

Panasia Sweaters Ltd

Panasia Clothing Ltd

Vogra, National University, Gazipur, Dhaka
(23.98077N, 90.37905E)

22 October 2013



Drainage and loading on roof slab

**Stub columns presumably
to accommodate new Steel
Roof to 7th Floor Level**

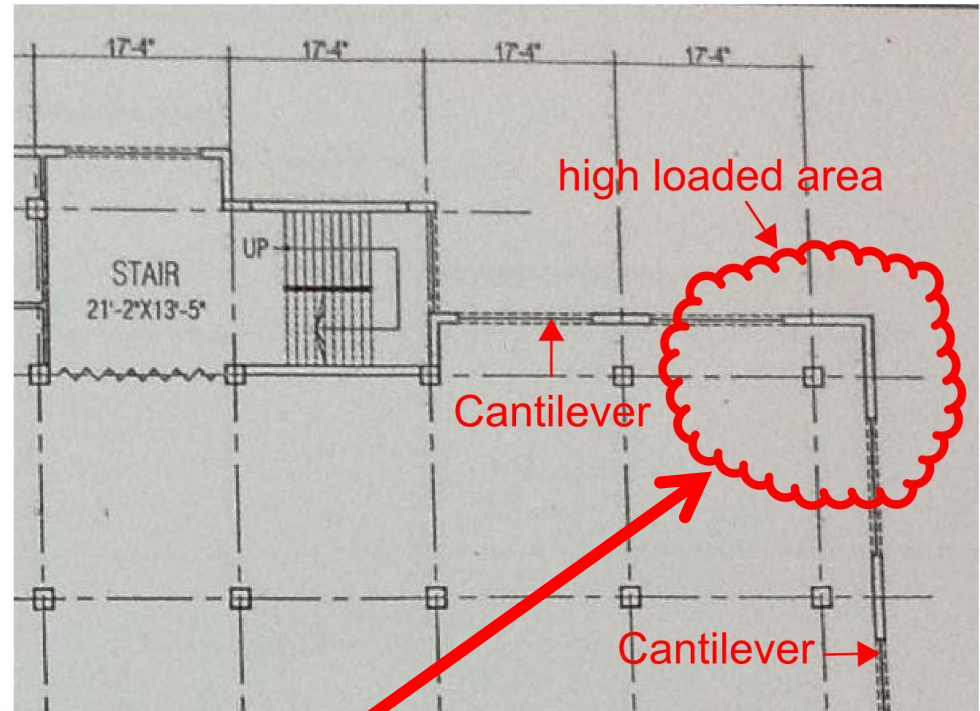


**17 total 2000 litre tanks
located on roof – in places
2 per span, located
midspan.**



