LOGOS Apparels Ltd.(New buildings)

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(24.016202, 90.305371)
29th January 2019 & 5th February 2019

ACCORD
on Fire and Building Safety in Bangladesh

Observations

Building#2

Observation Building#2

Lack of water proofing membrane at roof

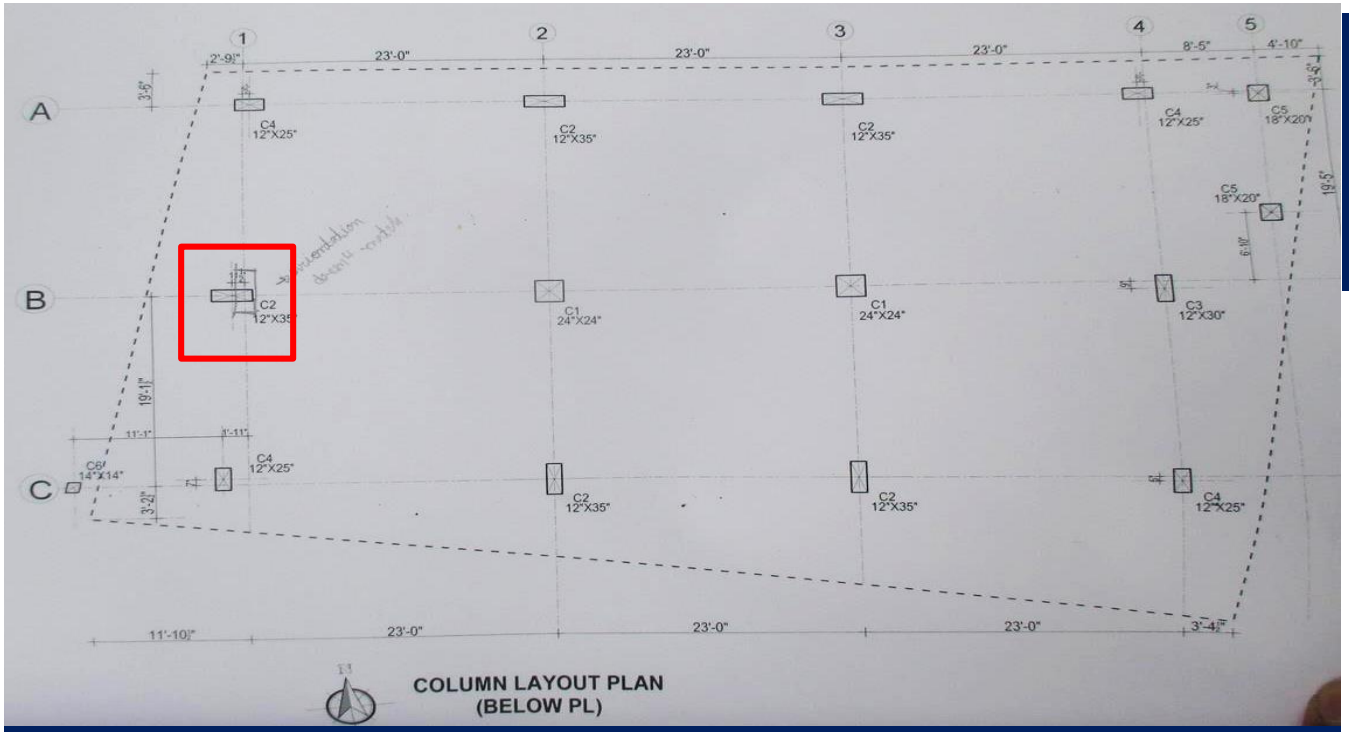
Observation Building#2

Roof slab constructed with brick aggregate. Water proofing membrane is required to be applied with proper slope.

Observation Building#2

Discrepancies between provided drawing and as-built condition

Observation Building#2



Column Layout Plan

Orientation of column layout at grid- B/1 does not match with actual site condition

Observation Building#2

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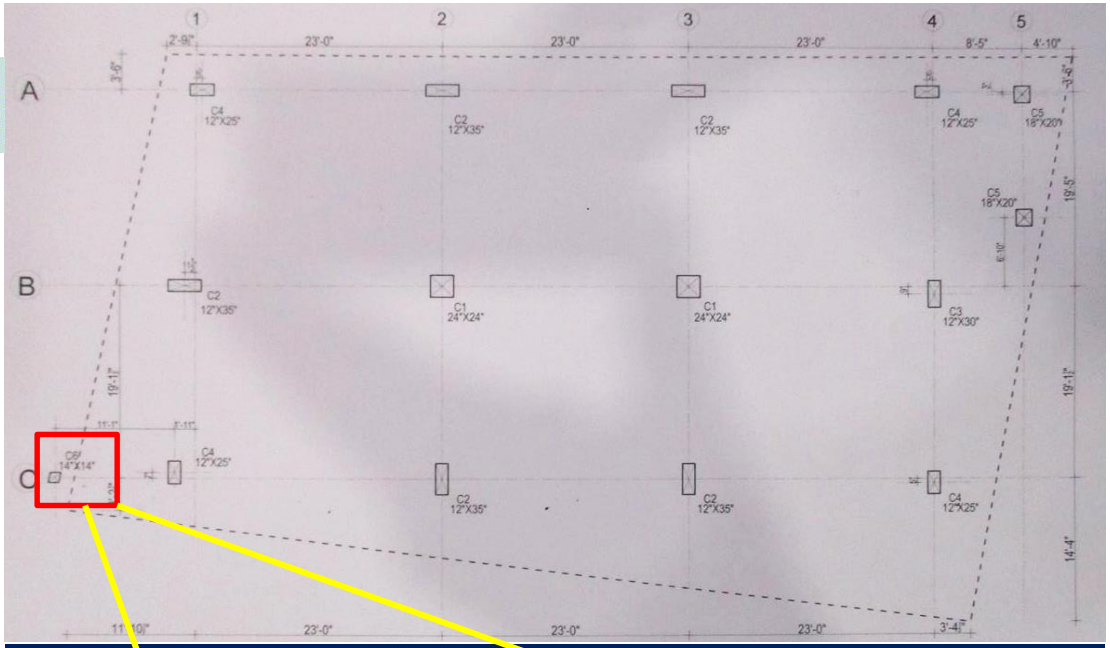
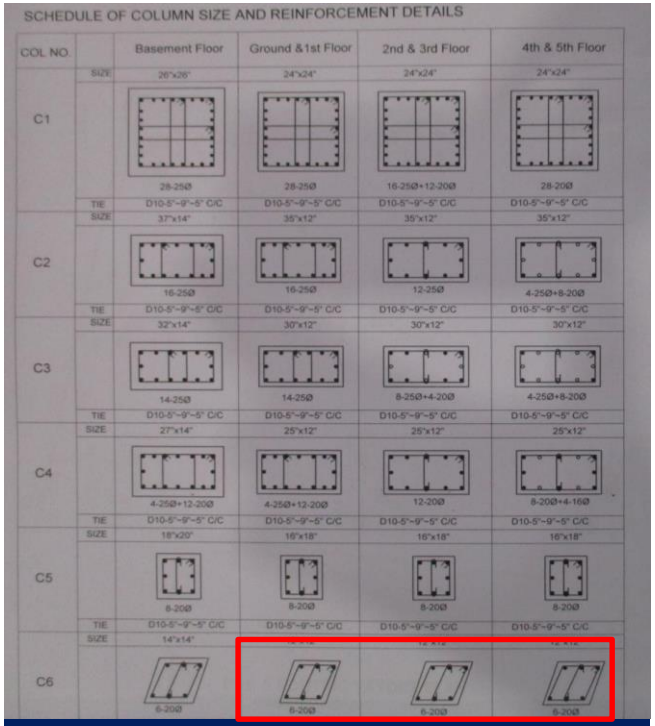


