

Masco Printing and Embroidery Ltd.

318/A, Kha Para road, Sataish, Tongi, Gazipur.

(23.914838, 90.374992)

30th May 2022



Building Information

1. Building-1 (Production & ETP Building): (G+9).
2. Building-2 (Utility Building): (G+M+1)
3. Building-3 (RMU Building): single storied.
4. Building-4 (Security Building): single storied masonry building.

Observations

Design Report needs to be prepared



West and South elevation

As per BNBC, every building or structure designed shall have its design documents prepared in accordance with the provision of Section 1.9.1. The design document shall include a design report, and a set of structural drawings, which shall be prepared in compliance with section 1.9.1.1 and section 1.9.1.2 as per BNBC. At the time of inspection, only as-built drawing was available, but no design report was available which is required to be prepared in compliance with section 1.9.1.1 (part-6, BNBC).

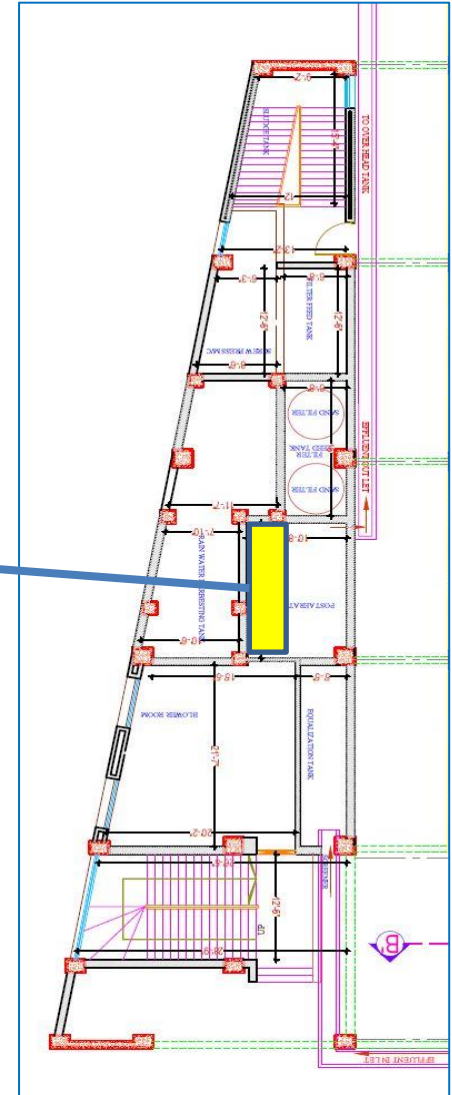
Observations: Building-1

Lack of information in as-built drawing

An undocumented steel deck slab was found on 1st floor of Building-1 at ETP portion (Single bay) . The building engineer to survey the structure and prepare as-built structural drawings with clear connection details.



Undocumented Deck slab



1st floor layout
ETP portion

Hairline cracks on 4th floor beam



Cracks in several beam on 4th floor

Hairline cracks were found in several beam on 4th floor. Factory engineer is required to investigate the cracks, produce investigation report showing extent of cracks and repair methodology. Factory is required to repair the cracks as per crack investigation report.

Non-structural element not braced/anchored



Racks on different floors are not adequately anchored or braced to resist earthquake forces. The factory engineer is required to anchor and brace all nonstructural elements of the building.

