

APS Group Ltd
APS Apparels Ltd
APS Design Works Ltd
APS Clothing Ltd
APS Holding Ltd

East Faidabad, Dakshinkhan, Uttara, Dhaka

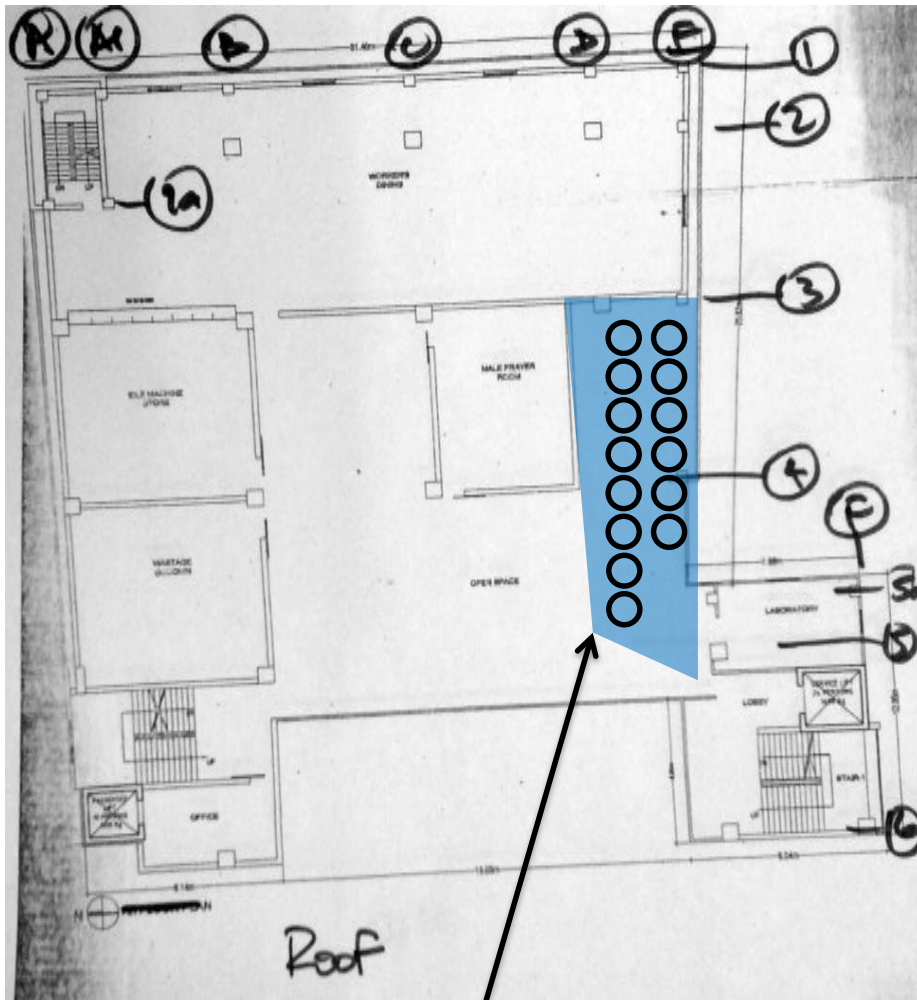
(23.879801, 90.417648)

19th March 2014



Observations

High loading due to water tanks



14no. 2000l water tanks in 2 bays of building roof adds significant load to supporting structure in particular the slabs

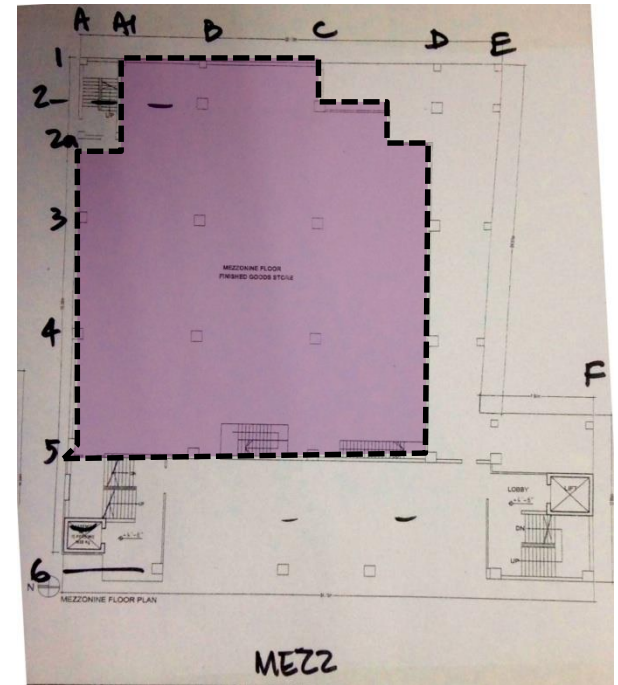


Loading – water tanks

Lack of structural drawings for mezzanine



Extensive mezzanine structure (independent of main reinforced concrete frame) was present, but no structural drawings/calculations/approvals were available. Steel structure with concrete slabs on profiled metal deck. Some connections appeared non-standard and all beams were fabricated. Mezzanine used almost exclusively for storage, with levels limited by low head height



Apparently non-engineered structures: Canteen at roof level



Lightweight steel roof appears to be supported by masonry walls only that may not provide adequate horizontal resistance in a storm event.

