



Sublime Greentex Ltd. Executive Intimates Ltd.

Gilarchala, Sreepur, Gazipur
(24.194254, 90.425146)
25th February 2018





Observations



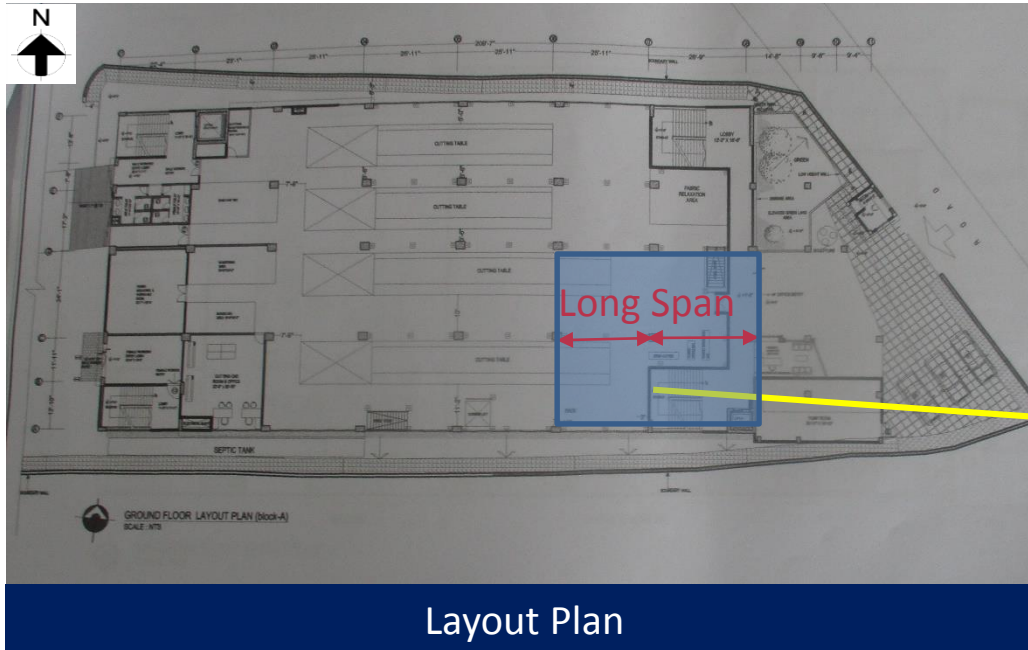
Column to be stressed above normal design limits



Cursory calculations indicate that the working stress of the columns at Ground Floor level are above normal design limits.



