



ALTA ENGINEERING, Ltd.
CONSULTING ENGINEERS

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October 4, 2023

Mr. Vince Deligio
Mastercraft Builders
deligioV@icloud.com

Re: 716 N. Dunton - Existing conditions
Arlington Heights, IL
AEL No. 23514.AEL

Dear Vince,

On October 3, 2023, at your request, I accompanied you on a visit to the referenced residence. No drawings for the existing building were available for review at the time of our inspection.

PURPOSE

The purpose of this visit was to visually inspect the residence structure, to evaluate the structural integrity of the system and to make observations concerning repairs that may be required and/or further investigation that may be necessary to correct any observed deficiencies.

EXISTING CONSTRUCTION

The residence is two story structure over a basement. It is approximately one hundred fifty years of age and appears to be of conventional construction: wood roof deck, rafters and beams; wood floor decks supported on wood joists, beams and beams; perimeter wood bearing walls; brick veneer (aluminum siding at the addition). The rear portion of the building appears to have been an addition. No drawings of the existing residence are available.

OBSERVATION

The following items were noted:

Exterior:

- The exterior brick work is cracked; there is evidence of previous patching and tuck pointing.
- The entry and side porches are deteriorated; the support piers are cracked and are moving. The wood trim, stairs, railings, etc., throughout, are deteriorating.

- The sidewalk along the south side of the house has been removed due to setback issues.
- Exception for a few windows that have been replaced, the remainder of windows, trim, etc. have deteriorated.
- The chimney is cracked and spalled above the roof, likely from water infiltration.
- The wall of the rear addition appears to be sitting on a spread footing. However, the top of the footing is above grade. Likely, there is inadequate frost cover provided.

Interior:

- The existing floor at the rear of the residence is uneven and sloped.
- There is evidence of water intrusion.

Basement:

- The existing basement stairs are narrow and uneven. The railings are questionable.
- The basement is constructed of common brick. There is evidence of water infiltration throughout the basement.
- The height of the basement is less than six feet (6'-0").
- There is evidence of water infiltration throughout the basement.
- At the north side, the basement wall is deflecting inward. The walls and the skim coating that was added are cracked and spalling. At one location at the base of the stairs, it appears that a piece of concrete wall was added to the interior to strengthen the existing. It too is being displaced and does little to prevent the typical water intrusion.
- The east wall is cracked and spalled. The brick has deteriorated, and the previous skim coat has spalled.
- several steel pipe columns have been added to support the wood beams. At one location the beam has been cut and removed and steel pipes added at each side. It is unclear how the loads bridge over the cut section of the beam.
- Brick cracking, deterioration and water infiltration is common throughout the basement.
- The chimney is cracked and deteriorated and appears to allow significant water infiltration.
- The basement slab has cracked and is uneven throughout.

EVALUATION /RECOMMENDATION

In our opinion, the condition of the residence is poor. The lack of maintenance and repair has significant water to infiltrate the building and allowed the structure to deteriorate.

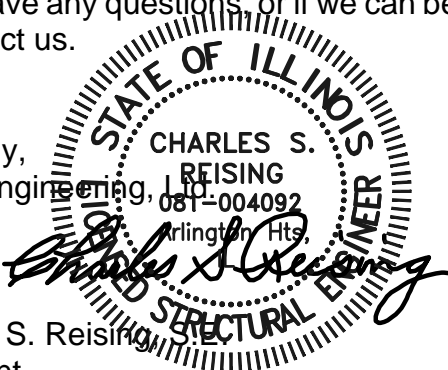
The work necessary to correct and restore the integrity of the structure is significant:

- New drain tile and sumps.
- New waterproofing of the basement walls.
- Remove and replace the basement walls; the basement could be deepened.
- As an option, the existing basement walls can be reinforced and braced with an additional wall structure.
- The deteriorated or damaged wood beams should be replaced or reinforced to eliminate several of the temporary columns.
- The chimney should be removed and replaced.
- The exterior brick should be patched and/or tuckpointed.
- The exterior wood porches (including foundations) should be removed and replaced.
- The wood railings, trim, architectural elements should be replaced.
- The wood windows and trim should be replaced.
- The interior wood floors should be shimmed or leveled to reduce the unevenness.