Canteen roof support

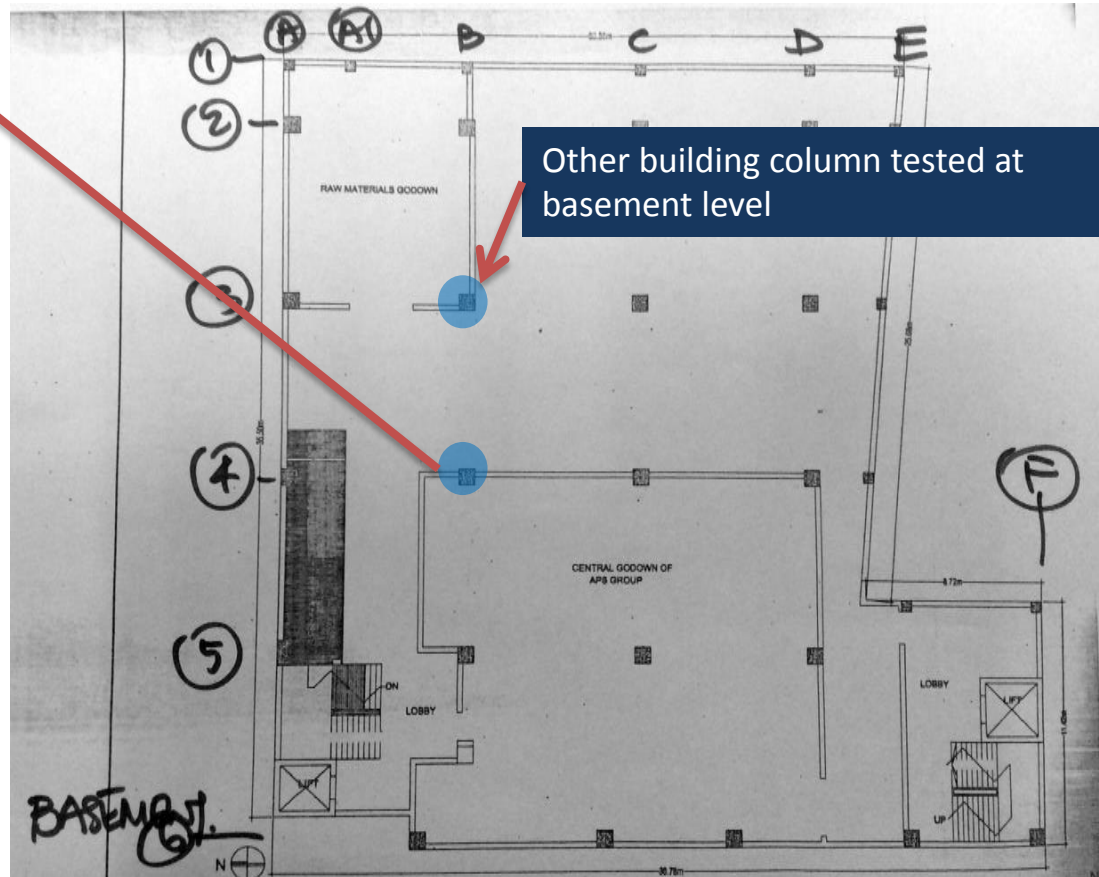
Concrete Testing

Building column tested at
basement level



Stone aggregate

Concrete testing



Excepting the mezzanine structure, design drawings are generally in good agreement with as-built structure. Opening up confirms aggregate type is stone throughout, and scanning on several columns indicates levels of reinforcement in agreement with drawings.

Priority Actions

Problems Observed

ITEM 1: High Loading due to Water Tanks at Roof Level.

ITEM 2: Lack of Structural drawings for Mezzanine Floor and Supports.

ITEM 3: Apparently non-engineered roof structures (Canteen at Roof Level).

Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	High Loading due to Water Tanks at Roof Level	Building engineer to check the capacity of the slab to carry the concentrated loading and remove/reduce the number of tanks as required	6-months
2	Lack of Structural drawings for Mezzanine Floor and Supports	Building engineer to check the structures and provide structural drawings and loading plan for the Mezzanine Floor	6-months
3	Apparently non-engineered roof structures (Canteen at roof Level)	Building engineer to check the structures for stability under horizontal loading	6-months