



CITY OF PHILADELPHIA

DEPARTMENT OF LICENSES & INSPECTIONS
1130 Municipal Services Building
1401 John F. Kennedy Boulevard
Philadelphia, PA 19102-1687

DAVID J. PERRI, P.E.
Commissioner

July 27, 2020

Dr. Jon Farnham
Executive Director
Philadelphia Historical Commission
1515 Arch St., 13th Floor
Philadelphia, PA 19102

RE: Former St. Laurentius Church

Dear Dr. Farnham,

The Department of Licenses and Inspections (L&I) contracted with Urban Engineers for professional advice concerning the structural condition of the former St. Laurentius Church building. On Friday, July 24, 2020, L&I inspected the building accompanied by Thomas Srodin from Urban Engineers, the building owner, and his engineers (Janis Vacca from the Harman Group and Mark Coggin from Thornton Tomasetti). Urban Engineers' report is attached. The primary focus was the condition of the two towers at the building's north elevation.

We witnessed damage to the towers' exterior brownstone façade stone and more significantly, cracking and related horizontal displacement (previously measured at up to 2-in.) of the interior mica schist stone cores. As a result of structural cracking, portions of the exterior walls of the towers are leaning outward and are partially freestanding.

It was agreed by the engineers present that repair is not practical and that the towers must be deconstructed and rebuilt or demolished. We also discussed temporary structural bracing. The installation of long-term structural bracing and/or the erection of structural scaffolding to gain additional time is not a practical alternative given the dire condition of the towers.

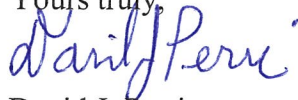
Finally, we must report that due to the tight dimensions of this site, adjacent buildings and narrow streets, the safest and most practical method to demolish the two towers is to stage the demolition from the south side. This approach however will necessitate substantial demolition of the former sanctuary.

The Department recommends that:

1. The Commission approve the demolition of both towers so that the design of the complex demolition sequence and public protection can begin immediately.
2. Discussion, going forward, should focus upon saving portions of the building, its facades, and artifacts for incorporation into a future building design.

We sincerely regret having to provide this sobering report, but the building has simply run out of time and public safety is our overarching priority.

Yours truly,



David J. Perri,
Commissioner

Attachment (Urban Engineers Report 7-27-2020)



530 Walnut Street
Philadelphia, PA 19106
215.922.8080

July 27, 2020

City of Philadelphia
Department of Licenses & Inspections
1130 Municipal Services Building
1401 John F. Kennedy Boulevard
Philadelphia, PA 19102-1687

Attn: Mr. David J. Perri, PE
Commissioner

**RE: Former St. Laurentius Church
1600 East Berks St., Philadelphia PA**

Dear Commissioner Perri:

At your request, Urban Engineers, Inc. (UEI) attended a site meeting at the above referenced location to meet with the City of Philadelphia Department of Licenses and Inspections (L & I), the property owner and the property owner's engineers. The purpose of the meeting was to observe the current condition of the brownstone masonry exterior and interior masonry schist wall construction and ascertain if demolition and restoration of the east and west bell towers is feasible and whether demolition of the main sanctuary structure is required to accomplish this task efficiently and effectively without risk to the public, adjacent properties, streets and sidewalks.

Observations of the exterior brownstone masonry wall construction revealed many areas of distress. The wall construction exhibits many repaired areas and several areas secured with netting, strapping and masonry anchors. Review of the engineering reports provided for UEI's use by L & I cited two inches of outward movement of the brownstone wall construction.

Observations of the interior schist rubble masonry wall construction revealed many areas of concern. There is no observable bond or anchorage between the exterior brownstone veneer and the interior schist rubble back-up wall construction or the timber steeple framing (no masonry ties). The wall construction exhibits many areas where the mortar is decomposing and many areas where there is no mortar at all. At several locations, the wall exhibits large cracks or separations in the construction and many locations where the walls exhibit voids or missing or dislodged rubble. Using the timber floor construction as a reference, the observed gap is consistent with the outward movement of the tower walls cited above. The nature of the wall construction implies that the integrity of the construction relies primarily on the bond between mortar and rubble masonry for continuity. Compromised wall construction implies degraded continuity and distressed structural integrity.

Due to the close proximity of adjacent structures, sidewalks and constrained street widths, demolition or deconstruction and restoration of the bell towers is not feasible while maintaining a safe work environment and an adequate safety zone (collapse zone) for pedestrians and motor vehicles. Demolition or deconstruction from the north, or northeast at the intersection of East Berks Street and Memphis Street is the most obvious approach for the implementation of demolition, deconstruction and restoration efforts. However, this approach requires closing off the intersection and restricting access to Berks and Memphis Streets and is impractical as there is insufficient area to accommodate construction equipment while maintaining an adequate safety zone. Demolition or deconstruction from the south offers an

alternative approach but requires demolition of the main sanctuary before demolition of the bell towers can commence.

In either approach, before demolition or deconstruction can commence, substantial structural bracing of the bell tower walls and north façade is required to prevent a collapse to the north, northeast or northwest and to contain a collapse, whether intended or unintended, within the perimeter of the bell towers, north façade and choir loft areas. Essentially, directing any collapse debris toward the south and away from adjacent properties, sidewalks, streets, pedestrians and vehicular traffic. Demolition or deconstruction initiated from the south will regrettably necessitate the need to take down the main sanctuary in order to reach the bell towers and perform the necessary demolition or deconstruction work in these areas. An unfortunate consequence of selecting a methodology that mitigates risk as quickly as possible.

As stated, the primary issue of concern is mitigating risk. With every passing day the level of risk does not diminish. The integrity of this structure is not improving with time. It is the opinion of UEI that mitigating risk is of primary concern and the demolition or deconstruction method that permits the most expedient resolution to minimize risk and provide for maximizing the safety of the community is the preferred approach, whether it be demolition or deconstruction. It is UEI's opinion that demolition or deconstruction commence from the south in order to dictate the direction of an intended or unintended collapse and mitigate risk exposure as quickly as possible.

UEI trusts that this information addresses the concerns of L & I regarding this matter. Please contact Tom Srodin at (215) 922-8081 x1164 regarding any questions or for further discussions.

Very truly yours,
URBAN ENGINEERS, INC.



Thomas F. Srodin, PE
Senior Structural Engineer

Digitally signed by Thomas F. Srodin
DN:
c=US, o=Urban Engineers, Inc., ou=Philadelphia, cn=Thomas F. Srodin, email=tsrodin@urbanengineers.com,
Date: 2020.07.27 11:16:52-0400