With the amount of work required to restore the structure of the building, the repair of the building may be cost prohibitive. Demolition may be a necessary option.

If you have any questions, or if we can be of further assistance to you, please do not hesitate to contact us.

Sincerely,
ALTA Engineering, LLC



Charles S. Reising
President

Date: 10-04-23
License Expires: 11-30-24

East Exterior



East Exterior

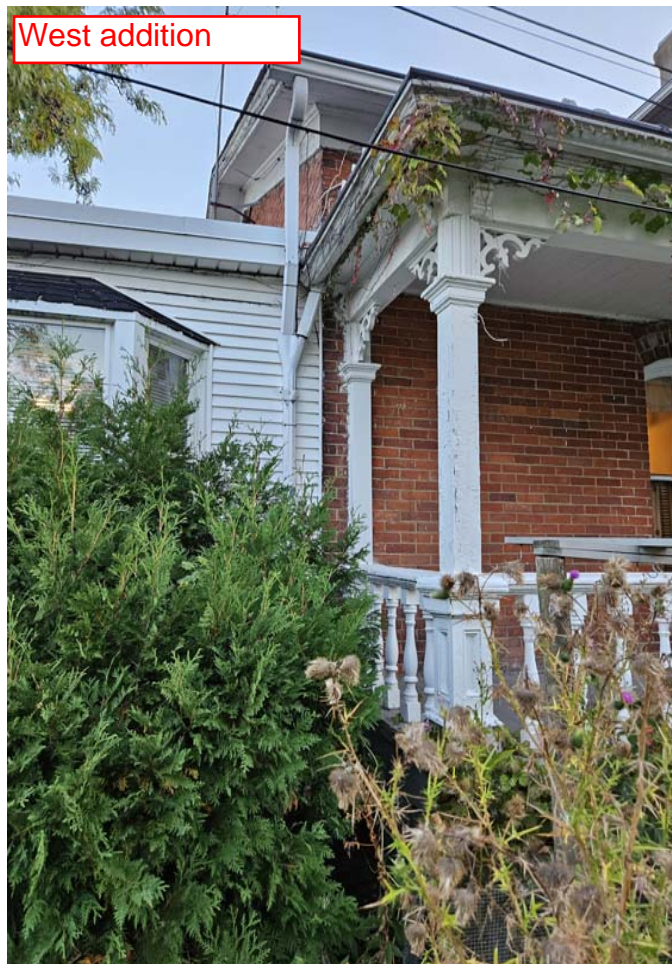


Southeast Porch



