



Entrust Fashions Ltd.

46/1 Nayanagar Main Road, Chairmanbari Mor, Nayanagar, Turag, Dhaka-1230, Bangladesh.

(23.886927N, 90.374318E)

25th October 2018



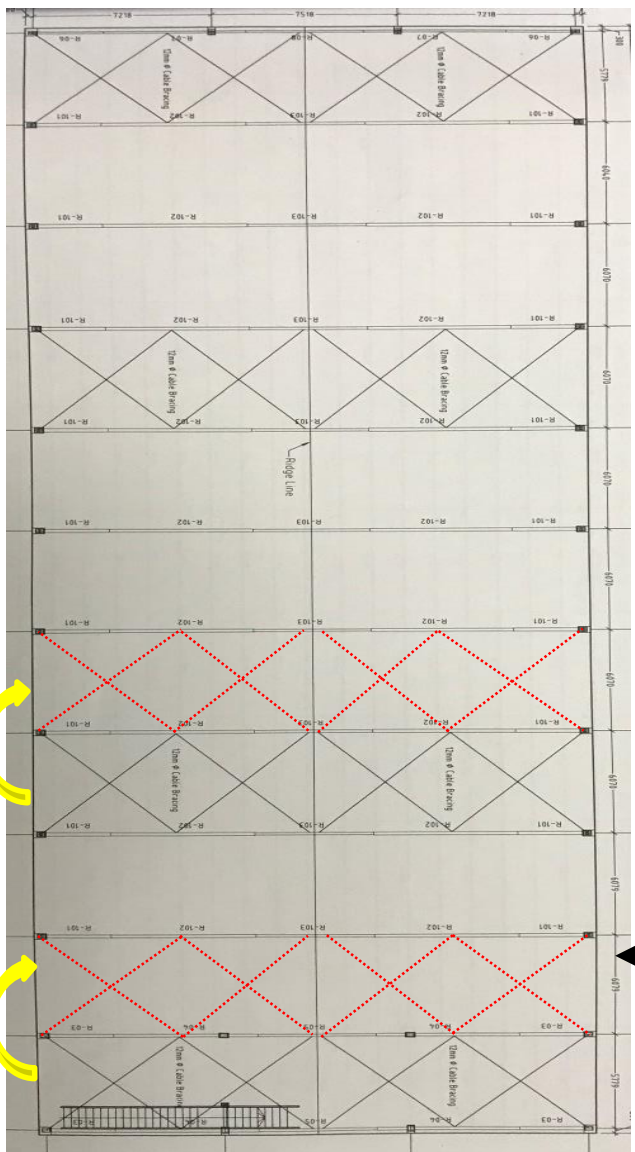


Observations



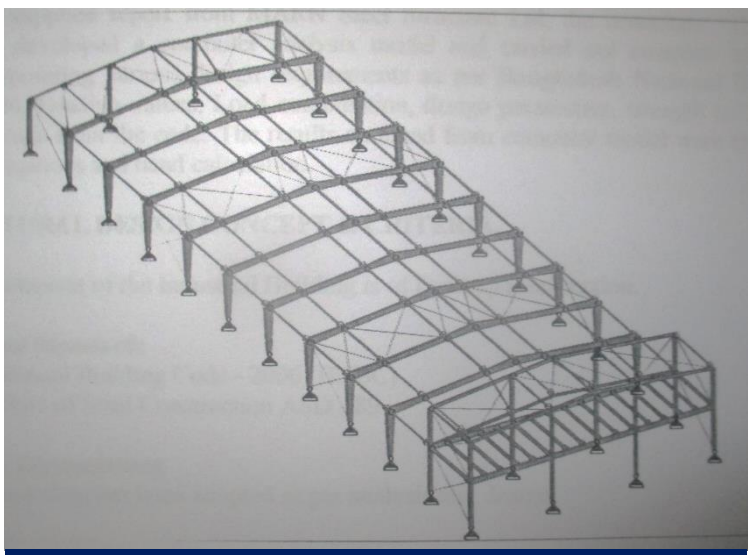
**Lack of bracings and discrepancy observed
between As built drawing and on site condition**