Column Layout Plan



Column schedule

C6 column was found at basement level only but shown up to roof level in as-built drawing.

Observation Building#2

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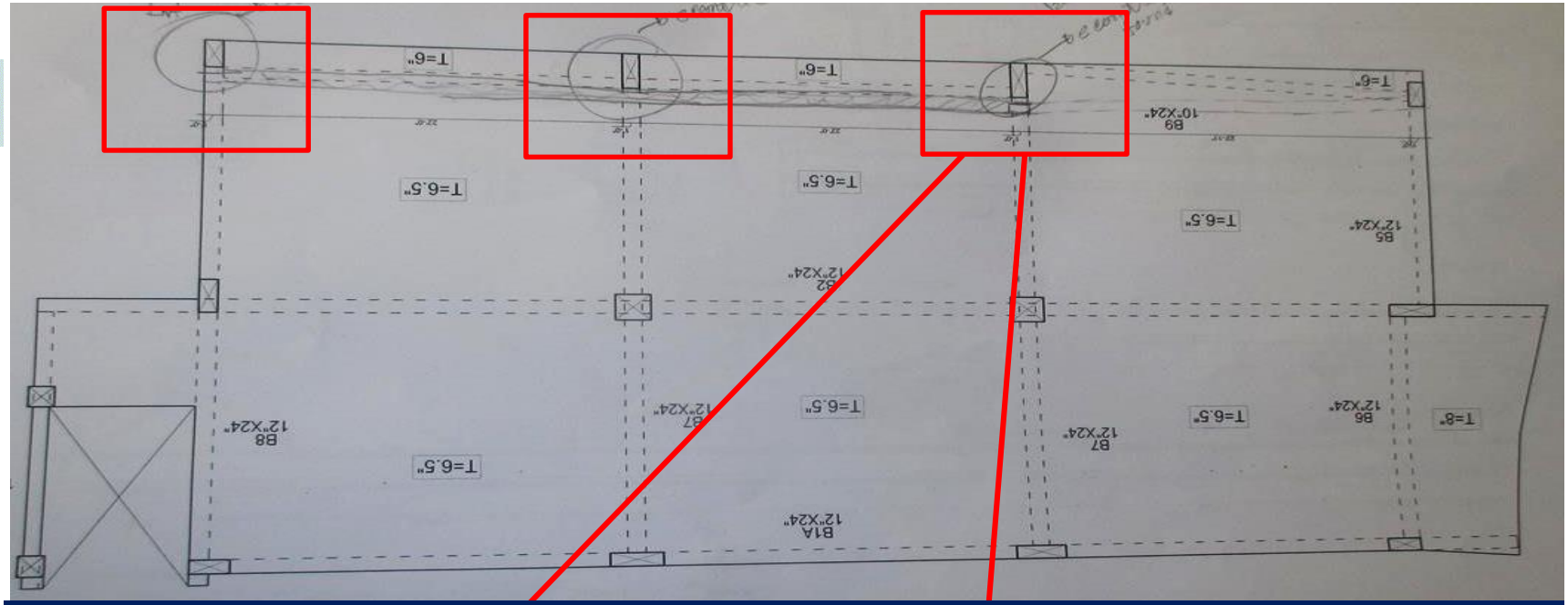
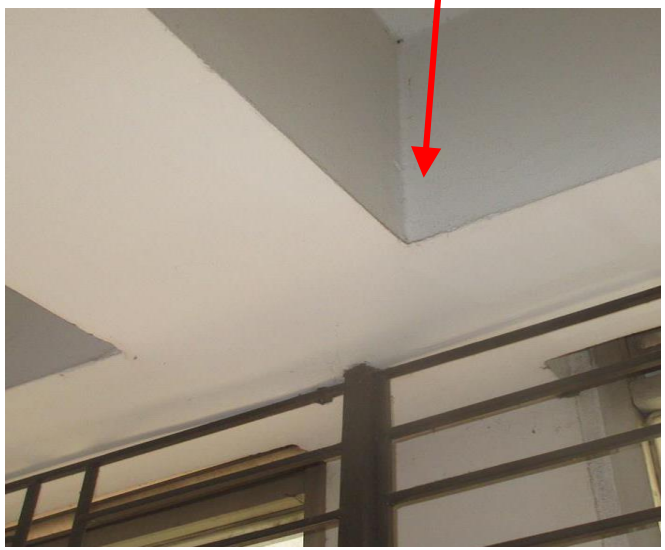
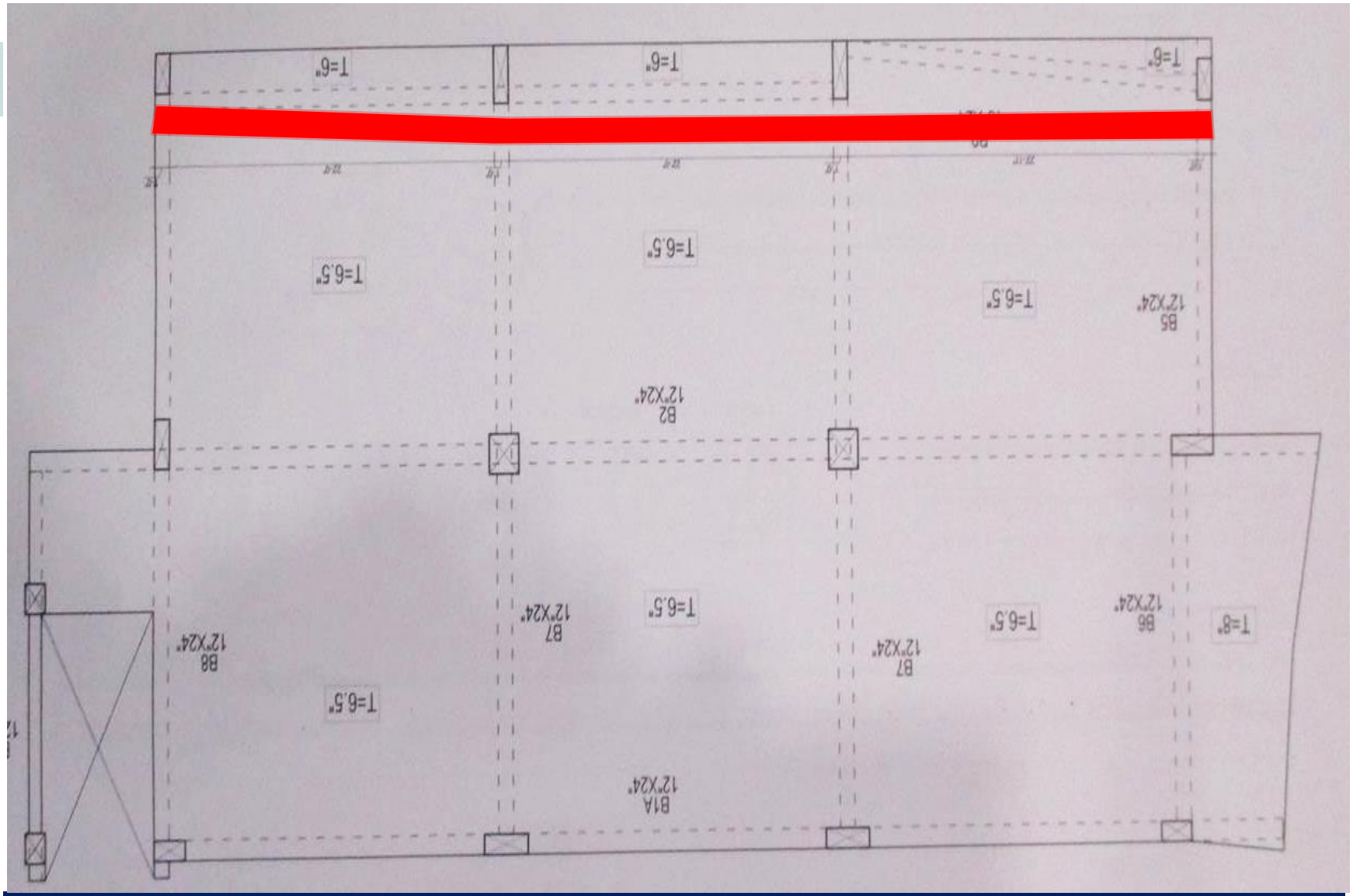