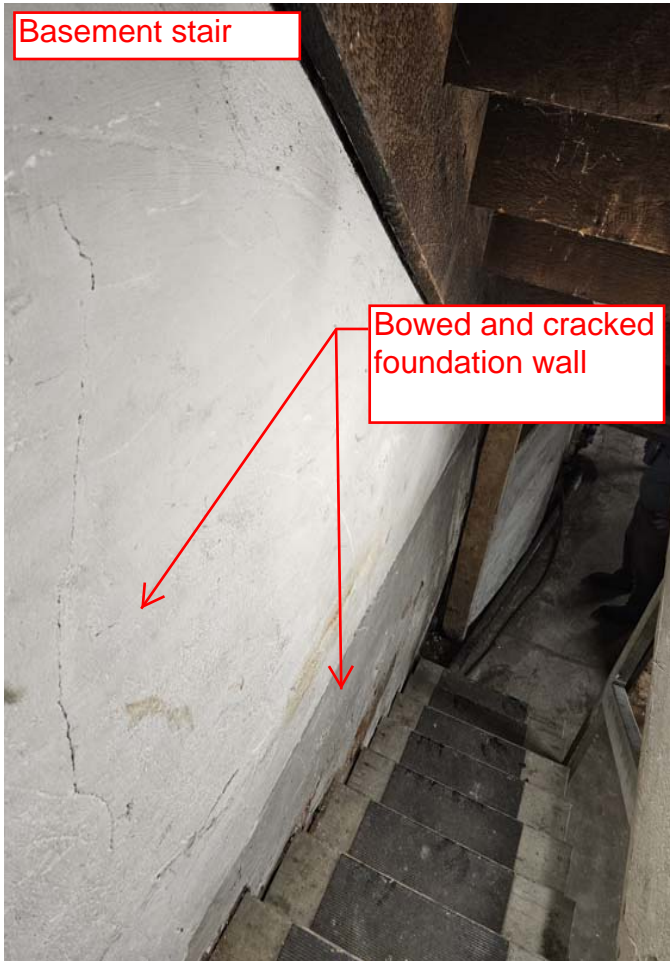
Southeast porch







Sidewalk removed



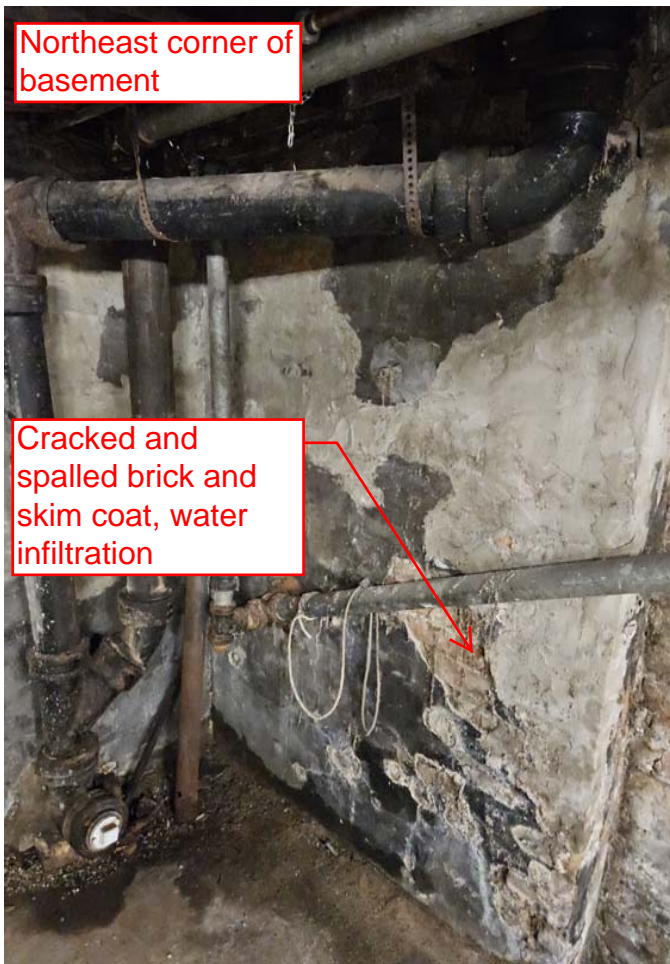
Basement stair

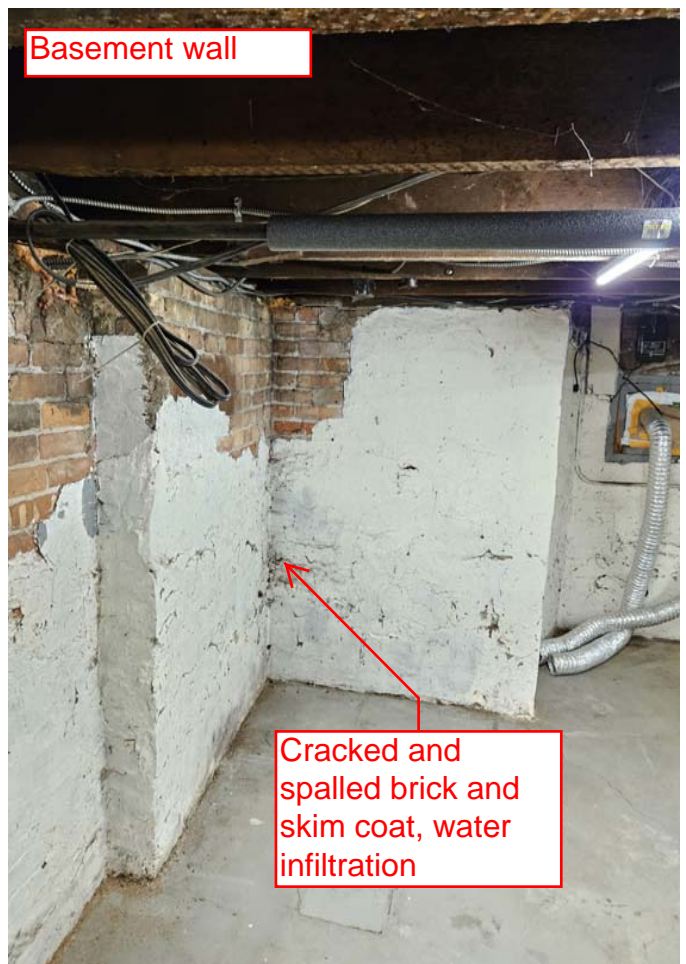
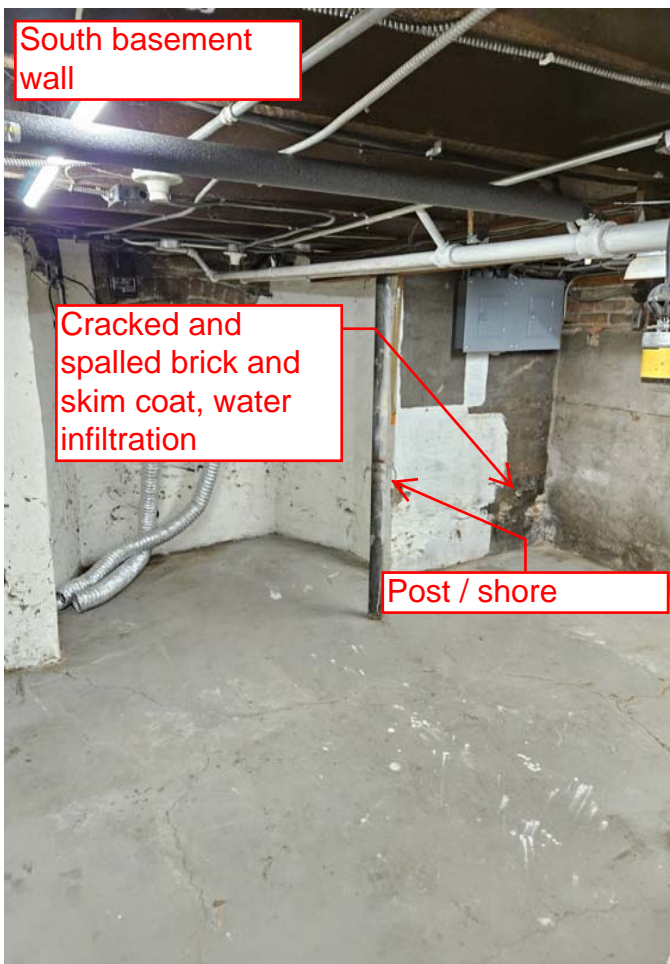
Bowed and cracked foundation wall