Long span



Layout Plan



250 mm brick wall at stair

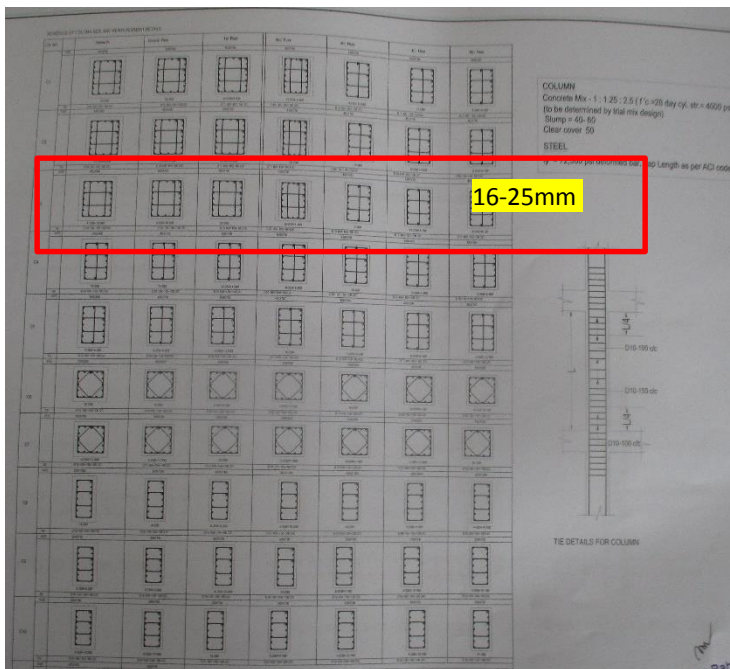
Observation : Production Building



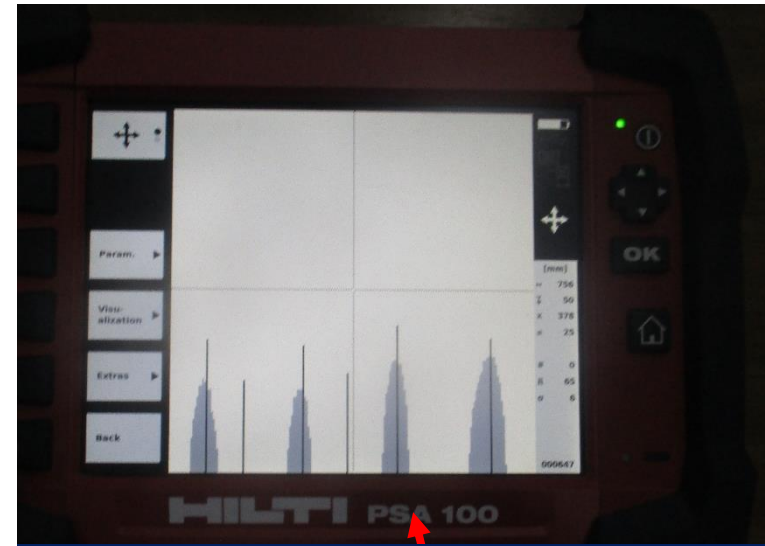
Discrepancy between provided drawing and on-site condition



Observed by ferro scan at 3rd Floor



Column Schedule



14 rebars (6 rebars on long face)

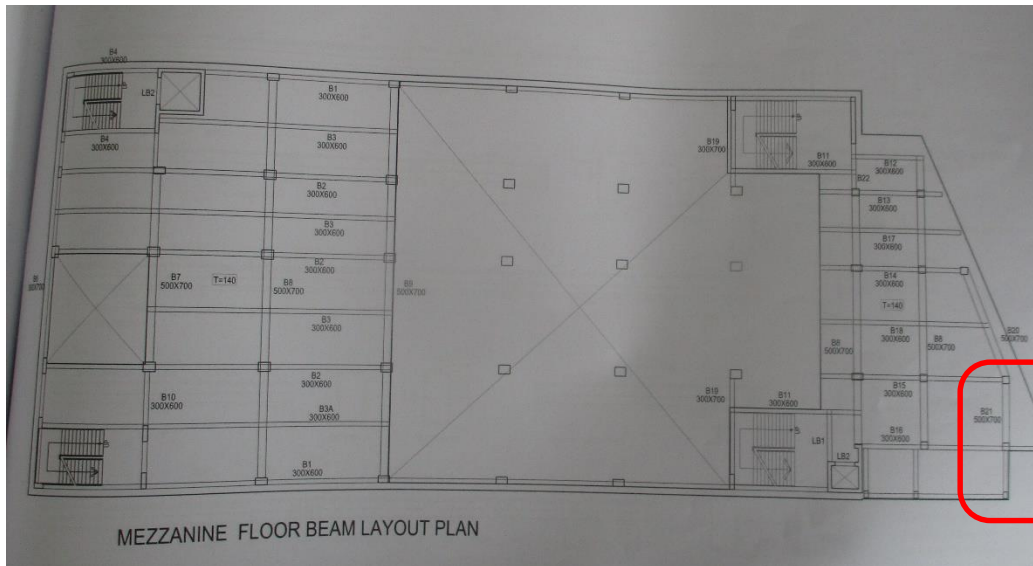
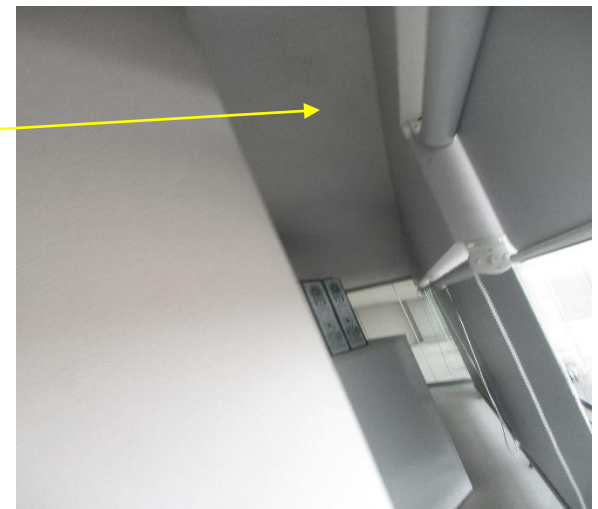
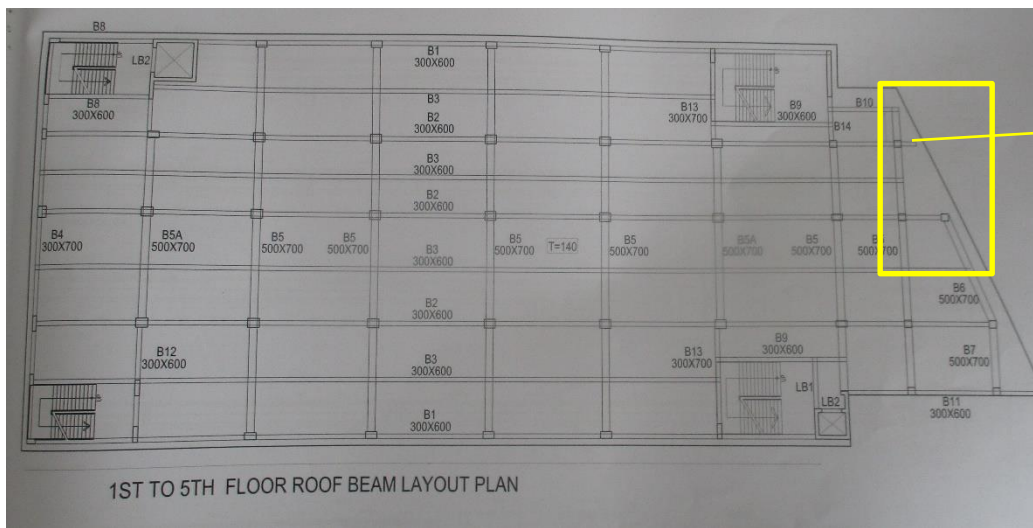
Reinforcement detected by Ferro Scanning internal and external columns in Production Building appears to be different than shown in the structural drawings.