Eccentric connection at beam-column joint (marked Locations)



Observation Building#2



Beam Layout does not match with actual site condition. Beam was found along marked location.

Observation Building#2

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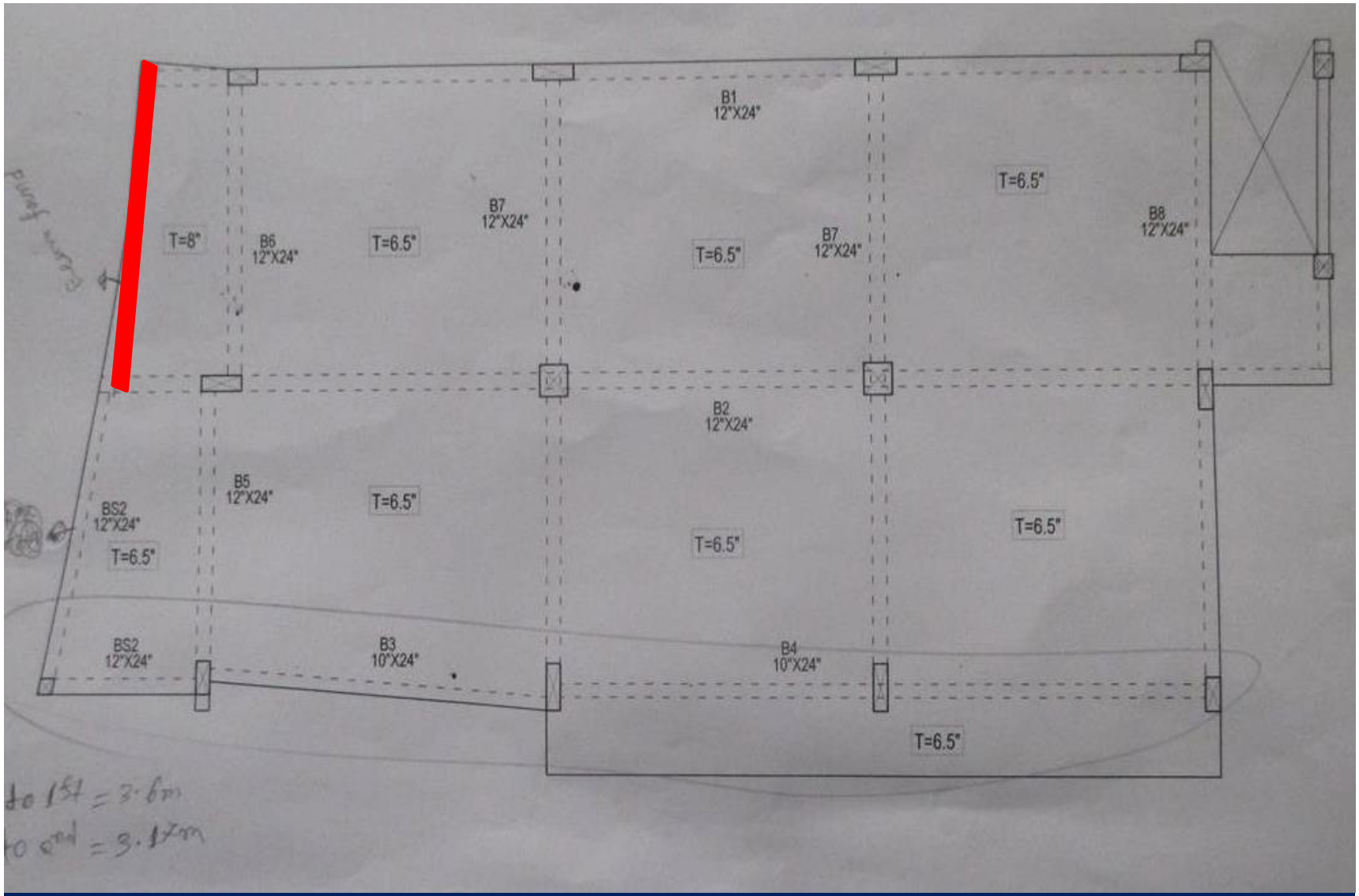

Beam found at red marked location not shown in as-built drawing.

Observation Building#2

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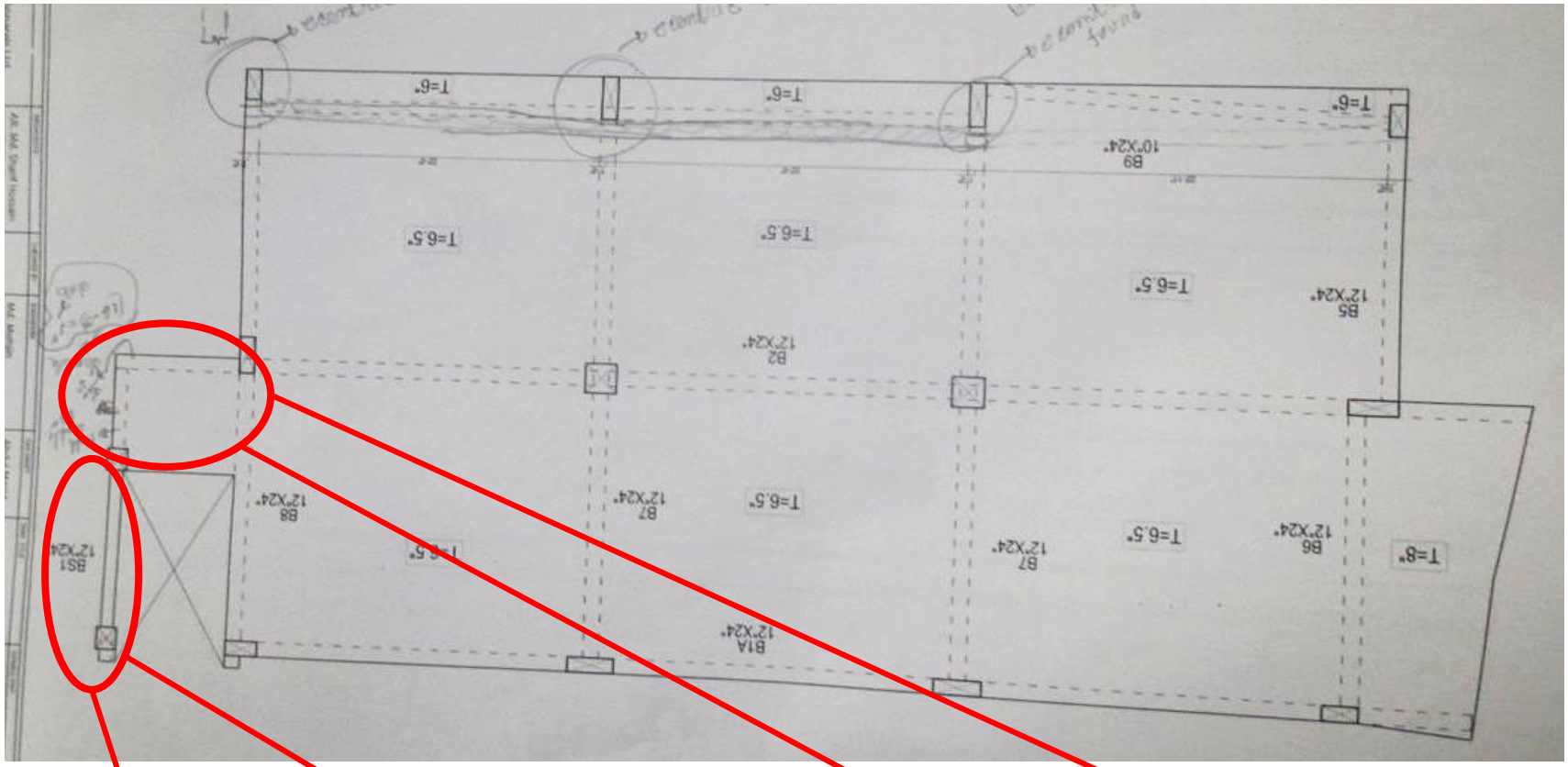
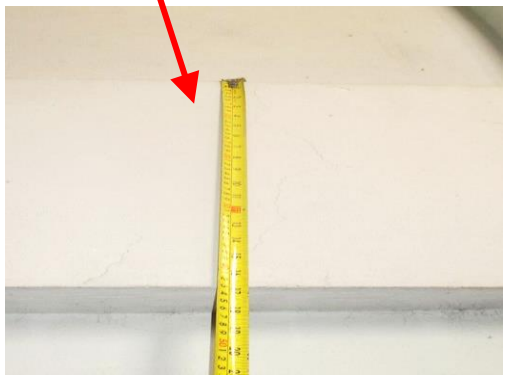


Beam layout Plan



Full Depth found 400 mm instead of 600 mm

Down stand depth of Beam was found 250mm.