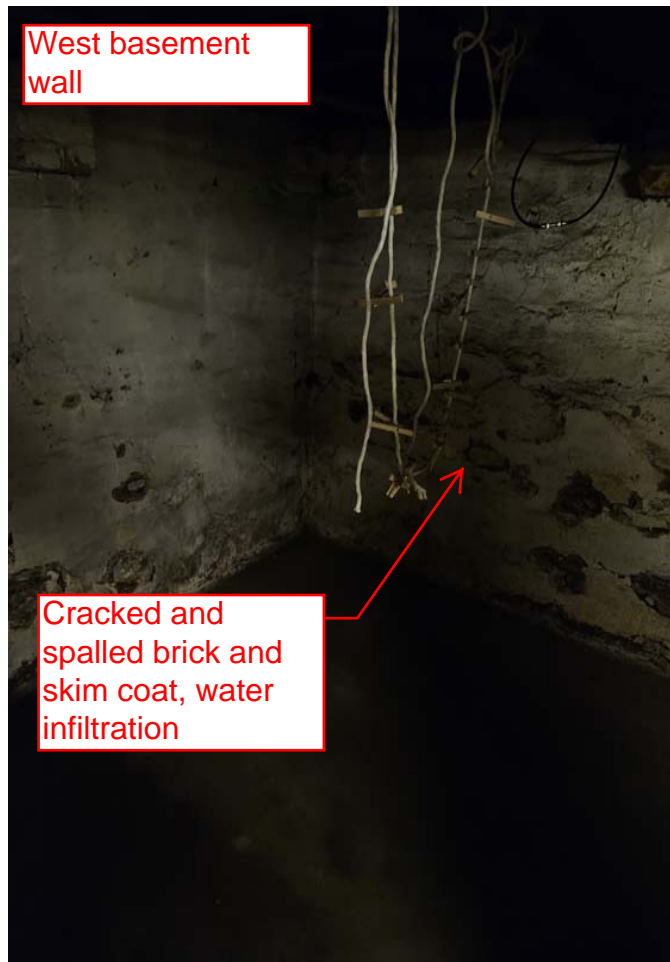
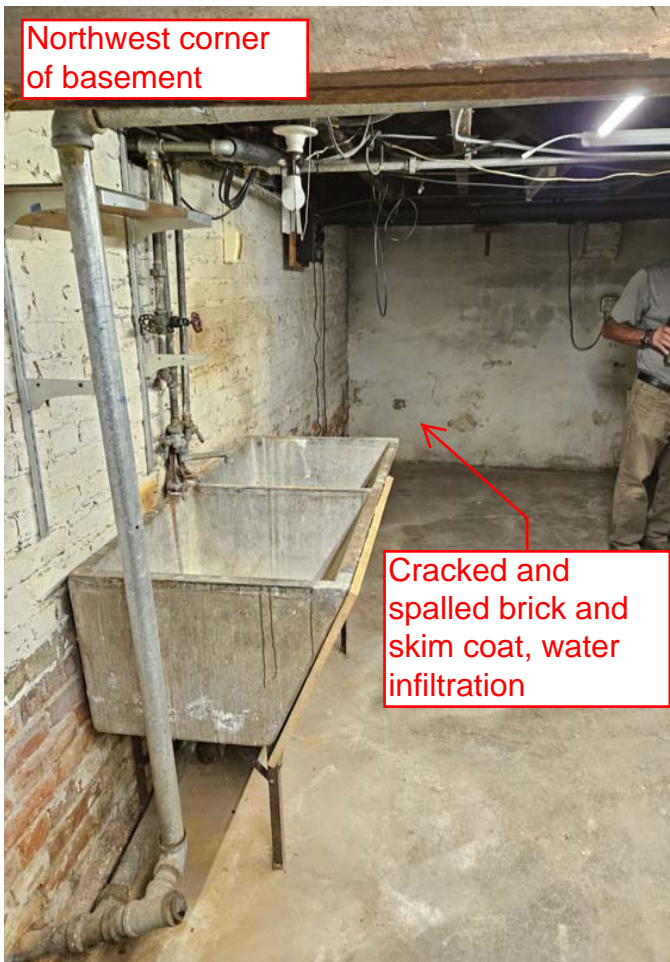