**Lack of drainage and water
tanks loading of 7th Floor Slab**

Excessive loading

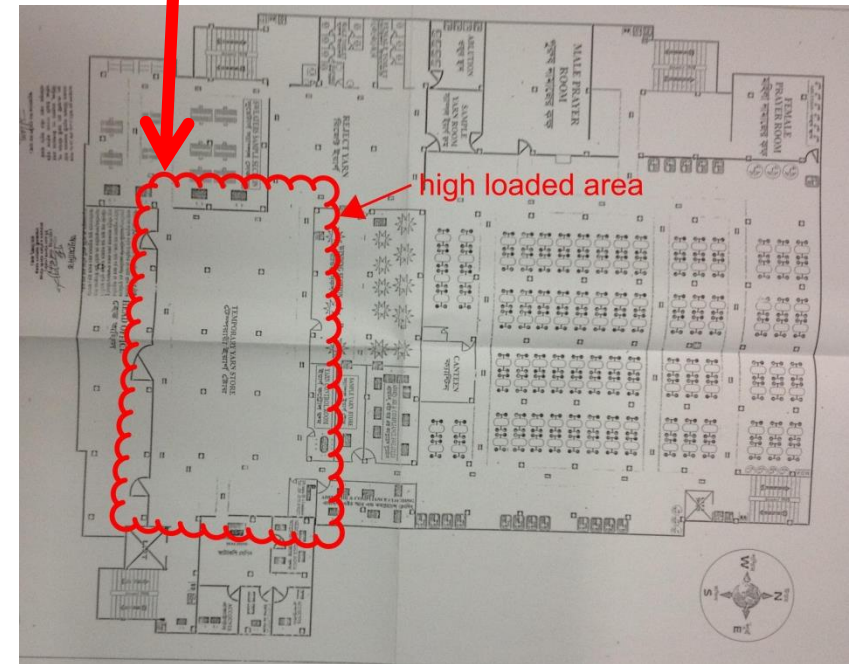


Floor Slab Cantilever subjected to heavy loading. Load needs to be limited to design load by e.g.. limiting stack height

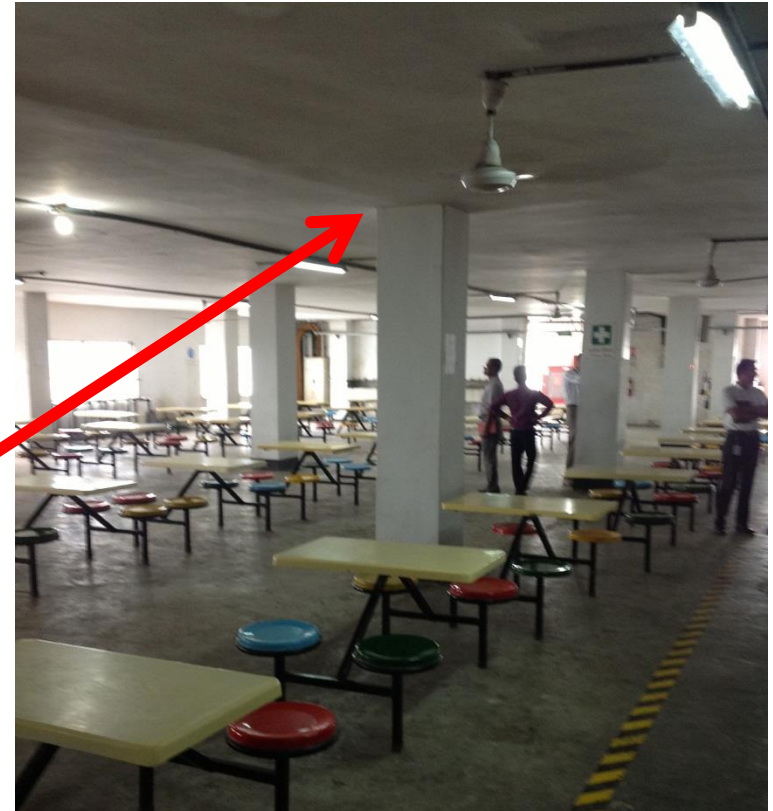
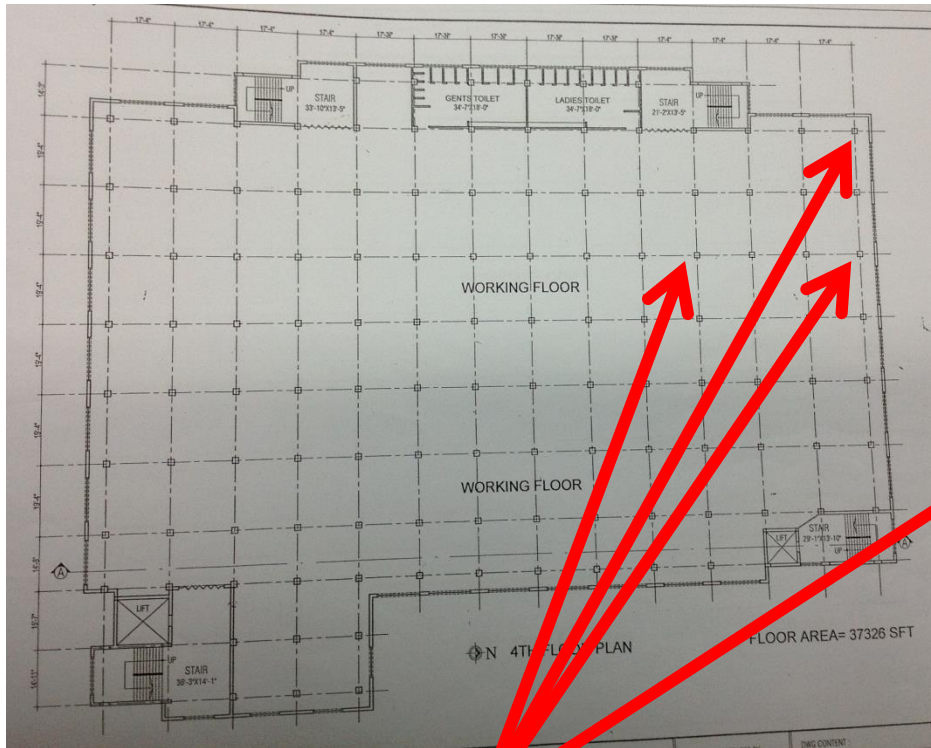
Cantilever Slab at South-West corner of 6th Floor. Check loading



