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Identified Priority 3 Concerns

Construction documents for concrete buildings do not reflect actual site conditions

Concrete slab at Main Production Shed should be dissociated from steel columns.

Central columns of main production shed should be checked compression/flexure interaction

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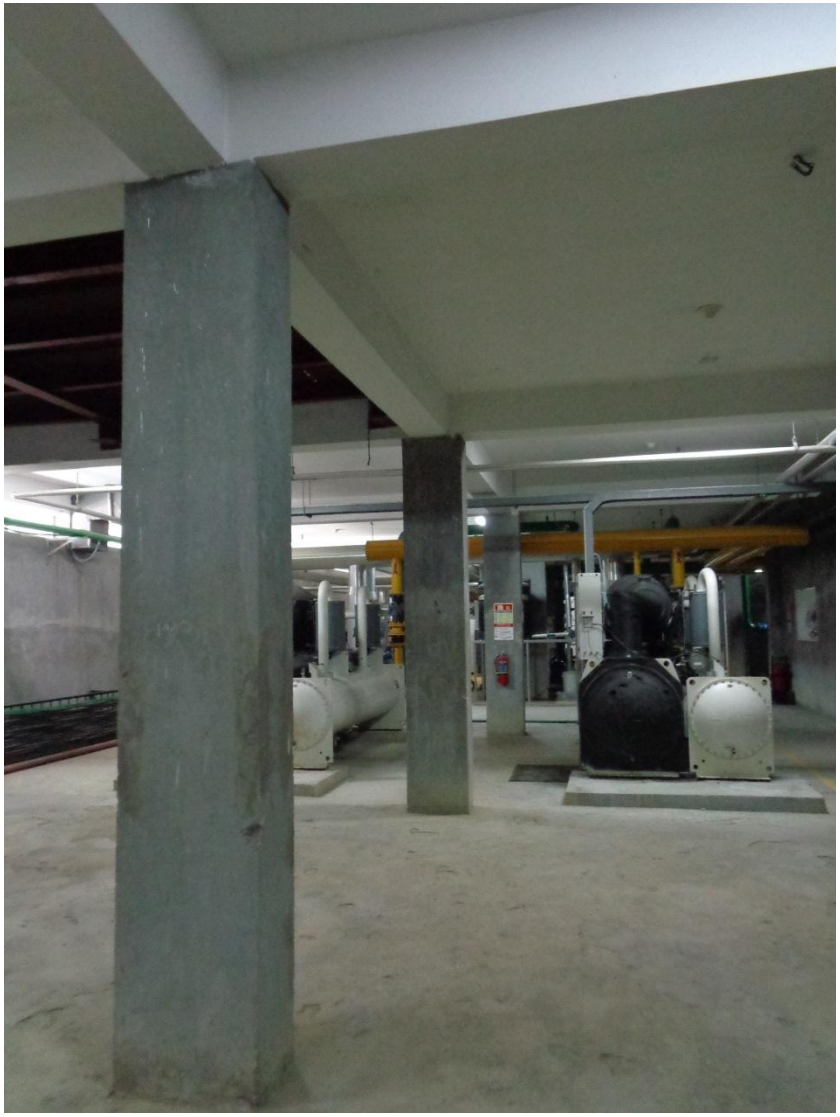

1st Priority 3 Concern

During our survey, we found that most dimensions in the construction documents of the concrete buildings were a little bit off. Because the buildings are no more than 2 storeys, this concern is not critical.

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2nd Priority 3 Concern

On the picture, we can see that the concrete slabs overlaps the flange of the column. We have found cracking and loose debris that could fall on the workers.

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3rd Priority 3 Concern

Calculations have shown the columns to be satisfactory to support gravity loads (taking slenderness into account).
We would like the design engineer to confirm that the column has sufficient capacity under lateral loads which might induce moments into the column.