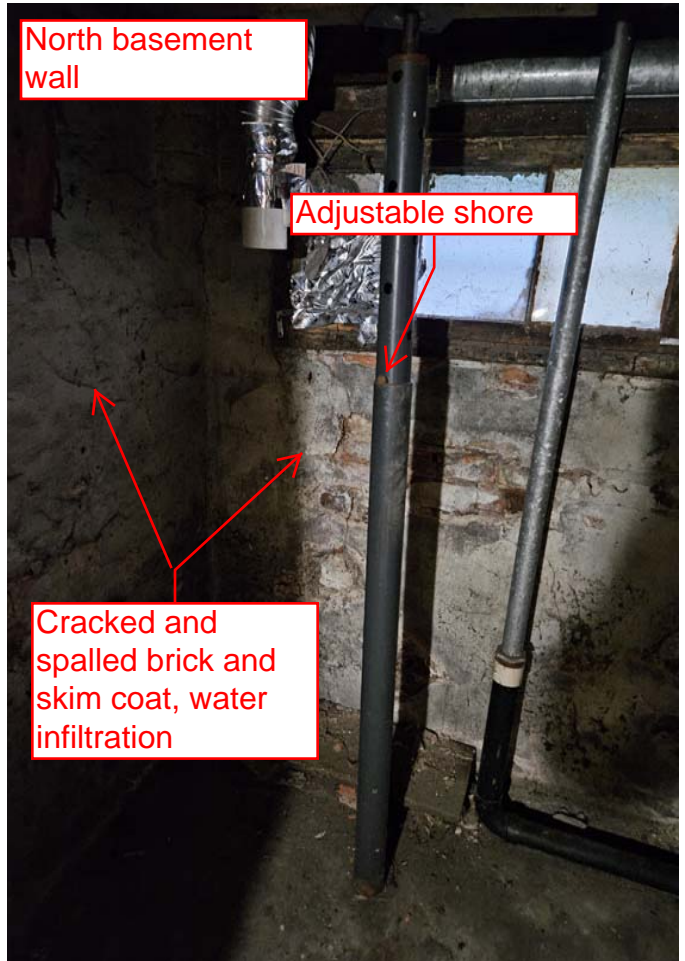
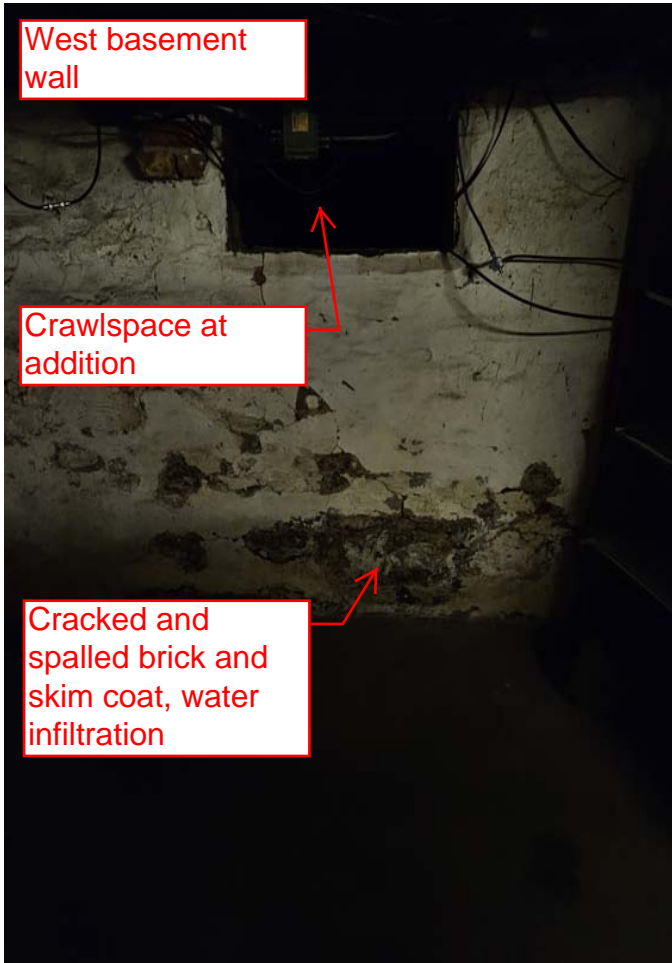
Basement stair

