

Babylon Garments & Dresses LTD

2-B/1, Darusalam Road, Mirpur, Dhaka

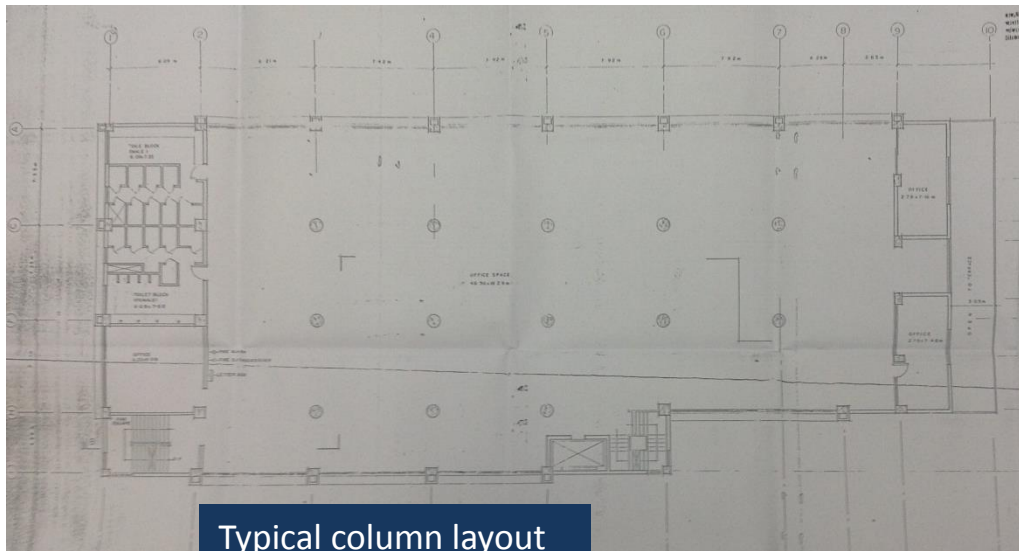
(+23.783559N, 90.351717E)

30 March 2014



Building Observations

**Columns appear to be stressed in excess of
normal design limits**



Typical column layout

Outline calculations indicate column working stress is in excess of normal design limits.

Building Engineer is to perform detailed calculations and concrete tests to prove column size and (if required):

- Reduce loads by vacating floors
- Reinforce columns



Tested Basement Floor Column – Stone Chips

Columns supported by the slab on the 8th and 9th floors



Columns not on Grid at 8th and 9th floors level.

**Stability of steel roof to dining area to
be reviewed by Building Engineer**

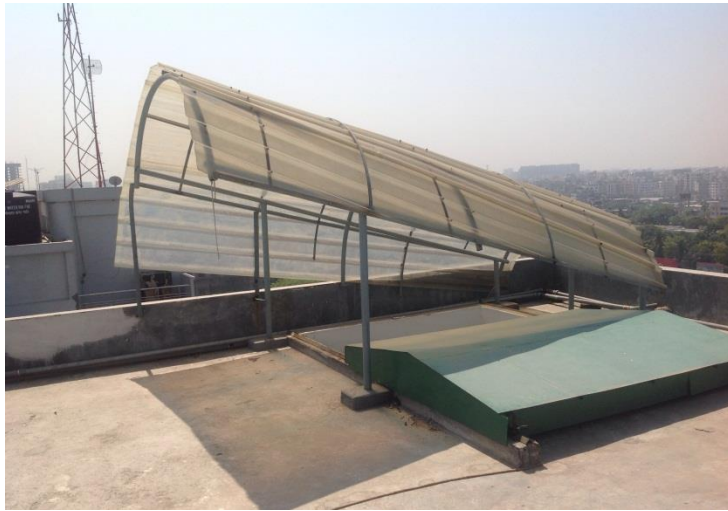


Building Engineer to confirm support/connection detail at these locations.