Estimated loading well in excess of documented design load of 4.25 kN/m^2 . Load needs to be limited to design load by e.g.. limiting stack height or providing 0.5m wide walkways around $1.5 \times 1.5 \text{ m}^2$ stacks

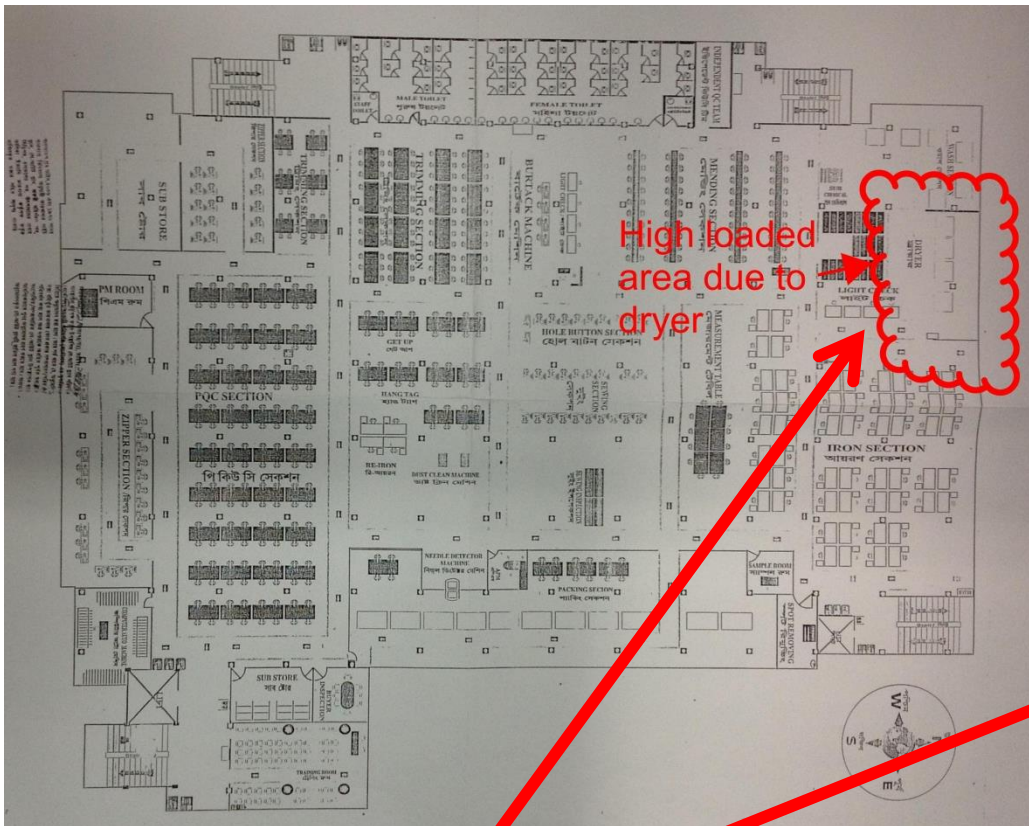


Excessive loading in Temporary Yarn Store on 5th Floor



Cursory Punching shear checks done showing sufficient load carrying capacity for factory design loading as certified (4.25 kN/m^2)