Observation: Shed-1



Change of roof bracing location

Bracing Layout in structural drawing

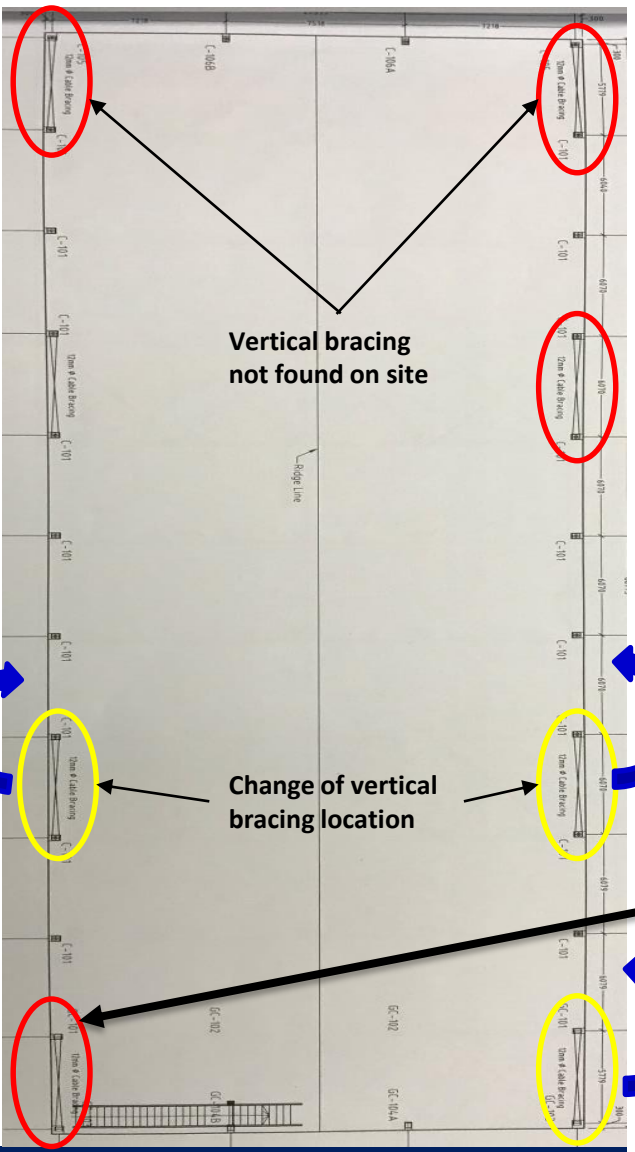


Bracing locations in FEM model

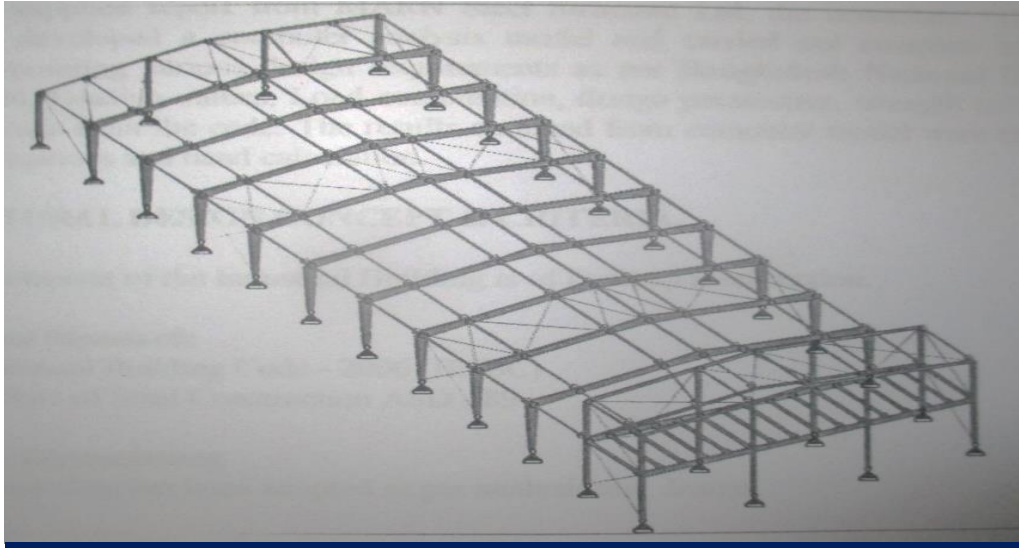


Onsite roof bracing location did not match with drawing

4 Observation: Shed-1



Bracing Layout in structural drawing

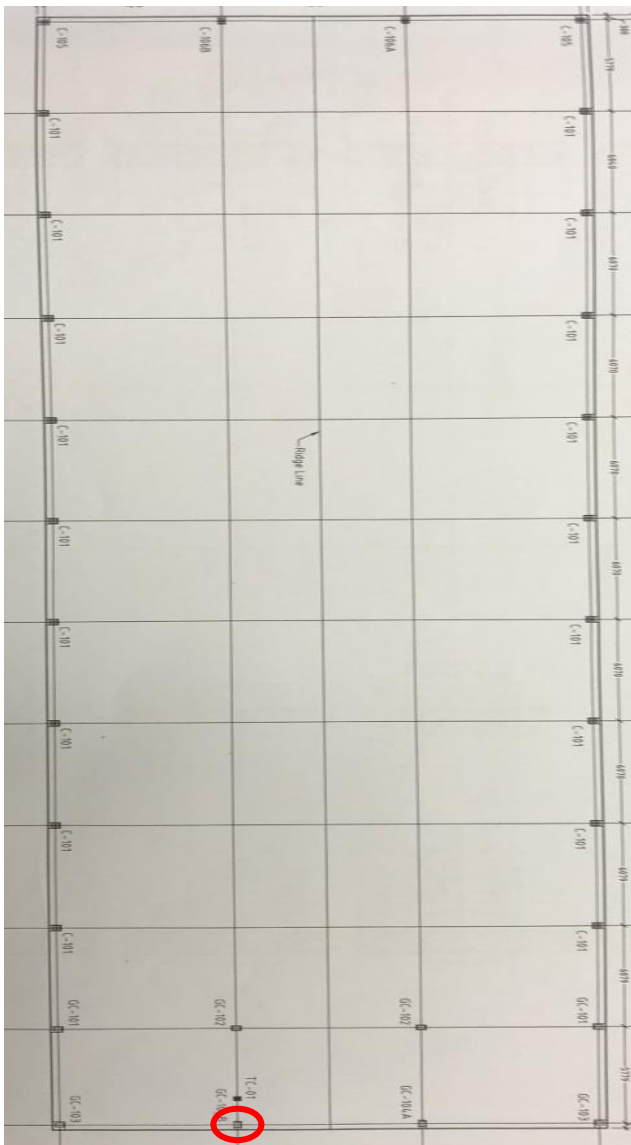


Bracing locations in FEM model

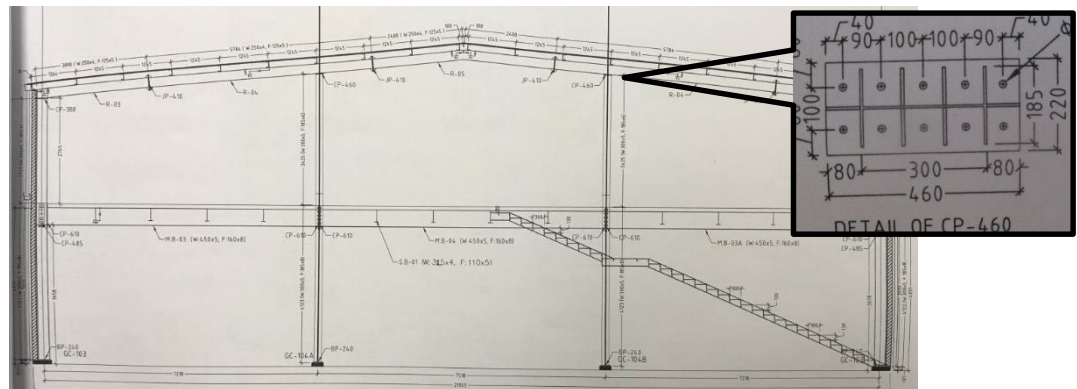


Vertical bracing not found according to the drawing