Roof structure to Dining Area not shown on the structural design drawings, no bracing visible, may be susceptible to wind uplift. Building Engineer to review.

Falling hazards
Stairwell canopies, Mast and
Column/Beam at roof level.



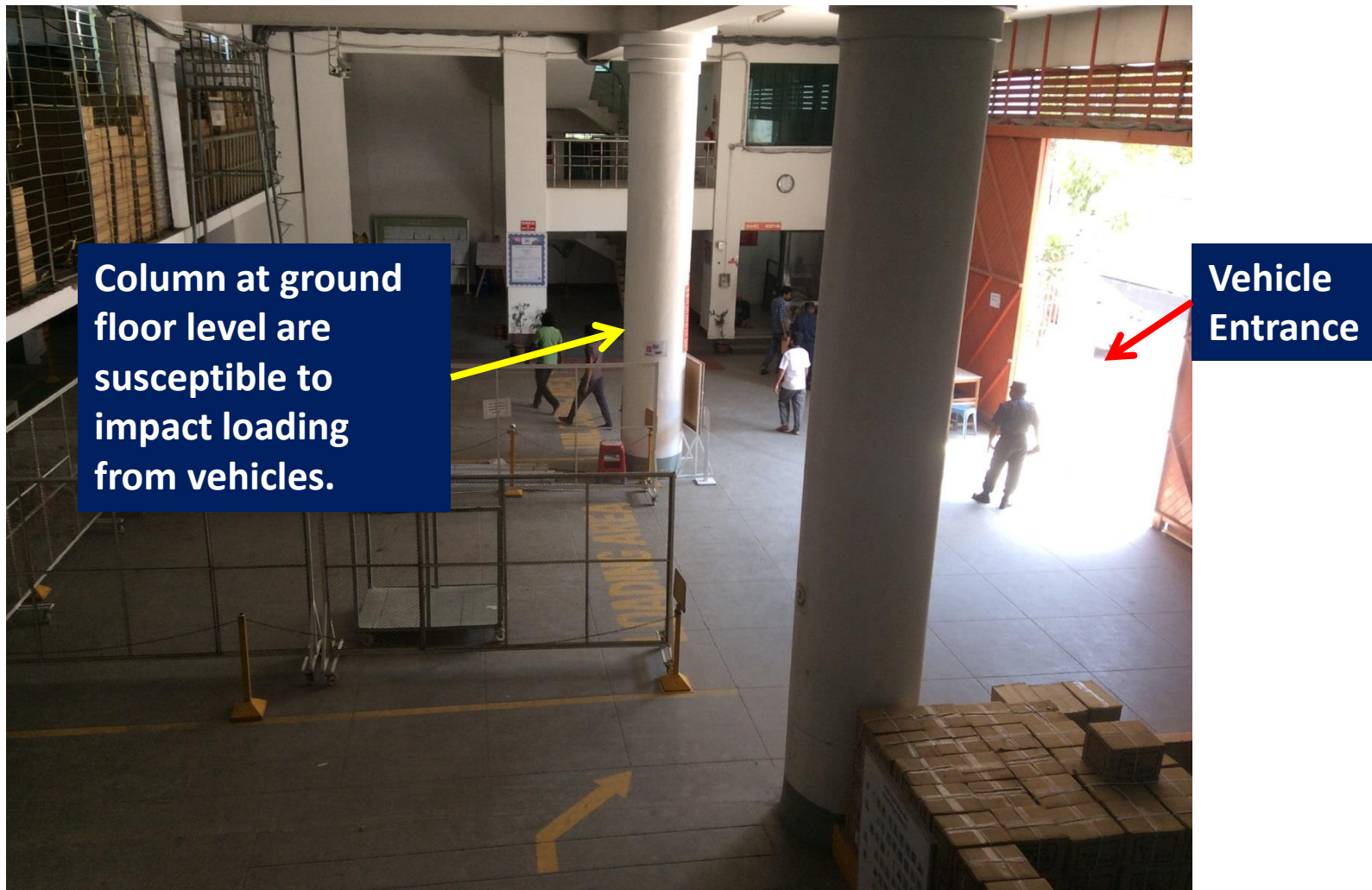
**Stairwell canopy construction very light,
may be susceptible to wind uplift.
Building Engineer to review.**



**Stability of mast unknown.
Building Engineer to review.**

Possible falling objects

Columns at ground floor level are susceptible to impact loading from vehicles.