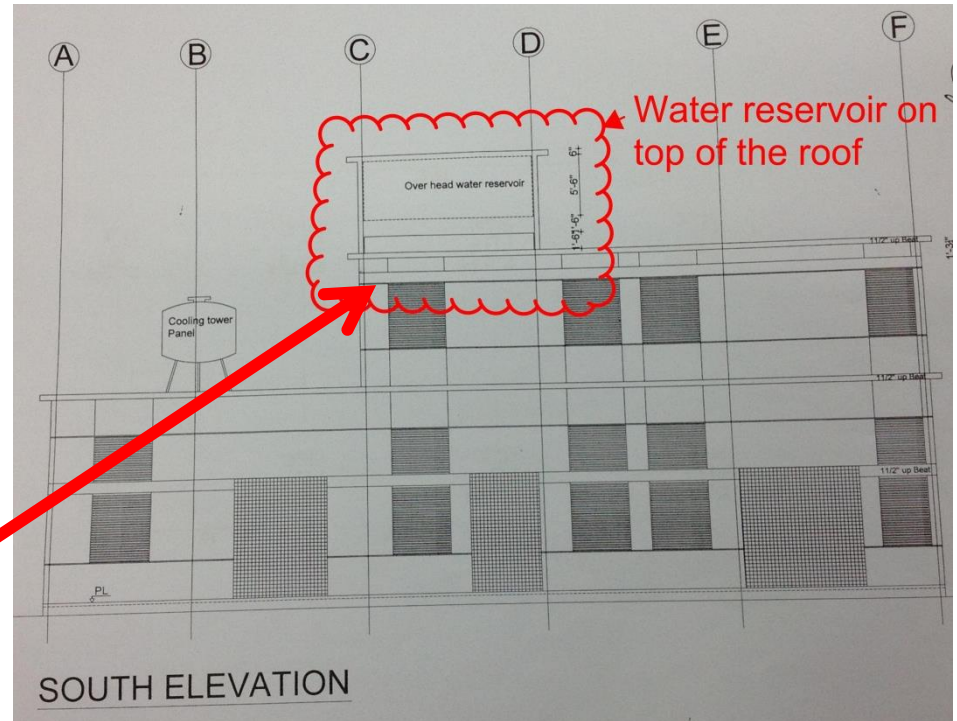
Punching Shear Stress over Columns



Floor Slab to be checked for additional 150mm floor build-up and Washing & Drying machine loading

Washing and Drying area at 1st Floor

Water reservoir over Utilities building



1st Floor roof slab to be checked for safe carrying capacity of point loads from brick piers above

Water reservoir supported by brick piers resting on roof slab over Compressor room in Utilities building

Priority Actions

Problems Observed

- Lack of drainage and water tank loading on the roof slab
- Heavy storage loading in the Temporary Yarn Store on 5th Floor
- Loading from 150mm floor build-up and Washing & Drying machines in the SW corner of 1st Floor
- Water reservoir supported by brick piers on roof slab over Compressor room in Utilities building

Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Lack of drainage and water tank loading on the roof slab	Construct drainage system to remove standing water from roof	6-months
2	Lack of drainage and water tank loading on the roof slab	Get engineer to check whether loading from water tanks in their present locations can be safely carried by 7th Floor slab	6-months
3	Heavy storage loading in the Temporary Yarn Store on 5th Floor	Limit loading in this area to maximum permissible design load, by e.g. limiting stack height or providing 0.5m wide walkways around 1.5 x 1.5 m ² stacks, maximum 2m high	6-months
4	Heavy storage loading in the Temporary Yarn Store on 5th Floor	Create controlled loading plans for all floors designating where storage can be placed and can not be placed	6-months
5	Loading from 150mm floor build-up and Washing & Drying machines in the SW corner of 1st Floor	Calculate loading due to additional floor thickness, and determine machine loadings. Engineer to justify that the existing slab capable of supporting these loads	6-months
6	Water reservoir supported by brick piers on roof slab over Compressor room in Utilities building	Check the capacity of the water reservoir slab to determine reason for brick pier supports. Check that 1st Floor roof slab can safely carry point loads from brick piers above	6-months