Observation Building#2

Building#3

Observation Building#3

Water ponding and dampness at roof

Observation Building#3

Water ponding and dampness at roof of the pump house. Water proofing to be applied by maintaining proper slope.

Observation Building#3

Lack of As-built drawings

Observation Building#3

Full set of as-built drawings was not available at site. Factory engineer is required to survey and prepare all necessary as-built drawing.

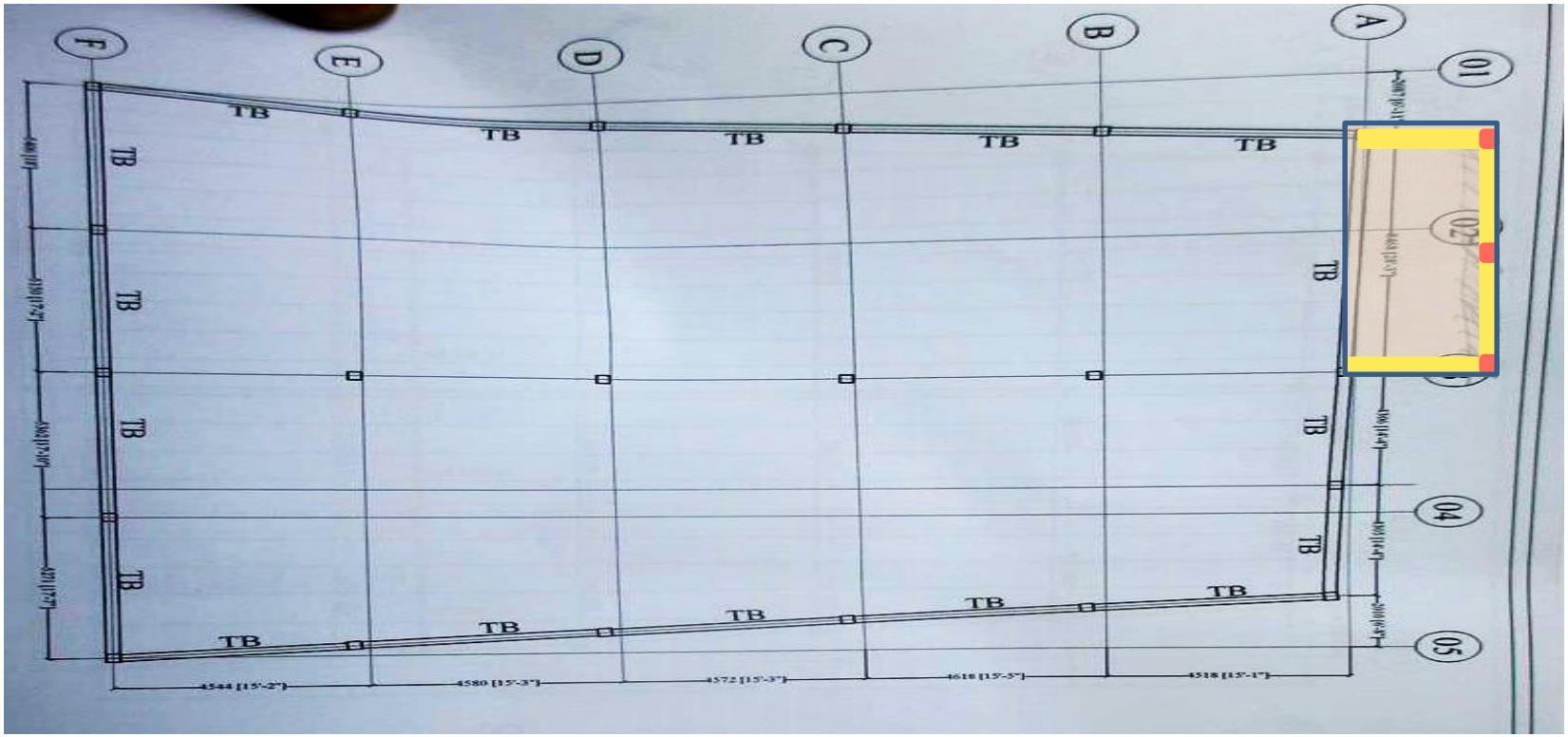
Observation Building#3

Shed#1

Observation Shed#1

Discrepancies between provided drawing and as-built condition

Observation Shed#1



Extended shaded portion is not shown in as-built drawing.

