

Mawna Fashions LTD. (EXTENSION)

Tepirbari, Sreepur, Gazipur.

(24.248042, 90.427258)

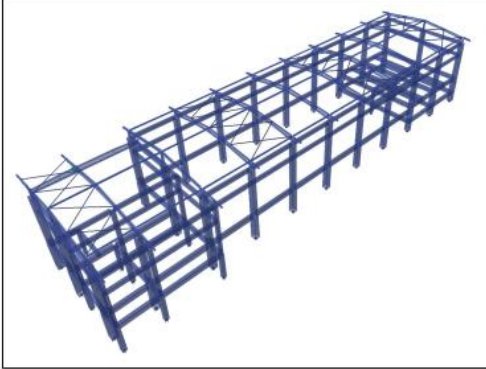
18 December 2024



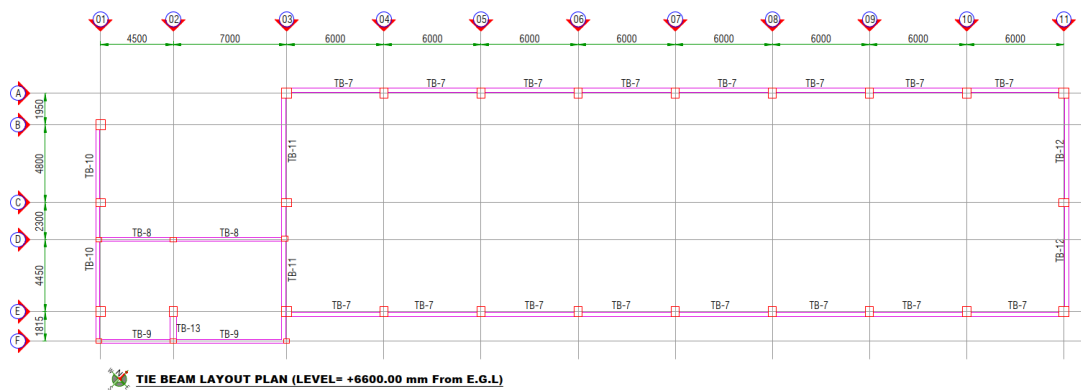
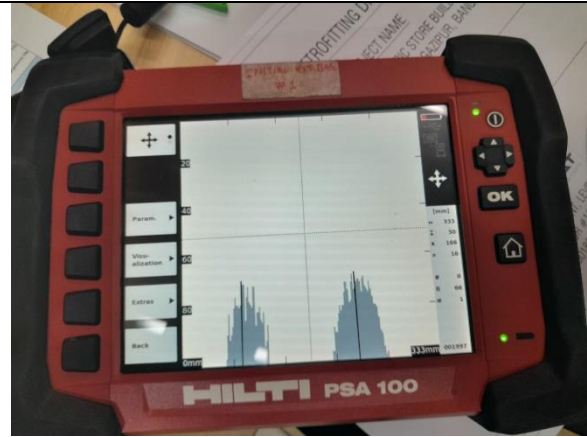
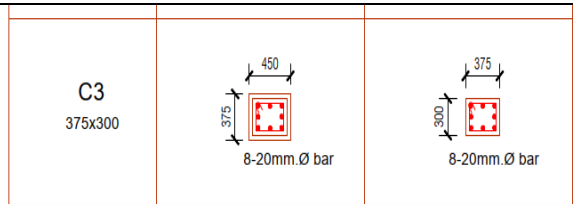
1. Building Information

Single Storied Shed

2. Observation

Observation-1: Overstressed structural members.	
DETAIL ENGINEERING REPORT FOR SINGLE STORIED FABRIC STORE SHED OF MAWNA FASHION LTD. Project type: Single storied steel shed. Location: Tepir Bari, Mawna, Gazipur, Bangladesh.  Submission date: 13 May 2024 Assessed by Md. Kazi Iqbal Mahmud B.Sc. In Civil Engineering MIEB- 37447 Submitted by IMARAT Designers & Consultants Level-03, House-1B, Quantum Emerald Point, Gareeb-e-Nayaz Avenue, Sector-11, Uttara, Dhaka 1230, Bangladesh	4 FINDINGS According to BNBC-2020 loading condition- ▪ All foundations have been found adequate in size for bearing capacity. ▪ All foundations have been found adequate in thickness for punching shear capacity. ▪ Some RCC columns have been found inadequate. ▪ Few grade beams have been found inadequate in reinforcement requirements. ▪ Some Tie beams are found overstressed in flexural reinforcement requirements. ▪ Few steel columns are found inadequate in P-M-M ratio. ▪ Some rafters are found inadequate in BNBC referred load combination. ▪ Few cable bracings are found inadequate in axial load. ▪ Some strut tubes are found inadequate in size. ▪ The structure is found inadequate in serviceability check.
DEA Report	
Description: Overstressed member observed by the analysis of the DEA report. Retrofitting is also suggested in the DEA report. In the DEA report the f_y of the MS plate is considered 345 MPa but the test report is not provided in the report. Also, concrete strength is considered below the design strength of concrete 27.5 MPa. Building engineer is required to review the design load and structural member stress. Submit the EA report to the RSC for further review.	

Observation 2: Lack of information and mismatch in as-built drawing.



Description: The amount of rebar of the C3 column was found 6 instead of 8. Grid-wise sectional details missing in long-direction grids.

Building engineer is required to confirm all types of column rebar by ferro scanning or strip cutting update the drawing and prepare a detailed accurate structural drawing.

Observation-3: Unbraced storage racks.



Description: Unbraced storage racks were observed. The building engineer is required to provide anchorage/bracing to the storage racks to protect them from falling hazards.

3. Action Plan

Item No.	Observation	Action Plan	Timeline
1.	Overstressed structural members.	Building engineer is required to review the design load and structural member stress. Submit the EA report to the RSC for further review	within 6 weeks
2.		Building engineer is required to use the concrete cylinder strength data and calculate 5.12.1 to use the design strength. & Use minimum MS plate grade otherwise carry out tensile strength test.	within 6 weeks
3.		Implement remediation work where required.	within 6 months
4.	Lack of information and mismatch in as-built drawing.	The building engineer is required to survey the structure and update the as-built drawing.	within 6 weeks
5.	Unbraced storage racks.	The building engineer is required to survey the structure and update the as-built drawing.	within 6 months