Building engineer to verify number and diameter of rebars at least at two sides by removing plaster and concrete cover of typical columns.



COLUMN LAYOUT PLAN (GROUND & 1ST FLOOR)

Column layout plan



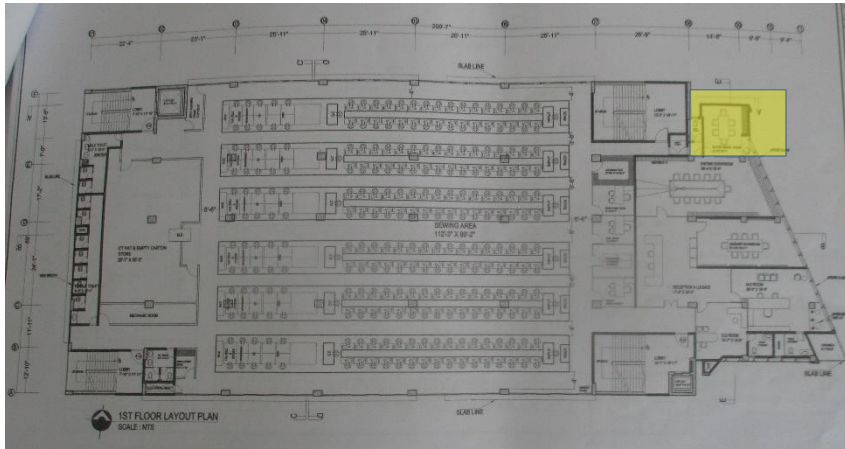
Beam layout does not match with as built condition. Cantilever beams at front are not shown properly on drawings.



Large floor cantilevers at East



Large cantilever beam was observed at the front side of the building. Building Engineer to check structural adequacy of the cantilever and propose any remedial actions if required.