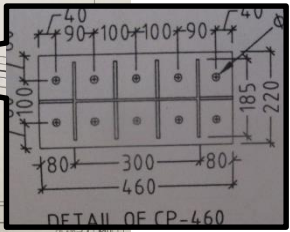
Vertical and roof bracing layout did not match with drawing and FEM model. Factory is required to revise the bracing layout in as-built drawing and FEM model accordingly.



Steel column layout in drawing



Section of Grid-12 in drawing



Connection of column and rafter was found different than drawing



10nos. Bolt was shown at column-rafter joint in grid 12-D whereas 8nos bolt was found on site. The connection is required to revise in drawing according to the on site condition

Observation: Shed-1



Loose cable bracing



Some of the horizontal and vertical cable bracings are appeared to be loose. Factory is required to tight the bracing for transferring lateral loads properly.



Significant gaps in connection



Gap was found in column-beam joint at stair case location

Significant gaps were found in column-beam joint. Factory engineer is required to carry out suitable remedial works.

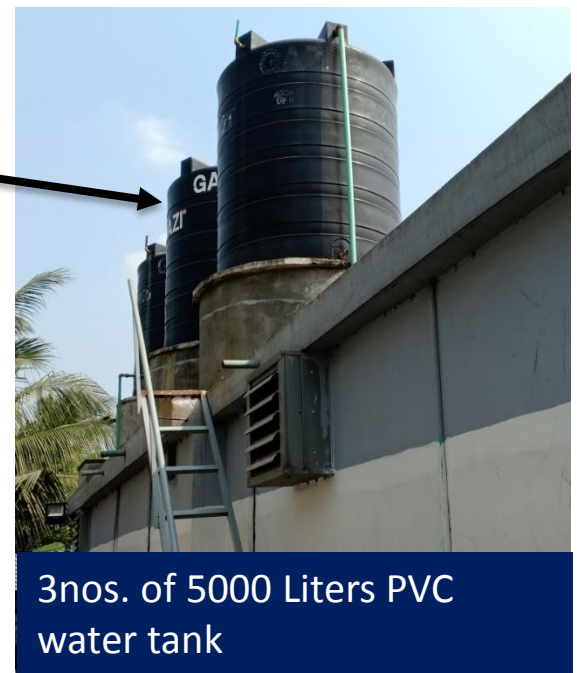
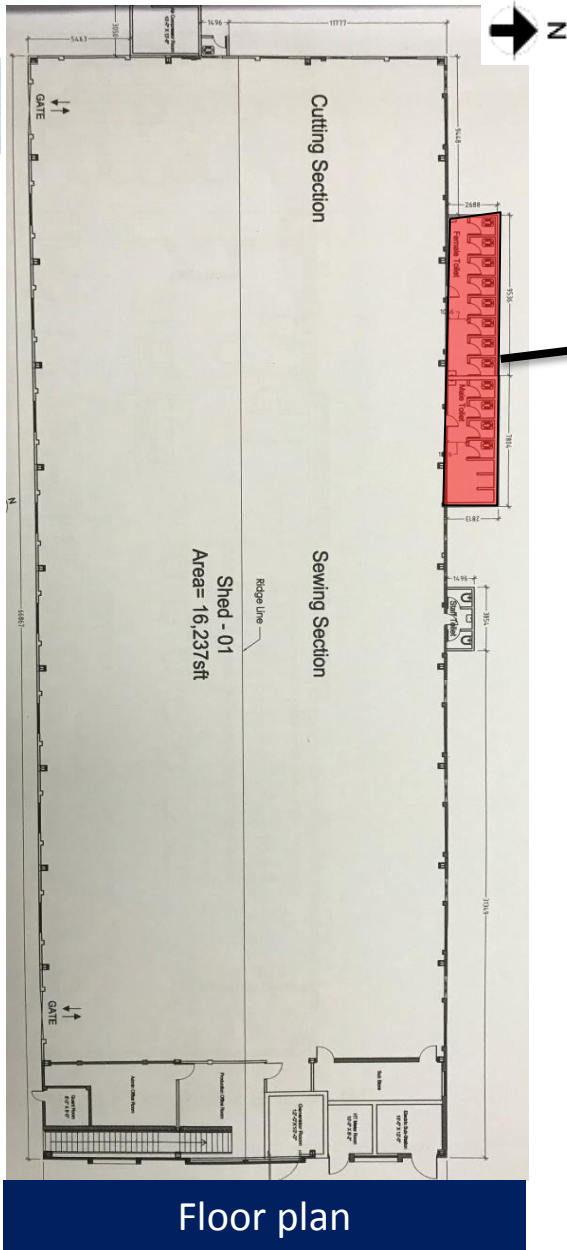