Observation Shed#1

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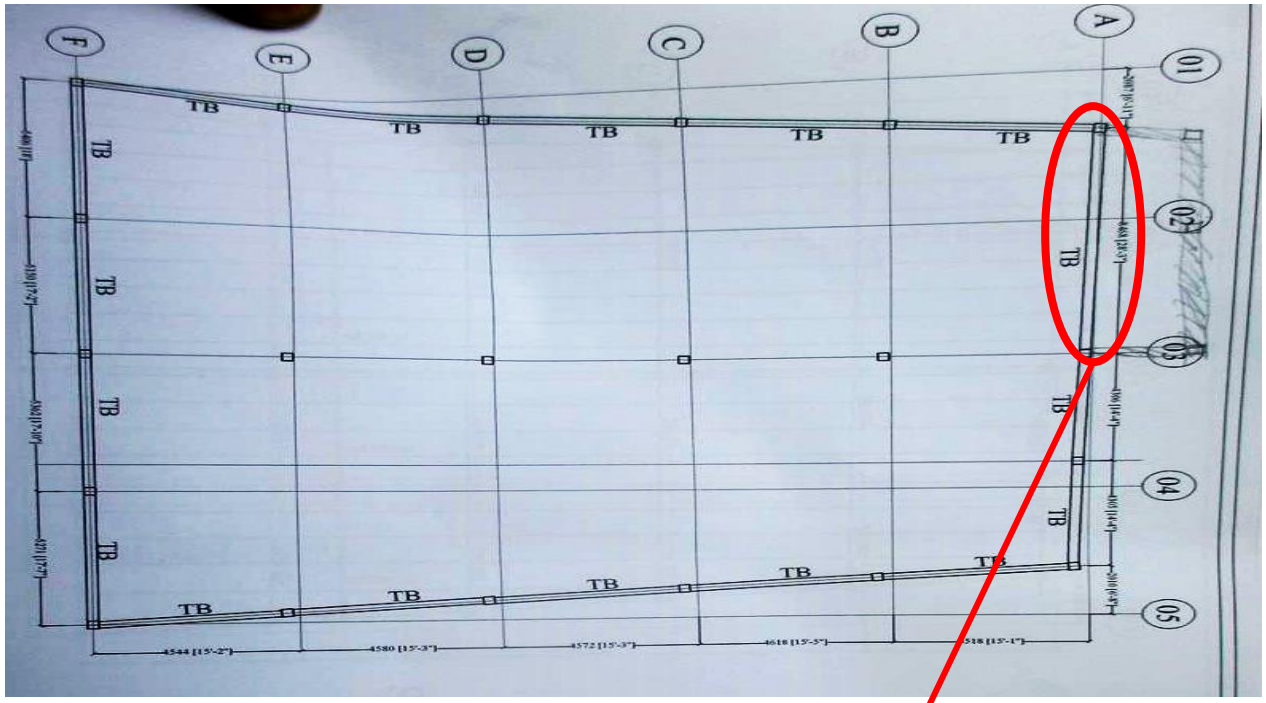
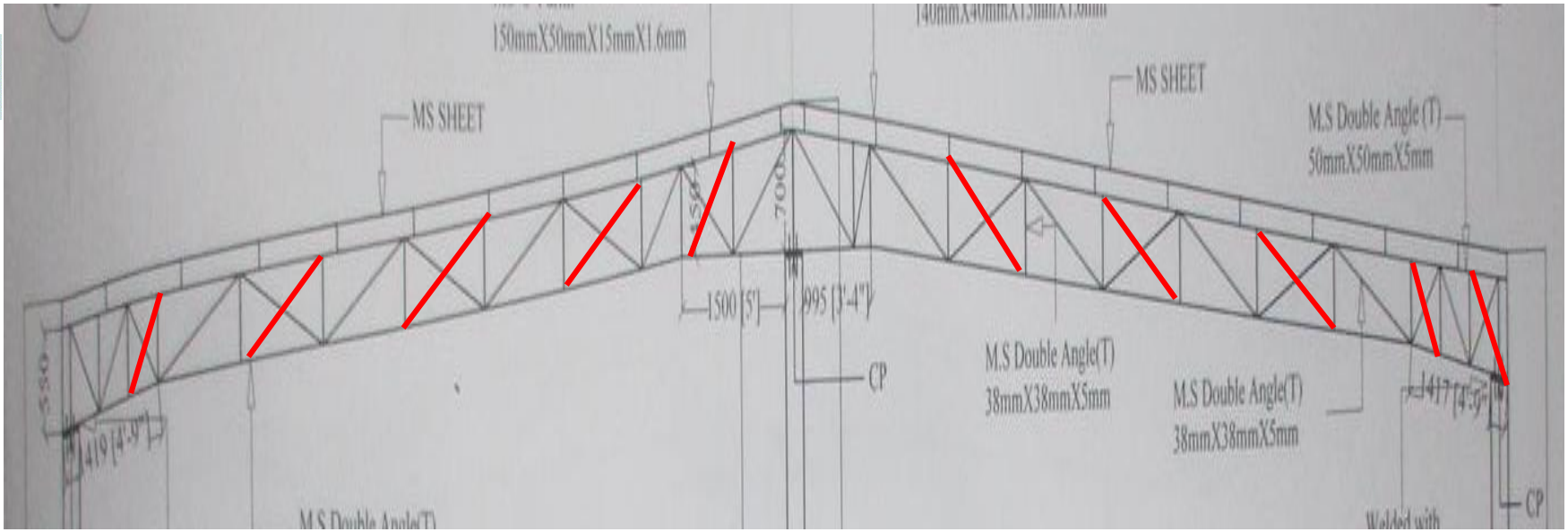


Tie beam was not found at marked location. But tie beam has been shown in as-built drawing.

Observation Shed#1



Arrangement and number of the truss member do not match with actual site condition. Total number of vertical member was found 10 nos in each side instead of 13 nos. Diagonal members were found in the pattern shown in red mark.

Observation Shed#1

Wall with no head restraint

Observation Shed#1

3.324m Height; 250mm masonry wall with no head restrain. Factory engineer is required to check the capacity of the free standing masonry wall.