Floor layout



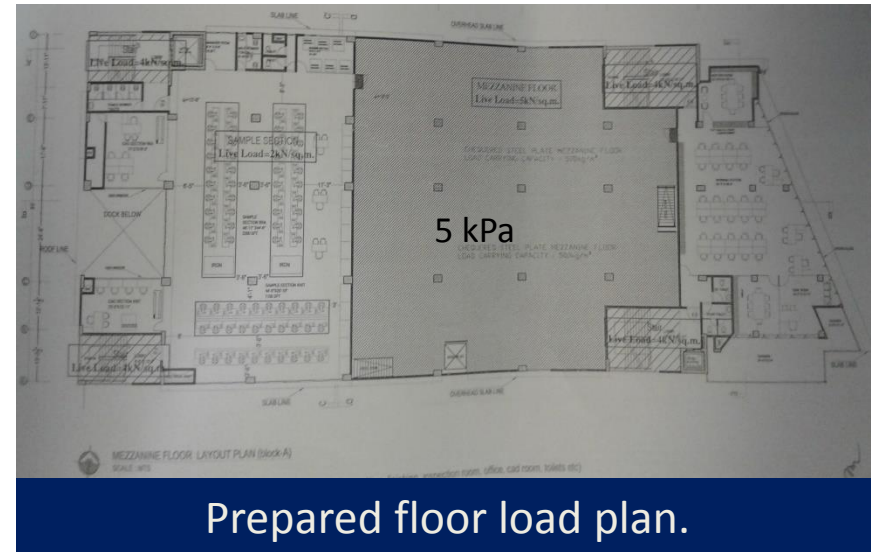
Cantilever at East



Lack of documents for steel part (Mezzanine floor)



No drawing was available for the steel mezzanine portion at Ground floor. Factory is required to produce as-built drawing reflecting on-site condition. Also, check the adequacy of the steel member and foundation details of the steel structure.

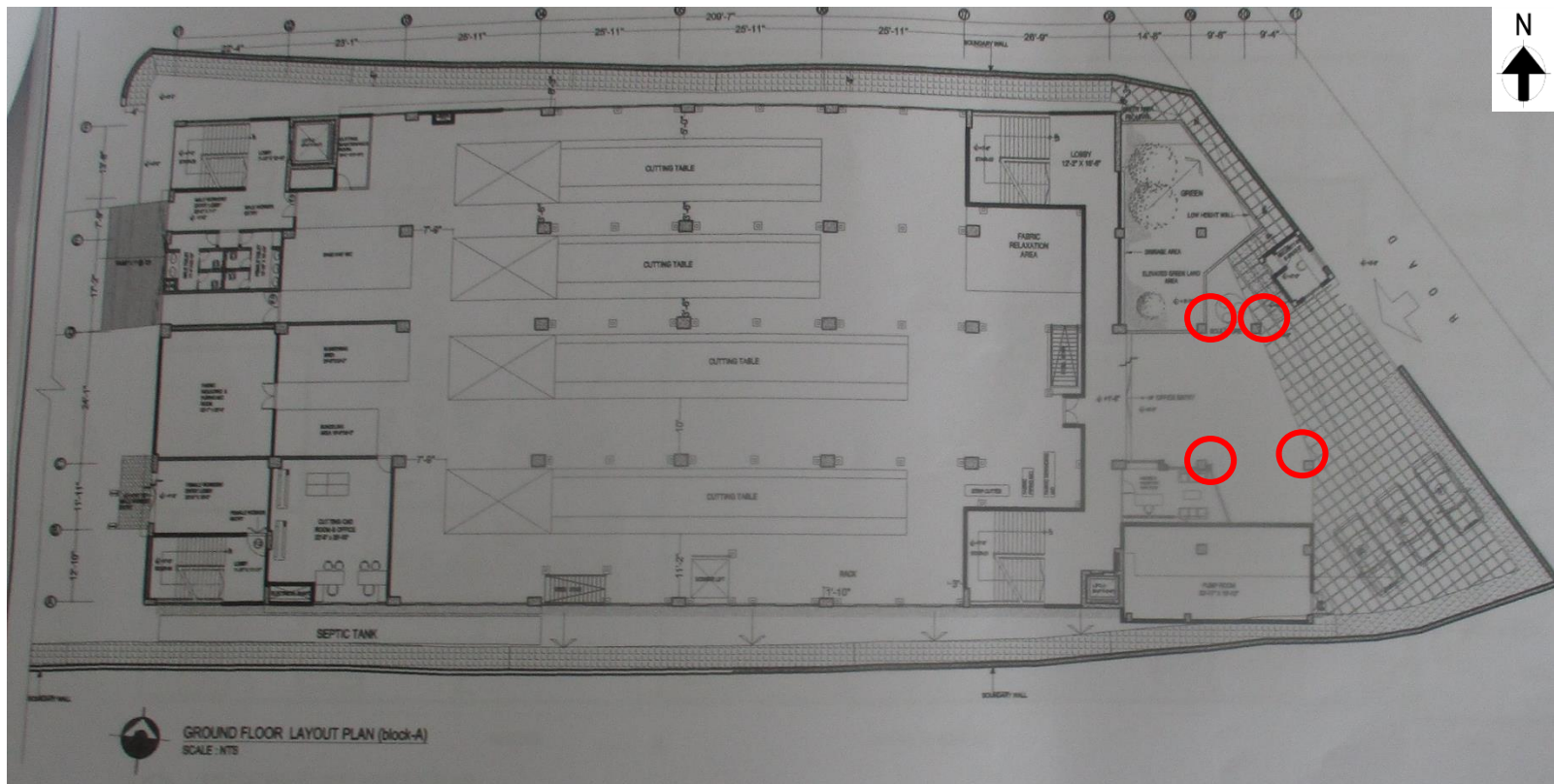


Factory engineer has prepared a load plan considering 5kpa allowable floor loading on steel mezzanine floor. Design report is required if the factory management intends to implement the prepared load plan.