Gap was found in column-beam joint at mezzanine floor

Observation: Shed-1



Heavy Loading observed on roof of the toilet block

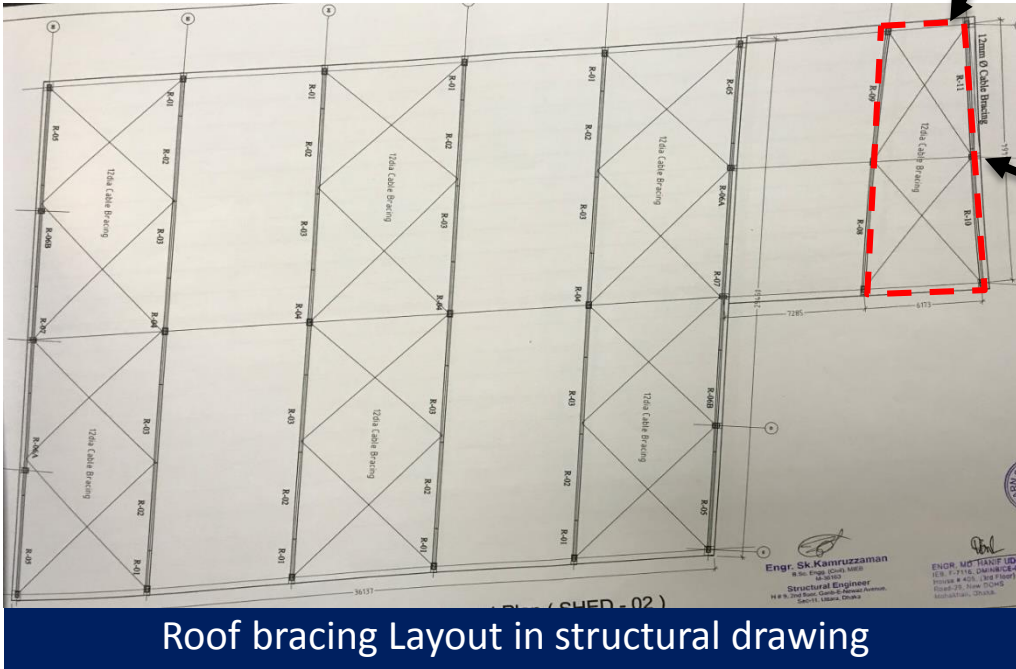


3nos. 5000 Liters PVC water tanks were observed on roof of toilet block. Factory is required to check the capacity of the slab and load bearing walls for the imposed load of water tank.

