

Artistic Design Ltd

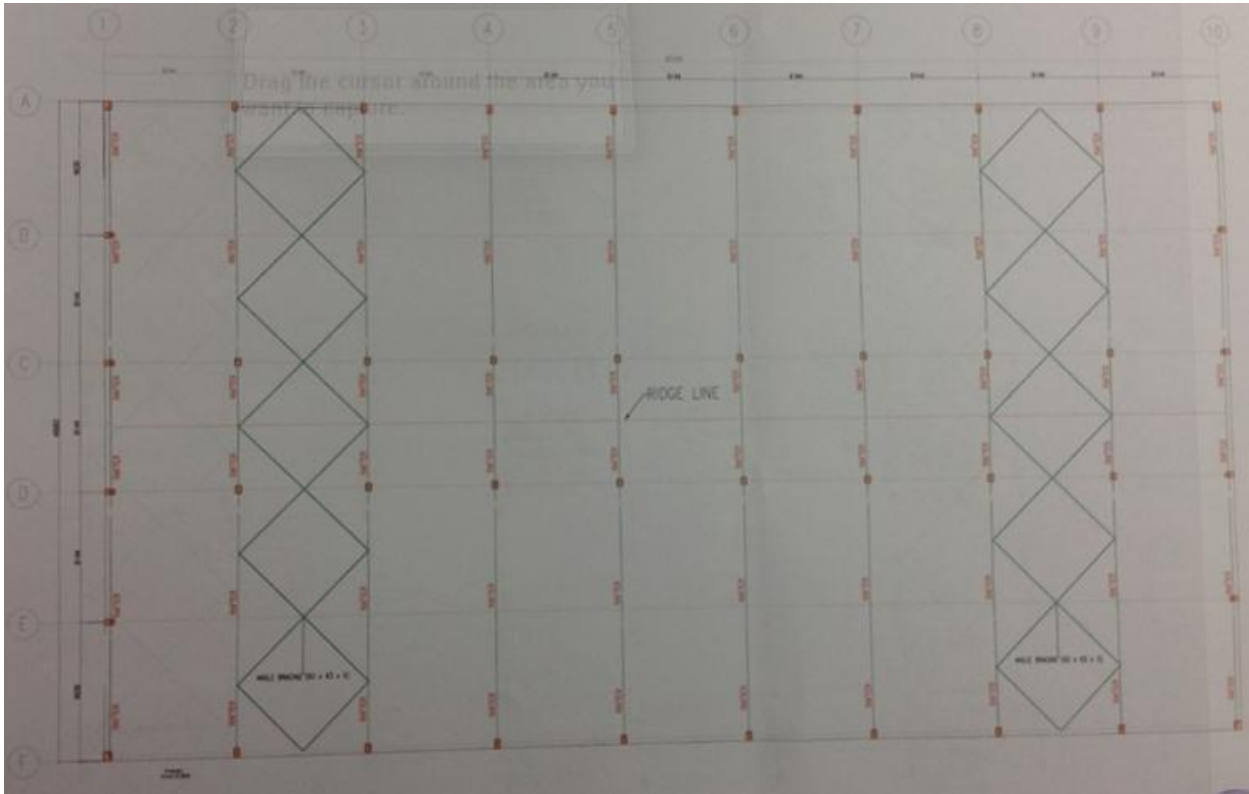
232, 233 East Narashinghpur (Bangla Bazar), Asulia, Savar 1314, Dhaka
(23.93780N, 90.30851E)

25 March 2014



Observations

Lateral Stability of Steel Structure



Bracing layout plan for steel structure

While bracing is provided along the roof there is no apparent lateral stability system along the east and west elevations. Engineer to review and provide bracing along these elevations if necessary.

Lateral stability of steel structure

Management of Storage Loads



2nd floor storage area

Building Engineer to prepare controlled loading plans for all floors which will designate where storage can be placed.