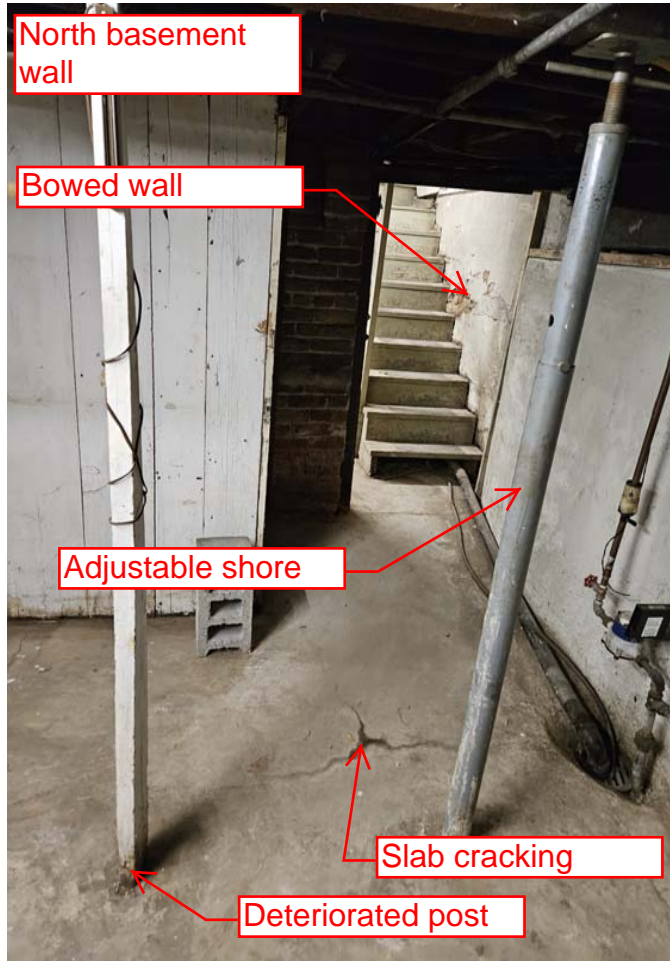
Bowed and cracked foundation wall







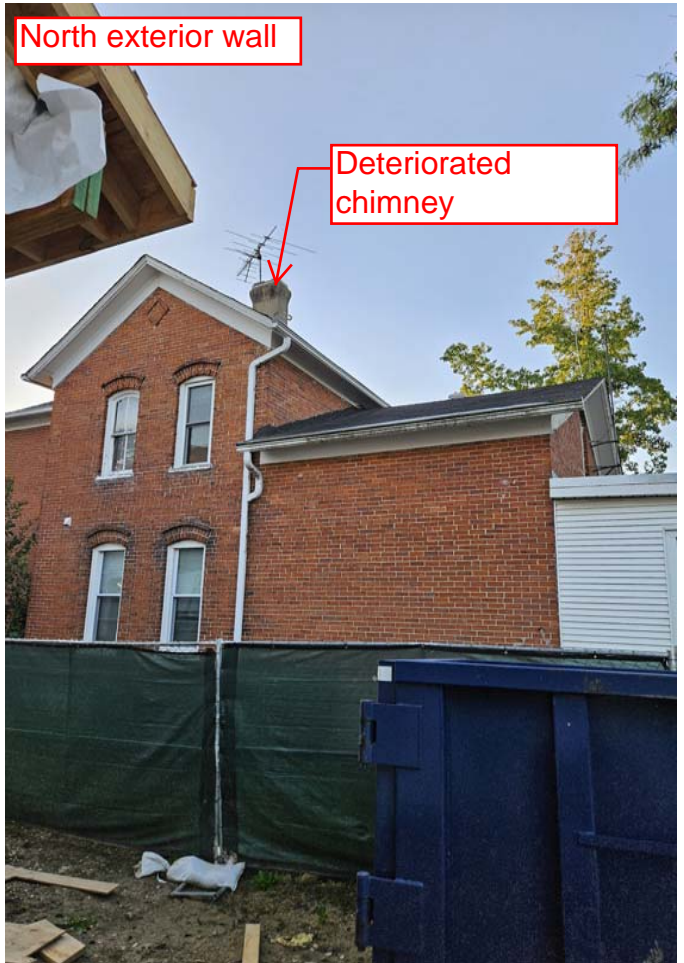




West addition



North exterior wall



