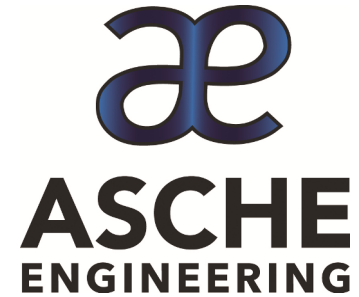


FIELD REPORT



PROJECT: AE18001 – Marshall Municipal Building
Marshall, MN
DATE: March 26, 2020

Weather: Overcast, cold, calm
Temperature: 35 degrees F at 9am
Present at Site: John VanDyck + Job Superintendent (Brennan Companies)
Sharon Hanson (City of Marshall – City Administrator)
Glen Olson (City of Marshall – City Engineer)
Numerous City Council Members
Andy Engan (Engan Associates)

Observations:

1. Adjacent Common Walls: we reviewed the common walls of the adjacent buildings to the west and east of the municipal building project. Glen Olson (City Engineer) stated the history of water migration through these common walls into the municipal building.
 - a. East Adjacent Building: we observed 2 recessed areas that collect snow and water (pictures #1 ~ #12). A roof drain was not found in either area. The common wall brick veneer appeared in stable condition (see pictures #3 ~ #6).
 - b. West Adjacent Building: we found deterioration of the exterior coating and brick veneer, and cap tiles were loose and missing (pictures #22 ~ #25).
2. East Neighbor Building: we performed a quick preview of the east neighbor building's main floor and lower level. We found numerous areas of structural concern; deterioration due to water migration, damage (split) to floor joists (see picture #32), mold, and deterioration of wood members (see picture #33).

Discussions/Recommendations:


1. Adjacent Common Walls:
 - a. East Adjacent Building: it was discussed to provide a new wall and roof over the two recessed areas to prevent water accumulation in these areas. Glen Olson (City Engineer) requests the new roof to slope to drain onto the neighbor's roof.
 - b. West Adjacent Building: we recommend replacing deteriorated brick veneer, provide a protective membrane over the exposed wall and replace tile cap with a metal cap.
 - c. We observed an abandoned lateral tie (picture #26) leftover from the previous building frame. These lateral ties were secured to wood floor joists/rafters and evenly spaced along the wall length. These ties provided stability, and would support the common wall in the event a neighbor's building was removed. If an adjacent building were to be removed, the existing common wall may need to be replaced with a new wall that is laterally connected to the remaining building floors and roof.
2. East Neighbor Building:
 - a. We identified numerous damage and deterioration to structural elements in our quick walk through of the main floor and lower level of the east neighbor building.

- b. When discussing the future of the east neighbor building, many factors should be considered. For example, changing a building function with a higher design load (floor, snow, wind pressures) may require extensive structural upgrading. In addition, satisfying current building code requirements can be costly.

Prepared By: 
Bryan Asche, PE, LEED AP

Attachment(s): pictures (6 pages)

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNATURE: 

NAME: BRYAN L. ASCHE

DATE: March 26, 2020

LICENSE NUMBER: 40855