2nd floor storage area

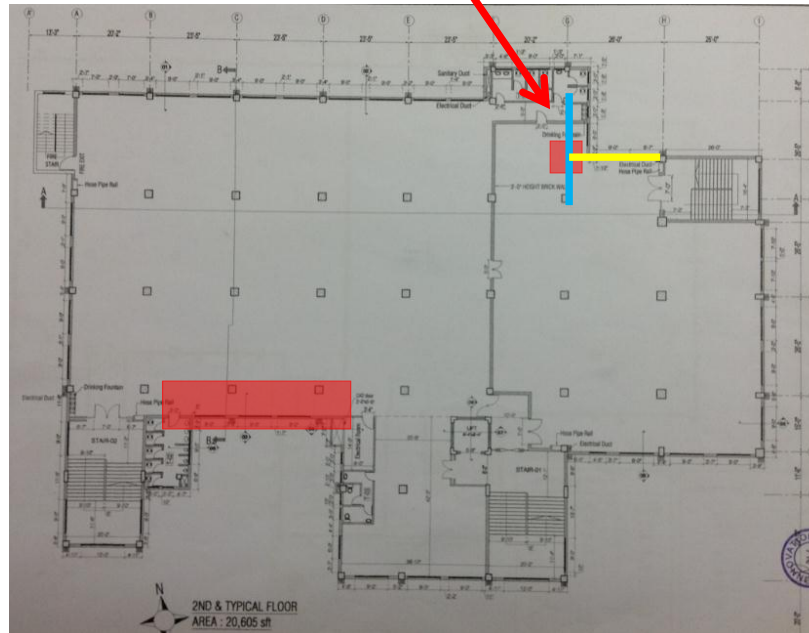
Management of Storage Loads

Hairline cracking to beams and slabs

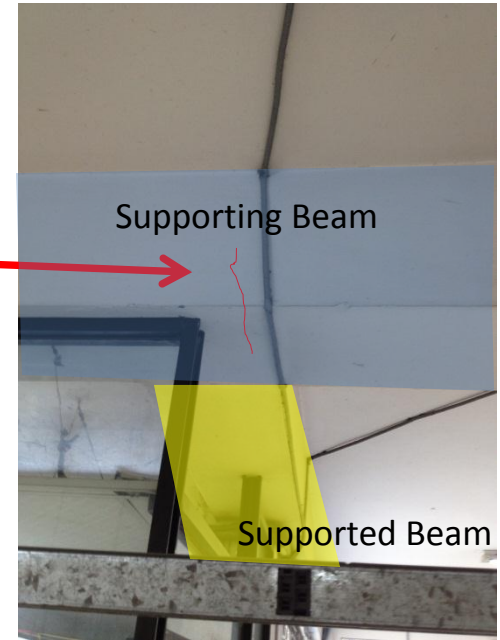


Cracking to ground floor slab

Building engineer to perform calculation to prove supporting beam (North-South) is adequately sized to take point load from supported beam (East-West)