Deteriorated chimney

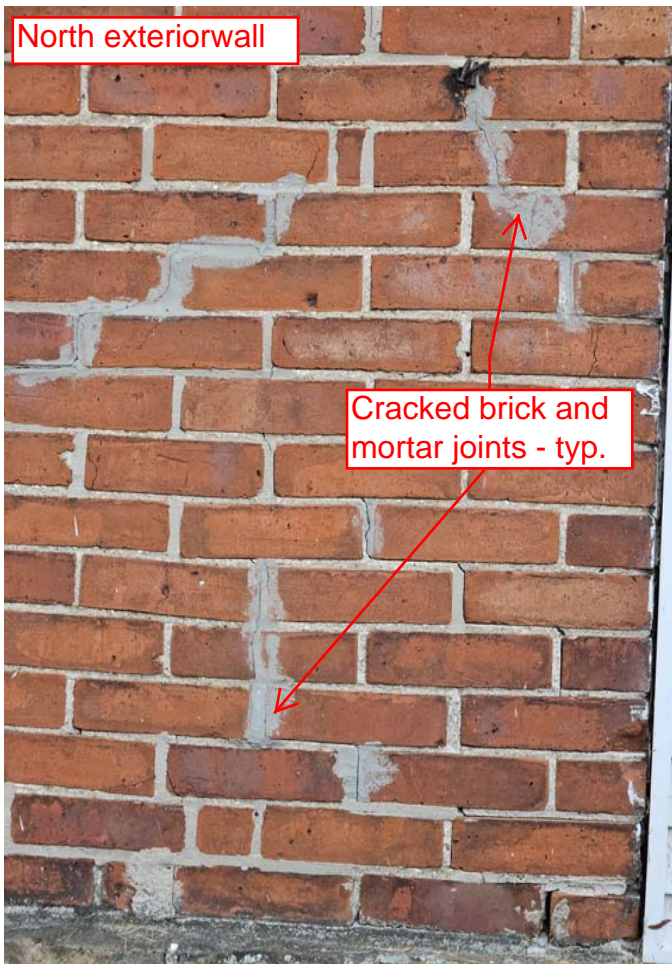
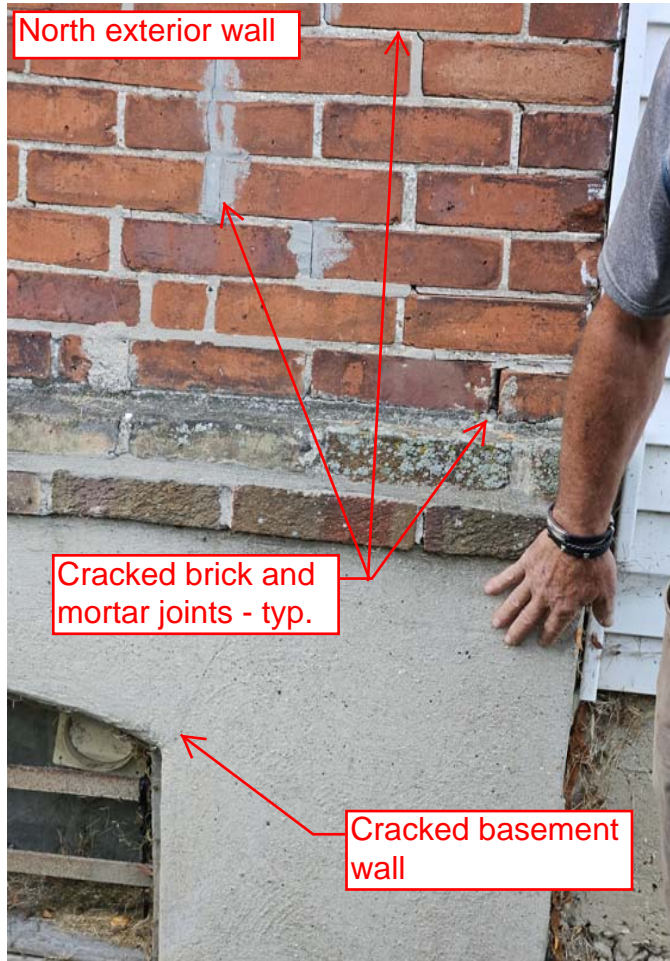
North exterior wall



Addition



Exposed foundation



Northeast corner