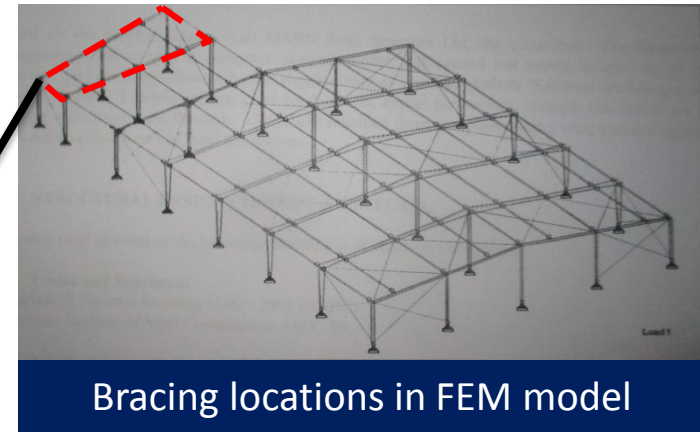


**Lack of bracings and discrepancy observed
between As built drawing and on site condition**

Observation: Shed-2



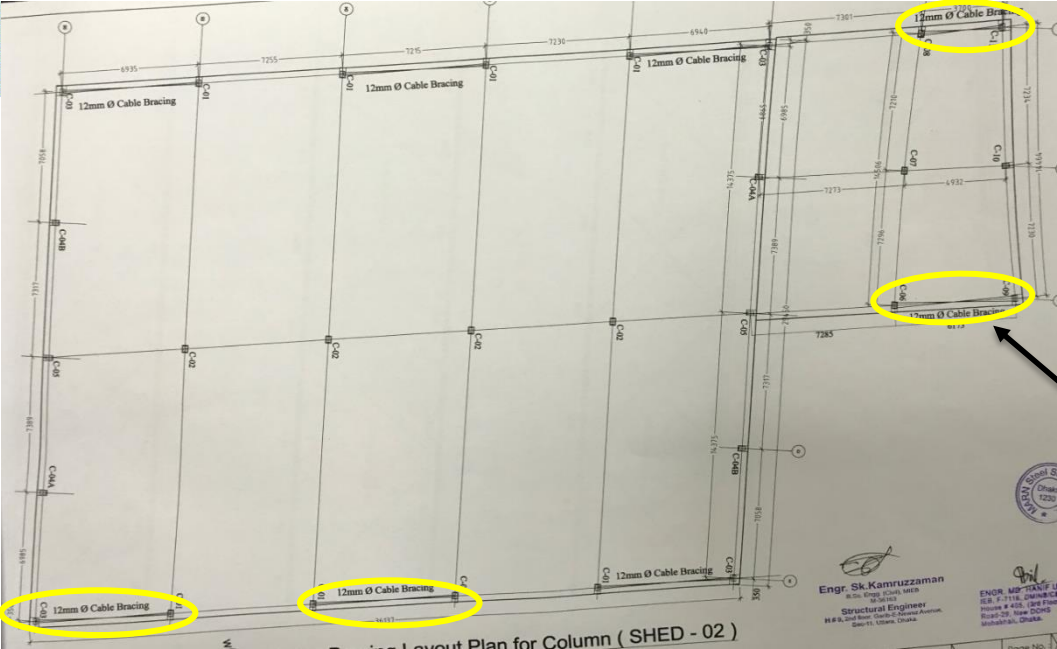
Roof bracing Layout in structural drawing