Typical plan showing crack locations on suspended slabs



Supporting Beam

Supported Beam

Hairline crack in beam

Water ingress



Water damage to façade on North Elevation

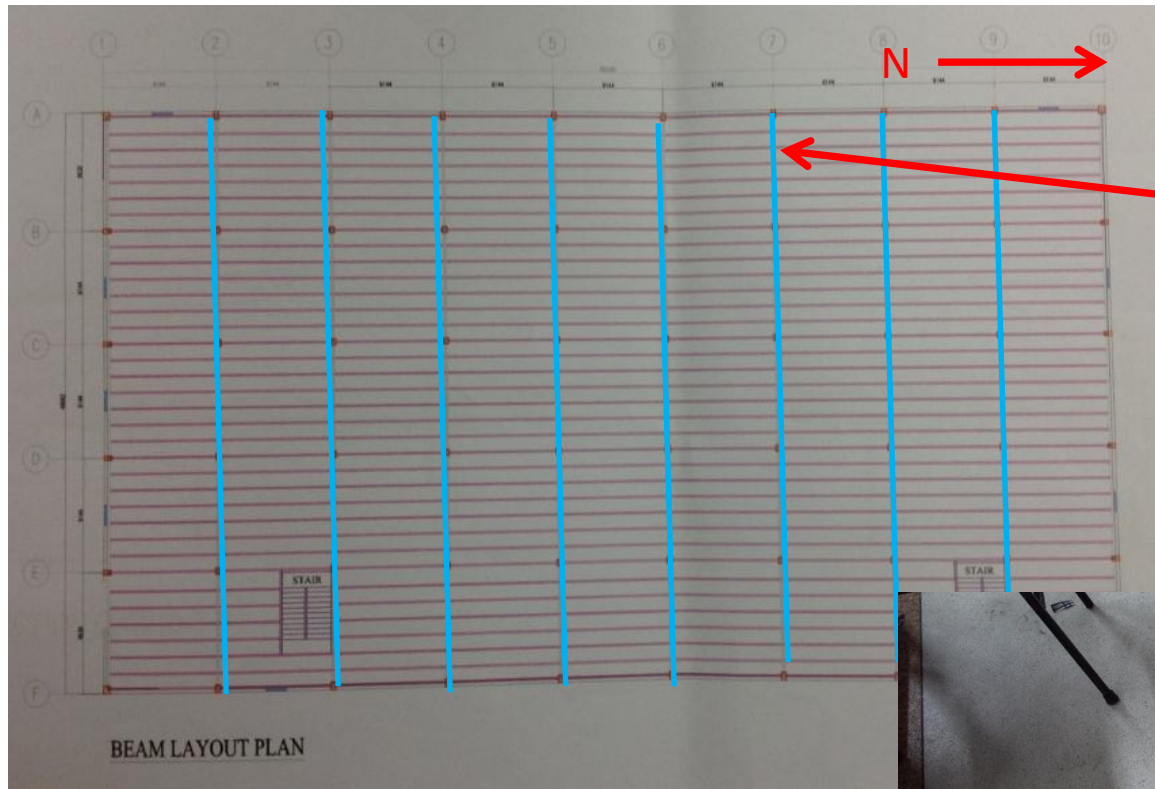


Water damage at soffit of roof slab

Building engineer to monitor water ingress and take preventative measures if necessary

Water ingress

Cracking to concrete slab in steel building



Beam layout plan

Cracks generally occur along line of primary beam (shown in blue), as slab is spanning east-west this does not constitute a problem.



Cracking concrete slab

Cracking to concrete slab

Damage to façade of steel building



Damage to façade on the North Elevation

Façade should be repaired in order to ensure water does not permeate into building.

Damage to façade of steel building

Priority Actions

Problems Observed

ITEM 1: Lateral Stability of Steel Structure

ITEM 2: Management of Storage Loads

ITEM 3: Large span slabs

ITEM 4: Hairline cracking to beams and slabs

ITEM 5: Water ingress

ITEM 6: Damage to façade of steel building

Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Lateral Stability of Steel structure	Engineer to review and provide bracing if necessary.	6-weeks
2	Management of storage loads	Produce and actively manage a loading plan for all floor plates within the factory giving consideration to floor capacity and column capacity.	6-weeks
3	Management of storage loads	Continue to implement load management plan	6-months
4	Large span slabs in concrete building	Building Engineer to review design of long span slabs (up to 7.9 x 7.7m)	6-weeks
5	Hairline cracking to beams and slabs	Building engineer to review design of highlighted transfer beam in North-East of Building	6-months
6	Water ingress	Building Engineer to review and prepare plan for remediation	6-months
7	Water ingress	Remediation to be carried out	6-months
8	Damage to façade of steel building	Damage to façade of steel building	6-months