Vehicle impact loading.

Cantilevered Window Cills/Brick Infill



**Building engineer to monitor/review
movement of brickwork upstands on
cantilever slabs**

**Cracking noted on cills. Building engineer to
monitor.**

Water ingress



**Tank overflow spills onto
roofs.
Building engineer to monitor
water ingress and take
preventative measures if
necessary**



Water staining in a number of soffits.

Proximity of River

River is very close to structure though management say the building has never flooded.

Visual evidence of damp in basement.

Building engineer to monitor building for signs of water ingress and appropriate action to be taken if ingress occurs.



Priority Actions

Problems Observed

- Item 1;** Columns appear to be stressed in excess of normal design limits
- Item 2;** Columns supported by the slab alone on the 8th and 9th floors.
- Item 3;** Stability of unpermitted steel roof to dining area to be reviewed by Building Engineer to confirm that it is braced and adequately designed to resist high wind loading.
- Item 4;** Falling hazards – stairwell canopies, mast at roof level.
- Item 5;** Columns at ground floor level are susceptible to impact loading from vehicles.
- Item 6;** Cantilevered Window Cills/Brick Infill
- Item 7;** Water ingress into building
- Item 8;** Proximity of River

Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	A check on column loads and column design is required	Building Engineer to provide calculations showing the structural adequacy of all columns, taking into account the loading plans and all built structure including additions beyond the original design.	6-weeks
2	A check on column loads and column design is required	Verify insitu concrete stresses either by cores (min of 4 no. 100mm dia.) or existing cylinder strength data for ground floor columns.	6-weeks
3	A check on column loads and column design is required	Create controlled loading plans for all floors, designating where storage can be placed and can not be placed.	6-months
4	Columns supported by the slab alone on the 8th and 9th floors.	Building Engineer to provide calculations showing the structural adequacy of all Slab/Beams to take point loading of columns, taking into account the proposed loading and all built structure including additions beyond the original design. Verify insitu concrete stresses either by 4 cores or existing cylinder strength data for the slabs.	6-weeks
5	No bracing observed in steel roof structure. Stability of steel roof to Dining Area to be reviewed by Building Engineer to confirm that it is braced and adequately designed to resist high wind loading	The steel roof over the Dining Area should be reviewed by the Building Engineer and, if required, upgraded to support code vertical and wind loads or the area should be vacated and removed.	6-weeks

Item No.	Observation	Recommended Action Plan	Recommended Timeline
6	Falling hazards – stairwell canopies, mast at roof level.	Lightweight canopies over stair-cores access to roofs to be strengthened or removed	6-weeks
7	Falling hazards – stairwell canopies, mast at roof level.	The connection of the mast to the roof structure is to be assessed by the building engineer for stability.	6-weeks
8	Falling hazards – stairwell canopies, mast at roof level.	Building Engineer to review all of the above and provide calculations and drawings demonstrating the adequacy of the structure/connections and /or evidence of how the structures are made safe	6-weeks
9	Columns at ground floor level are susceptible to impact loading from vehicles	Column to be protected from vehicle impact.	6-weeks
10	Cantilevered Window Cills/Brick Infill	Building Engineer to monitor these elements of the structure for signs of further cracking/movement and take preventative action if necessary.	6-months
11	Water ingress into building	Building Engineer to identify locations/sources of water ingress and remove/divert source to avoid contact with concrete/reinforcement of structure.	6-months
12	Proximity of River	Building Engineer to monitor the structure for signs of water ingress and take preventative action if necessary.	6-months