Observation Shed#1

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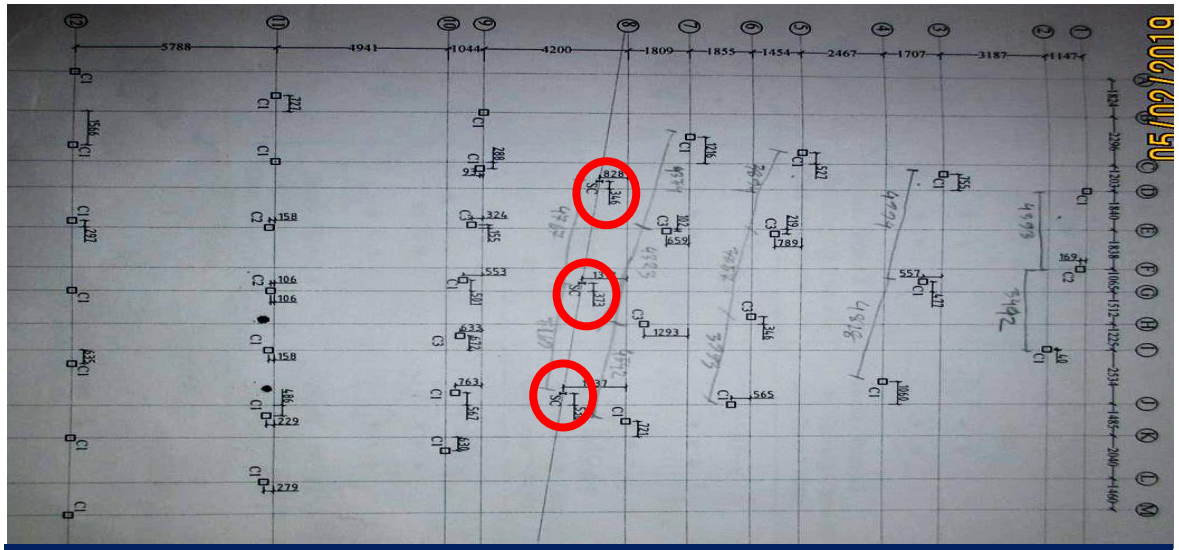
Shed#2

Observation Shed#2

Three steel column constructed on 1st floor slab

Observation Shed#2

Three steel column started from 1st floor to 2nd floor level. No adequacy check of slab was found. Factory engineer is required to check adequacy of the slab to bear load from steel column.



Column Layout Plan for 1st floor

Observation Shed#2

Discrepancies between provided drawing and as-built condition

Observation Shed#2

C.S.	WEB (MM)	THICKNESS (MM)	FLANGE (MM)	THICKNESS (MM)
SC	180	4	100	5
MB	120mmX100mmX3mm ms box			
MB-1/SB-1	180mmX60mmX1.6mm MS 'C' CHANNEL			
MB-2	F=175mm X 5mm, W= 100mm x 5mm			
SB	100mmX60mmX1.6mm MS 'C' CHANNEL			
PURLIN	175mmX63mmX1.8mm MS 'C' PURLIN			
CP	250mmx250mm, T = 10mm			

Depth of SB-1 beam was found 160mm instead of 180mm

Observation Shed#2

No anchorage/shear connector was found between mezzanine floor and supporting beam framing system.

Observation Shed#2

Lateral stability of the structure to be verified

Observation Shed#2

The building is vertically irregular, suspended deck slab is not rigidly connected with main framing system and there is no roof bracing. Factory Engineer is required to check the lateral stability of the structure.