Design Report needs to be prepared



West and South elevation

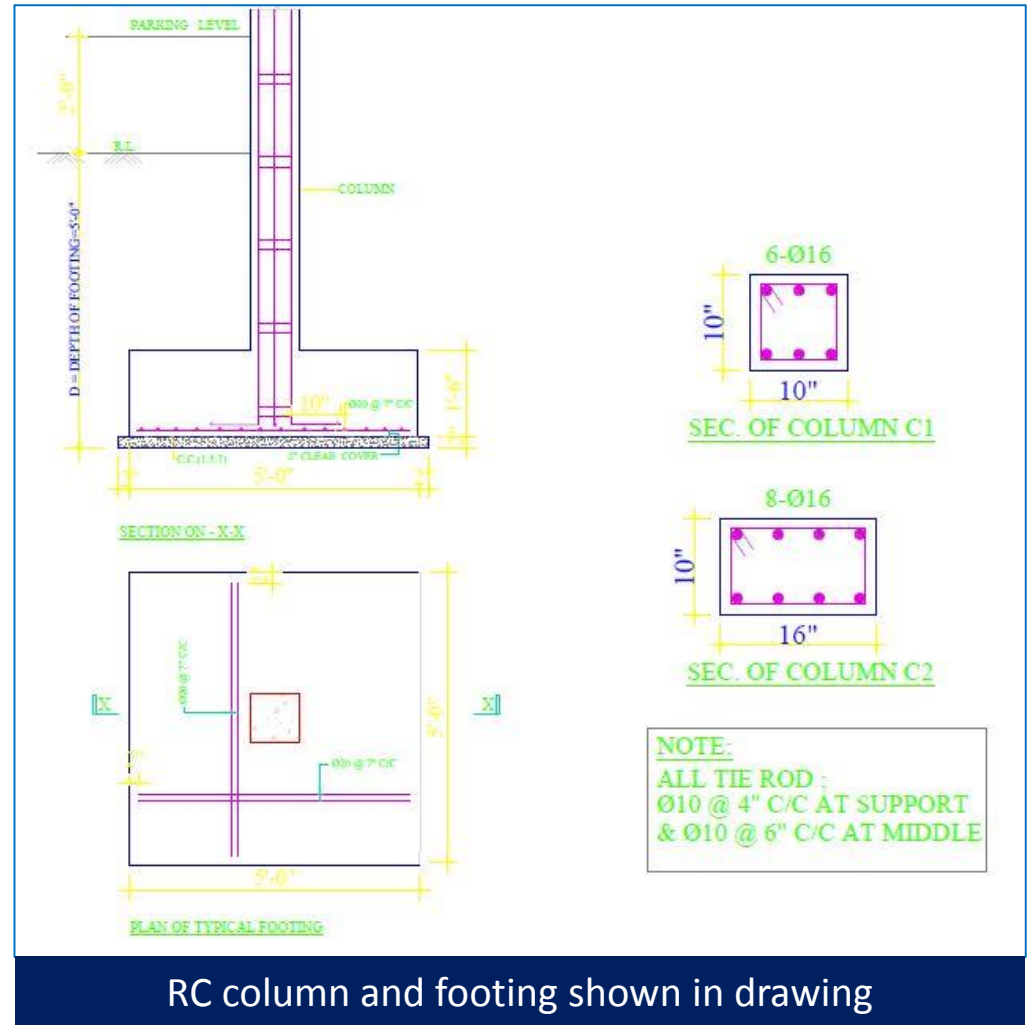
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Mismatch in as-built drawing

As per structural drawing, the Security Building is made of RC column but during on-site verification RC column was not found. The building is made of masonry brick wall. The building engineer to survey the structure and prepare as-built structural drawings.



Masonry
Brick Pier
observed
on-site.



Priority Actions

Problems Observed

Building-1:

Item 01: Design report needs to be prepared.

Item 02: Lack of information in as-built drawing

Item 03: Hairline cracks on 4th floor beam.

Item 04: Non-structural element not braced/anchored.

Building-2:

Item 05: Design report needs to be prepared.

Building-4:

Item 06: Mismatch in as-built drawing

Item No.	Observation	Recommended Action Plan	Recommended Timeline
01	Design report needs to be prepared (Building-1)	Building engineer is required to prepare the design report in compliance with section 1.9.1.1 (part-6, BNBC).	6-weeks
02	Design report needs to be prepared (Building-1)	Implement any remediation work if required.	6-months
03	Design report needs to be prepared (Building-1)	Implement load plan.	6-months
04	Lack of information in as-built drawing (Building-1)	The building engineer to survey the structure and prepare as-built structural drawings with clear connection details.	6-weeks
05	Hairline cracks on 4th floor beam (Building-1)	Factory engineer is required to investigate the cracks, produce investigation report showing extent of cracks and repair methodology.	6-weeks

Item No.	Observation	Recommended Action Plan	Recommended Timeline
06	Hairline cracks on 4th floor beam (Building-1)	Factory is required to repair the cracks as per crack investigation report.	6-weeks
07	Non-structural element not braced/anchored. (Building-1)	Adequately anchor and brace all non-structural elements of the building to resist earthquake forces.	6-weeks
08	Design report needs to be prepared (Building-2)	Building engineer is required to prepare the design report in compliance with section 1.9.1.1 (part-6, BNBC).	6-weeks
09	Design report needs to be prepared (Building-2)	Implement any remediation work if required.	6-months
10	Design report needs to be prepared (Building-2)	Implement load plan.	6-months
11	Mismatch in as-built drawing (Building-4)	The building engineer to survey the structure and prepare as-built structural drawings.	6-weeks