

# Raidha Collection Ltd (Extension)

Zamirdia, Valuka, Mymensingh

(24.30680, 90.38869)

2 November 2023

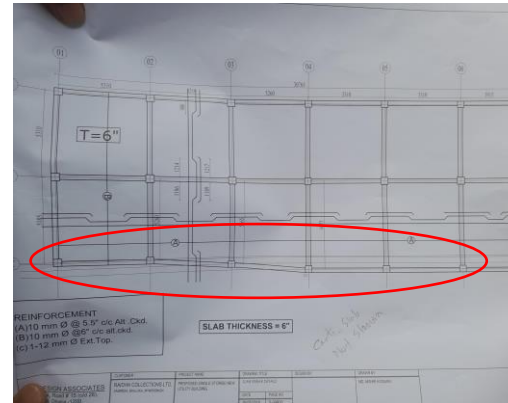


## 1. Building Information

1. **Utility Building:** A single storied reinforced concrete (RC) structure.
2. **Wastage Godown:** A single storied steel shed supported by RC column.
3. **Stoll Shed:** A single storied steel shed.
4. **Medical Building:** This structure is a two storied (G+1) RC Building.
5. **Disel Generator Building:** This structure is a single storied RC building.
6. **Common Toilet-01:** This structure is a single storied brick masonry structure.
7. **Air Compressor Room:** This structure is a single storied RC building.
8. **33 KV Substation:** This structure is a single storied RC building.
9. **Common Toilet-02:** This structure is a single storied brick structure.
10. **Fire Pump Room-01:** This structure is a single storied RC building.
11. **Fire Pump Room-02:** This structure is a single storied RC building.
12. **ETP:** This structure is a retaining wall structure.
13. **Security Building-02:** This structure is a single storied brick structure.

## 2. Observations:

### Observation-1: Lack of information in as-built drawing. (Utility Building)



Typical framing system

Cable bracing and compression strut

**Description:** During inspection, extended cantilever on roof slab was observed in south direction of Utility Building. However, structural detail of this cantilever slab was not available in slab details of structural drawing. The building engineer is required to update as-built drawing incorporating all structural details of this Building.

### Observation-2: Absence of design documents. (Wastage Godown)



Wastage Godown

**Description:** 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, a design report was not available which is required to be prepared in compliance with section 1.9.1.1 (part-6, BNBC).

**Observation-3:** Lack of lateral stability of steel rafter. (Wastage Godown)



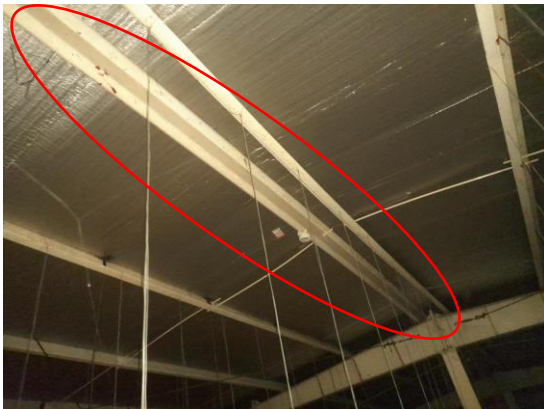
Missing compression strut



No vertical or Horizontal bracing

**Description:** Portal frame is provided along short direction. Load transfer media (compression strut) and resisting system (bracing) were not available along long direction. Therefore, lateral stability of steel rafter along long direction is questionable. The building engineer is required to check the lateral stability of the structure.

**Observation-4:** Lack of Lateral Stability. (Stoll Shed)



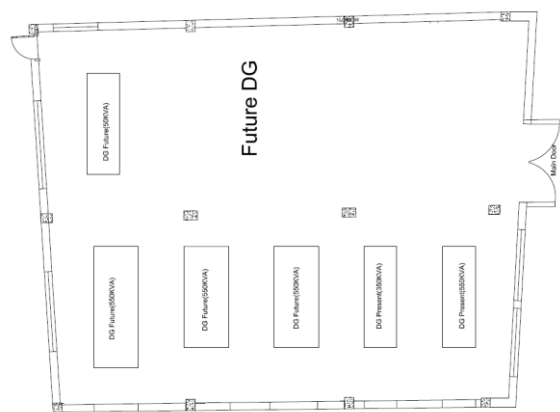
Missing compression strut



Cable bracing on roof

**Description:** Portal frame is provided along short direction. Load transfer media (compression strut) was not available along long direction. Therefore, lateral stability system along long direction is incomplete. The building engineer is required to check the lateral stability of the structure.

**Observation-5:** Lack of information in as-built drawing. (Diesel Generator Building)



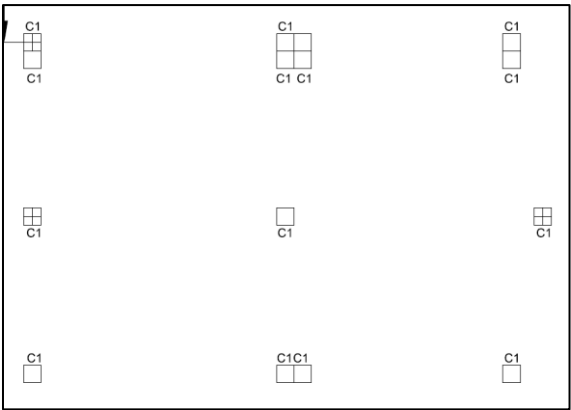
Diesel Generator Building



Roop top chiller

**Description:** In architectural drawing, roof layout plan and details for existing chiller on roof was not available for Diesel Generator Building. Building engineer is required to update as-built drawing incorporating all structural details of this Building.

**Observation-6:** Discrepancies in as-built drawing. (Air Compressor Room)



Column layout plan

| COLUMN NOS. | Upto Groung Floor Slab                                                                                                                              |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| C1          | <div></div> <div>6-16mmØ</div> <div>10mmØ @ 5"~7"~5" c/c</div> |

Column Schedule

**Description:** As per the column schedule, the number of rebars of column C1 was shown as 6 nos. However, during the inspection, 4 number of rebar were confirmed by ferro scanning in the column. The building engineer is required to survey the whole structure and update the as-built drawing accordingly.

### 3. Action Plan:

| Observation                                                          | Action Plan                                                                                                         | Timeline        |
|----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-----------------|
| Lack of information in as-built drawing. (Utility Building)          | The building engineer is required to update as-built drawing incorporating all structural details of this building. | within 6 weeks  |
| Absence of design documents. (Wastage Godown)                        | The building is required to prepare a set of design report in compliance with BNBC.                                 | within 6 weeks  |
| Absence of design documents. (Wastage Godown)                        | Implement remediation work if required.                                                                             | within 6 months |
| Lack of Lateral Stability of Steel Rafter. (Wastage Godown)          | The building engineer is required to check the lateral stability of the steel rafter.                               | within 6 weeks  |
| Lack of Lateral Stability of Steel Rafter. (Wastage Godown)          | Implement remediation work if required.                                                                             | within 6 months |
| Lack of Lateral Stability. (Stoll Shed)                              | Building engineer is required to check the lateral stability of the shed.                                           | within 6 weeks  |
| Lack of Lateral Stability. (Stoll Shed)                              | Implement remediation work if required.                                                                             | within 6 months |
| Lack of information in as-built drawing. (Diesel Generator Building) | Building engineer is required to update as-built drawing incorporating all structural details of this Building.     | within 6 weeks  |
| Discrepancies in as-built drawing. (Air Compressor Room)             | The building engineer is required to update as-built drawing incorporating all structural details of this building. | within 6 weeks  |