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Overall Stability System

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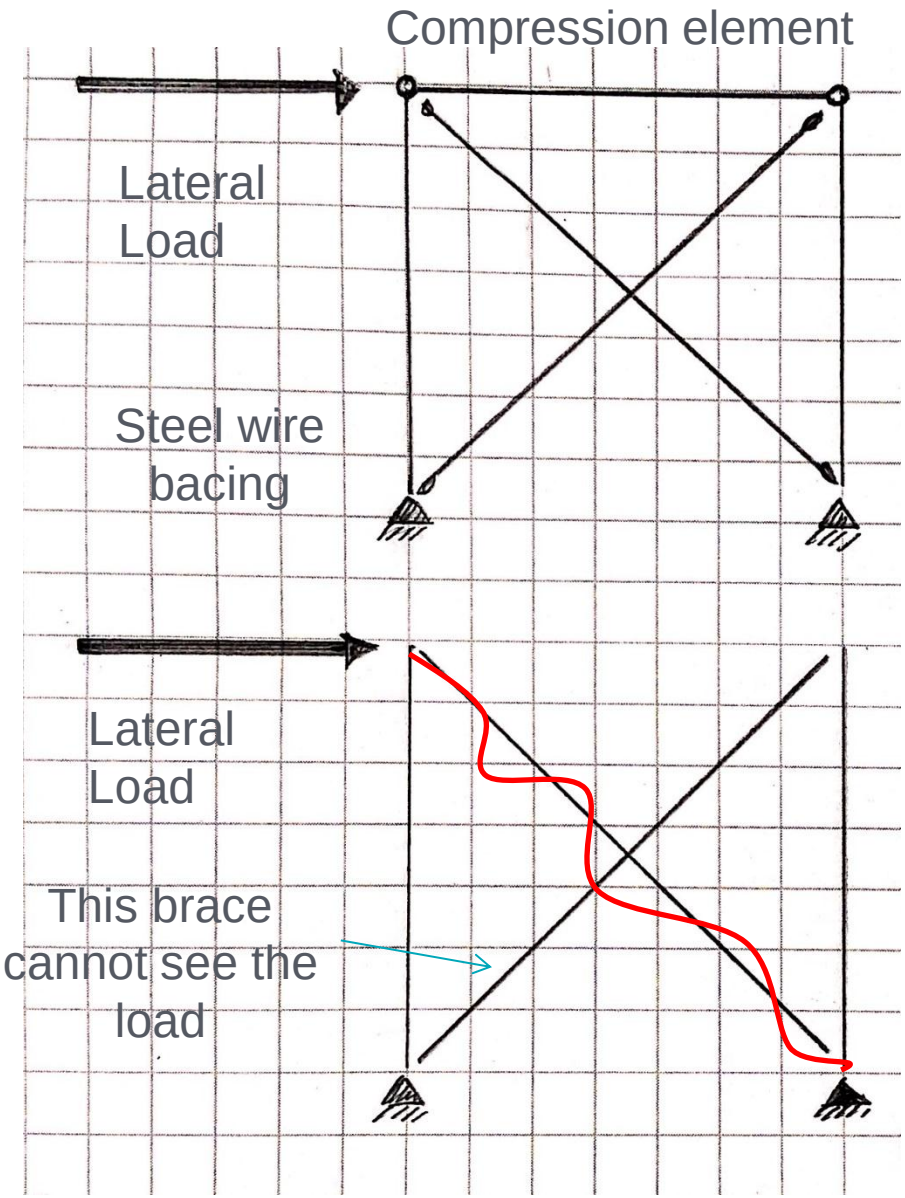

The structure should detailing for adequate lateral restraints for beams and purlins. The building also had horizontal steel wire bracing for the roof diaphragm.

Where we have a concern is that at the end of the horizontal bracing, the vertical bracing is not aligned and does not always have the collecting element at the top.

We require that this item be investigated in a Detail Engineering Assessment

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Water Ingress at Roof Level

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No waterproofing membrane was visible on the roofs of the office building and utilities building. This means that any cracks in the surface finishes on the roof will allow water to seep into the concrete slab and cause long-term soaking of the slab, and potential deterioration of the brick chip concrete.

Roof Waterproofing System at Office and Utility Building

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Priority Actions

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Problems Observed Summary

ITEM 1: (Priority 3) Construction documents for concrete buildings do not reflect actual site conditions

ITEM 2: (Priority 3) Concrete slab at Main Production Shed should be dissociated from steel columns.

ITEM 3: (Priority 3) Central columns of main production shed should be checked compression/flexure interaction

Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Construction documents for concrete buildings do not reflect actual site conditions	Update documents with actual site conditions	6-months
2	Concrete slab at Main Production Shed should be dissociated from steel columns.	Clear all loose material that could potential fall on the workers.	Immediate – Now
3	Concrete slab at Main Production Shed should be dissociated from steel columns.	Demolish the concrete around the column to allow the steel structure to move freely.	6-months
4	Central columns of main production shed should be checked compression/flexure interaction	design engineer to confirm that the column has sufficient capacity under lateral loads which might induce moments into the column.	6-months