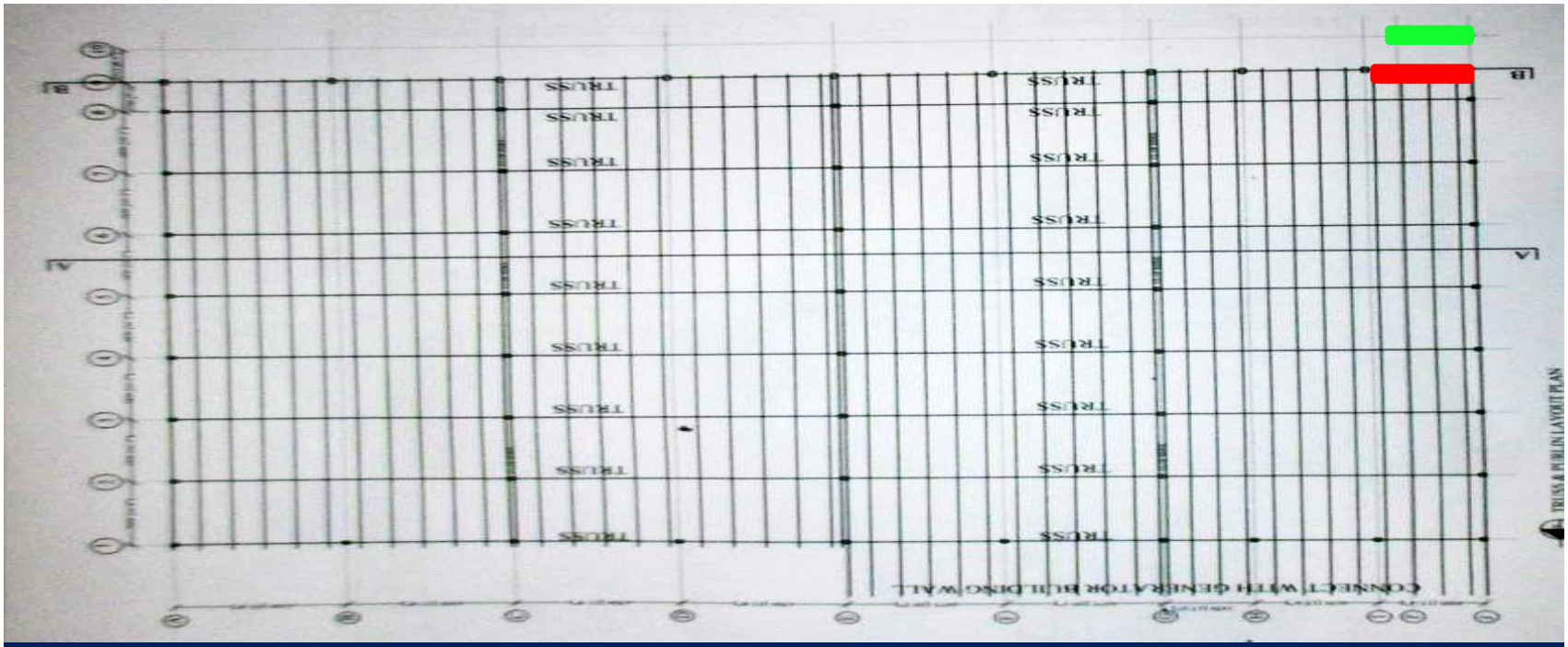
Observation Shed#2

Shed#3

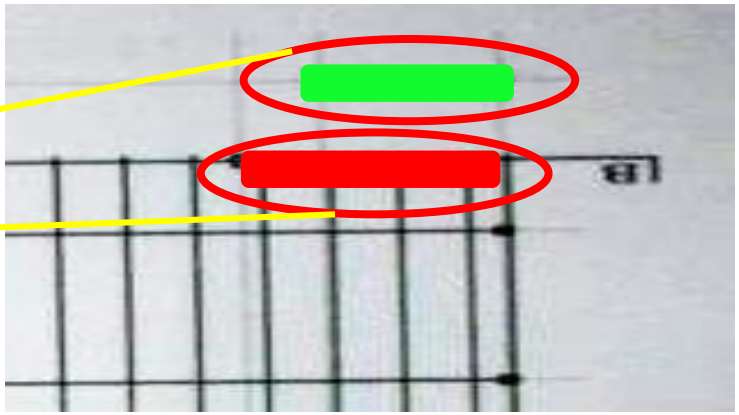
Observation Shed#3

Discrepancies between provided drawing and as-built condition

Observation Shed#3



Truss layout plan; Additional truss found at grid 10 instead of Grid-9 at marked location. Truss was found at green marked location instead of red marked location.



Observation Shed#3

Generator Building

Observation Generator Building

Exposed re-bar found at roof level

Observation Generator Building

Exposed re-bar was found at roof level. Factory is required to take necessary measure to prevent corrosion in exposed re-bar

Observation Generator Building

Problems Observed

Building#2 (Extension building):

1. **Lack of water proofing membrane at roof**
2. **Discrepancies between provided drawing and as-built condition**

Building#3 (Pump house Building):

1. **Water ponding and dampness found at roof**
2. **Lack of As-built drawings**

Shed#1

1. **Discrepancies between provided drawing and as-built condition**
2. **Wall with no head restraint**

Problems Observed

Shed#2

1. **Three steel column constructed on 1st floor slab**
2. **Discrepancies between provided drawing and as-built condition**
3. **Lateral stability of the structure to be verified**

Shed#3

1. **Discrepancies between provided drawing and as-built condition**

Generator Building

1. **Exposed re-bar found at roof level**

Priority Actions

Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Lack of water proofing membrane at roof (Building#2)	Apply suitable waterproofing material suggested by the factory engineer.	**6-months**
2	Discrepancies between provided drawing and as-built condition (Building#2)	Factory Engineer to survey the structure and update the full set of architectural and structural “as-constructed” drawings.	**6-weeks**
3	Discrepancies between provided drawing and as-built condition (Building#2)	An engineering assessment of the factory building is required to be carried out considering vertical & lateral loading.	**6-weeks**
4	Discrepancies between provided drawing and as-built condition (Building#2)	Produce and actively manage a loading plan for all floor plates within the factory giving consideration to floor, column and foundation capacity.	**6-weeks**
5	Discrepancies between provided drawing and as-built condition (Building#2)	Complete remedial works as per the recommendation of engineering assessment.	**6-months**
6	Discrepancies between provided drawing and as-built condition (Building#2)	Continue to implement allowable floor loading plan.	**6-months**

Item No.	Observation	Recommended Action Plan	Recommended Timeline
7	Water ponding and dampness found at roof (Building#3)	Factory Engineer to investigate the cause of water ponding & dampness at roof and suggest appropriate remedial measures.	**6-months**