Columns susceptible to vehicle impact

Observations: Production Building

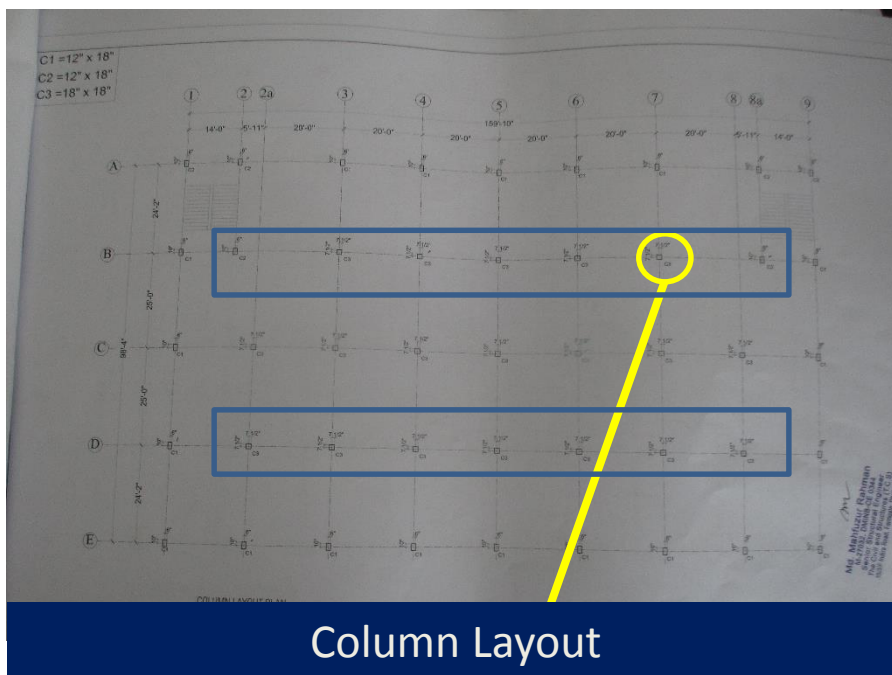


Impact protections are not provided to the columns at front parking area. Columns are susceptible to impact loading from vehicles.





Discrepancy between provided drawing and on-site condition



COLUMN SCHEDULE			
Column Number	Below Ground Level	G Floor Level	1st Floor Level
C1			
	Column Size 14' x 20'	12' x 18'	12' x 18'
C2			
	Column Size 14' x 20'	12' x 18'	12' x 18'
C3			
	Column Size 20' x 20'	18' x 18'	18' x 18'
Number of Bars			

