Franklin Central Supervisory Union

St. Albans, VT

STRUCTURAL ENGINEERING REPORT ❖

26-30 Catherine Street, St. Albans, Vermont

Date of Inspection: June 1, 2017
Date of Report: July 10, 2017
CCE Project Number 17031

CCE
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A. INTRODUCTION

The Franklin Central Supervisory Union (FCSU) in St. Albans, Vermont retained the services of Cross Consulting Engineers to perform a building structure review at their currently leased space at 26-30 Catherine Street. The building has two tenant spaces; one for the FCSU and the other space previously hosted Comcast offices. Comcast has vacated the space.

This review will assist the FCSU in determining if the building is a good candidate for purchase. At the time of this report, there were no structural concerns presented to CCE.

B. BUILDING STRUCTURE DESCRIPTION

The subject building is a single-story wood framed building of an unknown age. Construction of the building indicates that the building is roughly 100 years old. The foundation systems and the building's location suggest that the building was once used for the handling of materials associated with the railroad.

The structure's foundation varies. There is a small basement area used for water & sewer utilities as well as a boiler. A wood framed floor is above. Other building areas have foundation walls likely extending below grade with a slab-on-grade floor. Finally, the majority of the building has parallel frost walls extending out of the ground and supporting a wood floor. There is a crawlspace below that is open to the elements. Floor elevations vary across the building.

The wood framed floor at the basement mechanical room is constructed of 2x10 floor joists spaced at 16 inches on center. The joists and their supports are performing well.

The wood framed floor present at the majority of the building is constructed of 3"x12" wood joists spaced at 16 inches on center. These joists span between concrete foundation walls and are exposed to the outside. Crawlspace areas between foundation walls are accessed from the westerly exterior of the building.

The finished areas of the building are used as offices and for conference. First floor unfinished storage areas are located in portions of the west side of the building.

There are a variety of partitioned attic areas with their own access points that are used for attic access and/or storage. At the time of my visit only sporadic, light storage was observed. The wood framed roof was observed from the attic spaces. The roof is generally described as 2x8 wood rafters @ 24" spacing, supported by tripled 2x8 beams that are supported by wood columns. Roof areas were intact and didn't exhibit any deflection or other fatigue. In a couple of locations, beams were installed where columns were eliminated. These areas appear professionally constructed and are performing well.

C. SCOPE OF THIS REPORT

This report is prepared based upon observations of the visible portions of the structure. Existing finishes conceal a significant percentage of the building structure. No efforts were made to demolish finishes to reveal hidden conditions. Neither destructive nor non-destructive testing were performed. In the absence of indications of fatigue or failure, it is assumed that the building structure in concealed areas is performing adequately. Should demolition of finishes occur, it is possible for previously concealed conditions to exhibit construction that is in poor condition. Only the primary structural components are reviewed and addressed.

Plumbing, heating, electrical, efficiency and building & life safety codes were not reviewed.

D. OBSERVATIONS AND CONCLUSIONS

The building structure is in good condition and is performing well. The FCSU can continue to use the building as they do today and expand into the former Comcast space without structural reinforcement.

The existing roof structure is performing well. However, it does not meet today's codes for snow load capacity. This condition is not uncommon with older buildings. In the event of a major building renovation or significant increase in attic insulation, the roof framing will may need reinforcement.

The building's bearing walls and partitions are performing well. The attic floor areas cause certain interior walls to be bearing walls. The FCSU would need to determine which walls are bearing walls and plan accordingly if floor plan changes are considered.

Attic storage areas can continue to be used as they are today. If any heavier items or accumulation of heavy items are planned, then further structural evaluation is recommended to assure the safety of the floor. Determination of floor capacities was not in the scope of this review.

The floor framing at the basement mechanical area is performing well and is expected to continue to perform well. The concrete slabs on grade present in the building are performing well and will not need any structural attention for FCSU use. Finally, the wood framed floor areas have very strong construction, are performing well and will not need attention.

Submitted by:
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26-30 Catherine Street, South East View

26-30 Catherine Street-South West View

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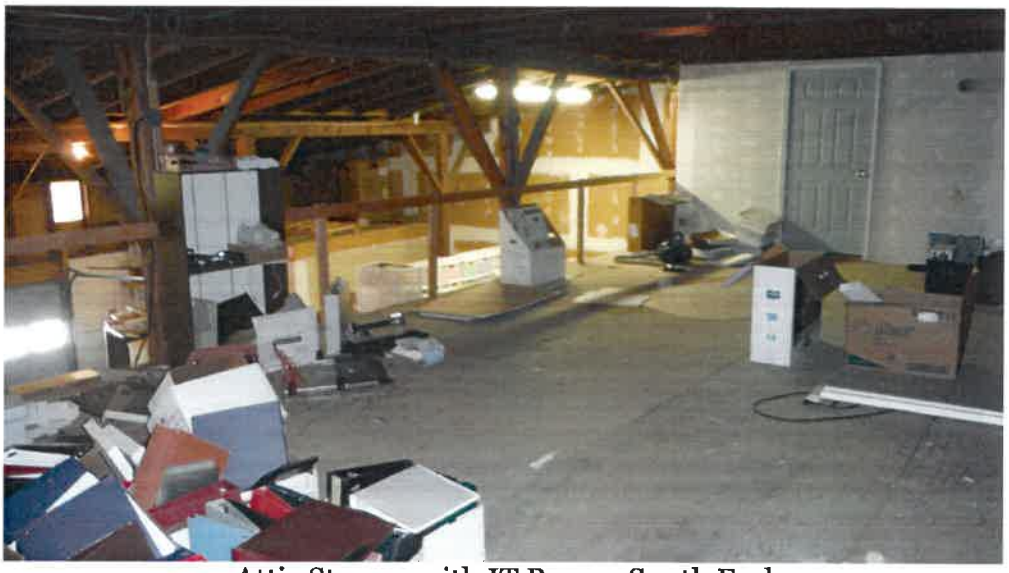
Typical Crawlspace and Floor Framing

Typical Crawlspace and Floor Framing

First Floor Framing at Basement Mechanical Room

Typical Roof Construction

Attic, No Storage, Access Only



Attic Storage with IT Room- South End