8	Lack of As-built drawings (Building#3)	Factory Engineer to survey the structure and update the full set of architectural and structural “as-constructed” drawings.	**6-weeks**
9	Lack of As-built drawings (Building#3)	An engineering assessment of the factory building is required to be carried out considering vertical & lateral loading.	**6-weeks**
10	Lack of As-built drawings (Building#3)	Complete remedial works as per the recommendation of engineering assessment.	**6-months**
11	Discrepancies between provided drawing and as-built condition (Shed#1)	Factory Engineer to survey the structure and update the full set of architectural and structural “as-constructed” drawings.	**6-weeks**
12	Discrepancies between provided drawing and as-built condition (Shed#1)	An engineering assessment of the shed is required to be carried out considering lateral loading.	**6-weeks**
13	Discrepancies between provided drawing and as-built condition (Shed#1)	Complete remedial works as per the recommendation of engineering assessment.	**6-months**

Item No.	Observation	Recommended Action Plan	Recommended Timeline
14	Wall with no head restraint (Shed#1)	Factory engineer to check the stability of the free sanding wall.	**6-weeks**
15	Wall with no head restraint (Shed#1)	Apply suitable remedial actions suggested by the factory engineer.	**6-months**
16	Three steel column constructed on 1st floor slab (Shed#2)	Factory engineer to verify the capacity of the slab to carry the loading from columns.	**6-weeks**
17	Three steel column constructed on 1st floor slab (Shed#2)	Complete remedial works as per the recommendation of engineering assessment.	**6-months**
18	Discrepancies between provided drawing and as-built condition (Shed#2)	Factory Engineer to survey the structure and update the full set of architectural and structural “as-constructed” drawings.	**6-weeks**

Item No.	Observation	Recommended Action Plan	Recommended Timeline
19	Lateral stability of the structure to be verified (Shed#2)	An engineering assessment is required to be carried out considering lateral loading.	**6-weeks**
20	Lateral stability of the structure to be verified (Shed#2)	Complete remedial works as per the recommendation of engineering assessment.	**6-months**
21	Discrepancies between provided drawing and as-built condition (Shed#3)	Factory Engineer to survey the structure and update the full set of architectural and structural "as-constructed" drawings.	**6-weeks**
22	Discrepancies between provided drawing and as-built condition (Shed#3)	An engineering assessment is required to be carried out considering lateral loading.	**6-weeks**
23	Discrepancies between provided drawing and as-built condition (Shed#3)	Complete remedial works as per the recommendation of engineering assessment.	**6-months**
24	Exposed re-bar found at roof level (Generator Building)	All exposed reinforcement to be protected from corrosion which may cause degradation of the concrete.	**6-weeks**