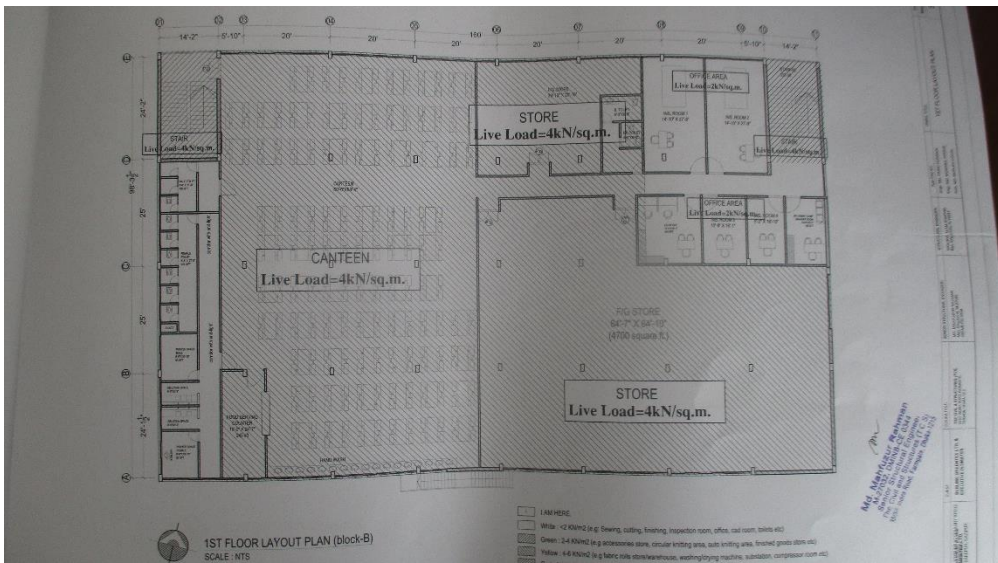


375 mm instead of 450 mm

C-3 type column section was found (375 X 375 mm) instead of (450mmX450mm) along grid B & D. Building engineer to verify sizes of each column and prepare accurate as-built drawings.



**Prepared load plan required to be
verified**



During inspection no over loading was observed on floor. Factor of safety calculation for internal column was found satisfactory considering 3 kpa allowable floor live loading for existing structure.

Factory engineer has prepared a load plan considering 4kpa allowable floor loading for 1st floor. Design report is required to review if the factory management intends to implement the prepared floor load plan (above 3 kPa).

Concrete core has been taken from column but test report was not available during inspection.



Loading on 1st floor (Store)



Loading on 1st floor (Dining)

Factory is required to maintain the floor live load below 3 kpa until prepared load plan reviewed by design engineer.



Lack of documents for compressor shed



Structural drawings were not available for the compressor shed during visit.



Compressor Shed



Problems Observed

Production Building

Item-1: Column to be stressed above normal design limits.

Item-2: Discrepancy between provided drawing and on-site condition.

Item-3: Large floor cantilevers at East.

Item-4: Lack of documents for steel works.

Item-5: Columns susceptible to vehicle impact.

Service Building

Item-6: Discrepancy between provided drawing and on-site condition.

Item-7: Prepared load plan required to be verified.

Compressor Shed

Item-8: Lack of documents for compressor shed.



Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	(Production Building) Column to be stressed above normal design limits	Factory Engineer to review design, loads and columns stresses.	6-weeks
2	(Production Building) Column to be stressed above normal design limits	Verify in-situ concrete stresses by 100mm dia. cores from min. 4 no. column from ground floor level.	6-weeks
3	(Production Building) Column to be stressed above normal design limits	Produce and actively manage a loading plan for all floor plates within the factory giving consideration to floor capacity and column capacity.	6-weeks
4	(Production Building) Column to be stressed above normal design limits	Make any structural alterations as advised by Building Engineer.	6-months
5	(Production Building) Column to be stressed above normal design limits	Continue to implement loading plan.	6-months
6	(Production Building) Discrepancies between provided drawings and on site condition.	Building Engineer to survey as-built structure and prepare accurate as-built survey information for the building.	6-weeks



Item No.	Observation	Recommended Action Plan	Recommended Timeline
7	(Production Building) Large floor cantilever at East	Building Engineer to confirm that the cantilever slabs have been designed to take the floor and façade loads applied.	6-weeks
8	(Production Building) Large floor cantilever at East	Remedial works to be carried out if required.	6-months
9	(Production Building) Lack of documents for steel works	Building Engineer to survey as-built structure and prepare accurate as-built survey information for steel part.	6-weeks
10	(Production Building) Lack of documents for steel works	Factory Engineer to review design and columns stresses based on the prepared load plan.	6-weeks
11	(Production Building) Lack of documents for steel works	Remedial works to be carried out if required.	6-months
12	(Production Building) Columns susceptible to vehicle impact	Install a barrier to prevent vehicle impact in columns.	6-weeks
13	(Service Building) Discrepancies between provided drawings and on site condition	Building Engineer to survey as-built structure and prepare accurate as-built survey information for the building.	6-weeks



Item No.	Observation	Recommended Action Plan	Recommended Timeline
14	(Service Building) Prepared load plan required to be verified	Maintain 3 Kpa load on all floors.	6-weeks
15	(Service Building) Prepared load plan required to be verified	Produce and actively manage a loading plan for all floor plates within the factory giving consideration to floor capacity and column capacity if loading above 3 kpa is considered.	6-weeks
16	(Service Building) Prepared load plan required to be verified	Continue to implement final load plan	6-months
17	(Compressor Shed) Lack of documents for compressor shed	Prepare an “as constructed” drawings which reflect the actual site dimensions with complete structural information.	6-weeks