bottom
3-20mm Ø rod straight
L/8
12' x 30'
25"
23 5"

LONG SECT. OF R.BEAM-RB3
SCALE : AS SHOWN

3-20mm Ø top rod straight
2-20mm Ø top rod straight
2-16mm Ø middle rod straight
10mm Ø ring @ 5' to 7' C/C
4-20mm Ø rod ext. bottom
4-20mm Ø rod straight
L/8
12' x 27'
24"

LONG SECT. OF R.BEAM-RB4



The dimension of floor beams for RB2, RB3 and RB4 does not matched with as-built conditions.



The floor built up on toilet zone not shown in as-built drawings.



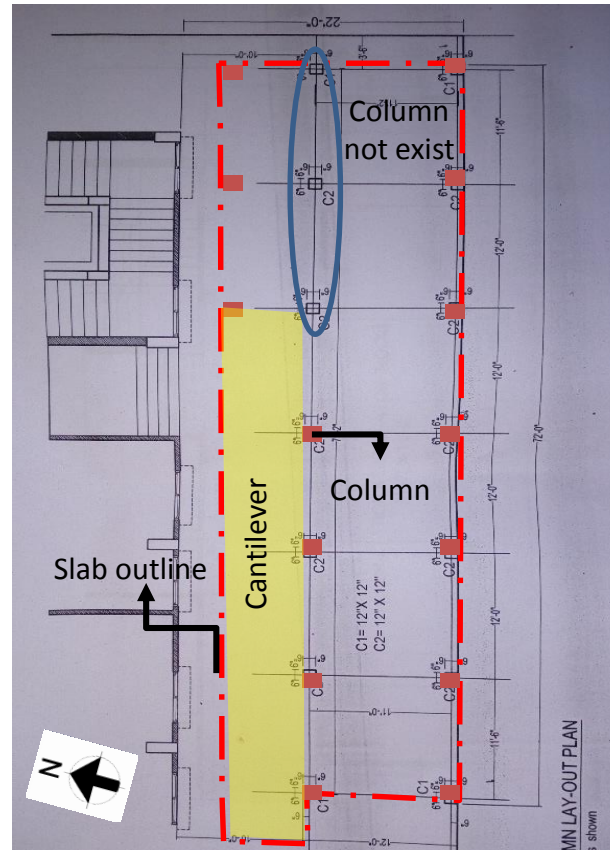
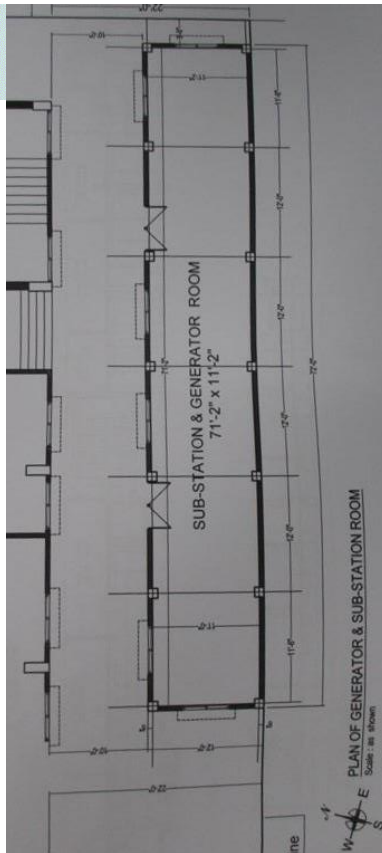
Roof top water tanks were not shown in as-built drawings.

Provided as-built drawing does not matched with as-built conditions. Floor built-up, roof top water tanks, cantilever slab, porch and some internal partition walls were not mentioned in as-built drawings. Factory engineer to update the as-built drawings as per actual scenario.

Observations- Production Building



Insufficient as-built drawing of utility building



Floor & Column Layout Plan

Utility Building

As-built drawing of Utility Building does not match with as-built conditions.
The column dimension and the grid spacing not match's with drawings.
Factory engineer to update the as-built drawings to the as-constructed status.

Observations- Utility Building



Lack of water proofing membrane on roof



Water ponding was observed on the roof of production building. Proper drainage system and water proofing membrane need to be apply on roof to resist water ingress into the slab.

Observations- Production Building



Non engineered steel roof lean to production building



Mono-pitched roof lean to the production building



Steel framing

The support between steel frame and production is not clear for the light weight steel roof in the premises of the factory. The drawing of the roof system were not available on site. Factory engineer to prepare as-built drawing including support details and check the adequacy of supports.

Observations- Production Building



Extension to be carried out



Factory has permit of 8 storey factory building from local authority (CDA). If any extension above 3-storey to be carried out, building engineer is required to carry out a Detail Engineering Assessment considering BNBC provision.

Observations- Production Building



Priority Actions



Problems Observed

- 1: Mismatch in as-built drawings of production building
- 2: Insufficient as-built drawings of utility building
- 3: Lack of water proofing membrane on roof
- 4: Extension to be carried out
- 5: Non engineered steel roof lean to production building



Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Mismatch in as-built drawings of production building	Building Engineer is required to survey the structure and update the as-built architectural and structural drawings to the “as-constructed” status.	6-weeks
2	Lack of as-built drawing for the utility building	Building Engineer is required to prepare the as-built architectural and structural drawings for the utility building.	6-weeks
3	Lack of water proofing membrane on the roof of production building	Building engineer to develop drainage system and apply water proofing membrane on the roof	6-months
4	Non engineered steel roof lean to production building	Factory engineer to be checked the connections and adequacy of the steel roofing against wind loading.	6-weeks
5	Non engineered steel roof lean to production building	Carry out repair works if required	6-months
6	Extension to be carried out	Factory engineer to be carried out a Detail Engineering Assessment (DEA) prior to commencement of further construction above 3 storey.	6-months