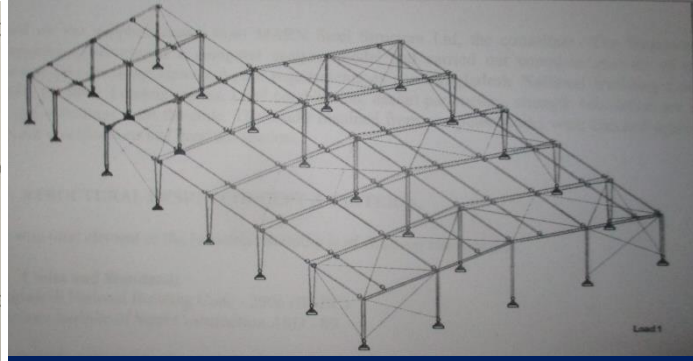
Bracing locations in FEM model



Roof bracing not found in the marked location



Vertical bracing Layout in structural drawing



Bracing locations in FEM model

Vertical and roof bracing layout did not match with drawing and FEM model. Factory is required to justify the bracing requirement and install accordingly.



Vertical bracing not found in the marked location



Corrosion observed at steel sections



Corrosion was observed at joint of pedestal column and steel column.

Corrosion was observed on steel columns on different locations of ground floor areas. Factory is required to identify the corroded locations and take proper remedial measures.



Loose cable bracing



Some of the horizontal and vertical cable bracings are appeared to be loose. Factory is required to tight the bracing for transferring lateral loads properly



Missing Bolts



Bolts were missing on Column and rafter connection in gable frame location on different areas. Factory is required to take remedial action as per engineer's recommendation.



Problems Observed

Shed-1:

Item 1: Lack of bracings and discrepancy observed between As built drawing and on site condition.

Item 2: Loose cable bracing

Item 3: Significant gaps in connection

Item 4: Heavy Loading observed on roof of the toilet block

Shed-2:

Item 5: Lack of bracings and discrepancy observed between As built drawing and on site condition.

Item 6: Corrosion observed at steel sections

Item 7: Loose cable bracing

Item 8: Missing Bolts



Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Lack of bracings and discrepancy observed between As built drawing and on site condition. (Shed-1)	The factory is required to revise the bracing layout in as-built drawing and FEM model accordingly.	6-weeks
2	Lack of bracings and discrepancy observed between As built drawing and on site condition. (Shed-1)	Check the bracing requirement in the structure for the lateral loadings.	6-weeks
3	Lack of bracings and discrepancy observed between As built drawing and on site condition. (Shed-1)	Carry out remedial works resulting from assessment report if necessary.	6-months
4	Loose cable bracing (Shed-1)	The bracings are required to be tighten as per suggestion of the factory engineer.	6-weeks
5	Significant gaps in connection (Shed-1)	Factory engineer is required to carryout suitable repair works.	6-weeks
6	Heavy Loading observed on roof of the toilet block (Shed-1)	Factory Engineer to review design, loads and wall stress in area identified above to confirm capacity.	6-weeks
7	Heavy Loading observed on roof of the toilet block (Shed-1)	Carry out remedial works resulting from assessment report if necessary.	6-months



Item No.	Observation	Recommended Action Plan	Recommended Timeline
8	Lack of bracings and discrepancy observed between As built drawing and on site condition. (Shed-2)	The factory is required to revise the bracing layout in as-built drawing and FEM model accordingly.	6-weeks
9	Lack of bracings and discrepancy observed between As built drawing and on site condition. (Shed-2)	Check the bracing requirement in the structure for the lateral loadings.	6-weeks
10	Lack of bracings and discrepancy observed between As built drawing and on site condition. (Shed-2)	Carry out remedial works resulting from assessment report if necessary.	6-months
11	Corrosion observed at steel sections (Shed-2)	Factory Engineer to suggest and implement proper remedial measures to protect steel sections from corrosion.	6-weeks
12	Loose cable bracing (Shed-2)	The bracings are required to be tighten as per suggestion of the factory engineer.	6-weeks
13	Missing Bolts (Shed-2)	Factory engineer is required to install the bolts according to the as-built drawing.	6-weeks