
ADDRESS OF PROPERTY: 424 East Tremont Avenue, *Dilworth Local Historic District* *HDC 2013-060*

SUMMARY OF REQUEST: Demolition

OWNER: *Nicholas J. Dross*

APPLICANT: *Nicholas J. Dross*

Details of Proposed Request

This is a c. 1920 house that is identified as Contributing in the Dilworth National Register Inventory. Owners show structural problems than are driving them to ask for DEMOLITION.

Relevant HDC Design Guidelines

- Demolition

Staff Analysis

Commission will first determine if the house is Contributing to the Dilworth Local Historic District. Commission will have to determine if the documentation justifies a shortening of any delay imposed.

DEMOLITION

North Carolina Law (NCGS 160A-400.14.) states that the demolition of buildings and structures within Local Historic Districts requires the prior issuance of a Certificate of Appropriateness. The policies listed below are designed to follow state law in a manner that minimizes the inconvenience to property owners when demolition is warranted, while affording as much protection as possible to structures that make valuable contributions to the character of Local Historic Districts.

1. No building or structure located within a Local Historic District can be demolished without a Certificate of Appropriateness.
2. The Historic District Commission will evaluate demolition applications to determine if the structure in question contributes to the character of the Local Historic District. If the HDC finds that the structure does not contribute to the character of the district or is unsalvageable, immediate approval of the demolition request may be granted.
3. Should the Historic District Commission find that the structure does contribute to the character of

the historic district, the HDC can delay the issuance of a Certificate of Appropriateness authorizing demolition for a period not to exceed 365 days, in order to work with the owner to seek alternatives to demolition.

4. When an application for demolition receives a 365-day delay, any consideration of applications for proposed new construction on the same site will be deferred for 90 days.
5. When an application for demolition receives a 365-day delay, the Historic District Commission Staff will seek an alternative to demolition and will contact, within one month of the delay vote, the property owner who has applied for demolition, Historic Charlotte, Inc., and Preservation North Carolina to inform them of the threatened status of the building.
6. A permanent injunction against demolition can be invoked only in cases where a building or structure is certified by the State Historic Preservation Officer as being of statewide significance.
7. Applications for the demolition of dilapidated accessory structures may be eligible for administrative approval. All other demolition applications will be reviewed by the full Commission.
8. The maximum delay period for the issuance of a Certificate of Appropriateness authorizing demolition shall be reduced by the HDC where the Commission finds that the owner would suffer extreme hardship or be permanently deprived of all beneficial use or return from the property by virtue of the delay

Any project that the Historic District Commission determines would require significant and substantial exterior demolition may, at the discretion of the Commission, be subject to the HDC policy on Demolition.

Charlotte Historic District Commission - Case 2013-060



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|  | 424 East Tremont Avenue |
|  | Dilworth Local Historic District |
|  | Property Lines |
|  | Building Footprints |

Print Date;
May 5, 2013

Verna Engineering, P.C.

428 E. 4th Street, Suite 300
Charlotte, NC 28202

Structural Engineering Design
Residential and Commercial Inspection
Structural Inspection and Design of Repairs
Expert Witnesses: Structural & Construction

Office 704-331-9219
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Scheduling Fax: 704-331-9664
Construction Fax: 704-373-0166

Via E-mail to ndross475@gmail.com

February 11, 2008

Nicholas J. Dross
4316 Winward Circle
Charlotte, NC 28226

RE: 424 E. Tremont Avenue

Dear Nick:

At your request, Verna Engineering made a visit to the referenced address on February 8, 2008, to perform a structural investigation. This is a one-story house built in 1905 on a masonry pier and curtain wall foundation. Lapped shingle siding has been used as an exterior cladding system.

Investigation of the interior showed numerous cracks in the plaster walls and ceiling with racking of several doors also being noted. (see Photos #1 through #8) These cracks appear predominantly at intersections and around doors and windows. We recommend that these cracks be routed out to approximately ¼" in depth. Once this has been done, apply a 6" wide fiber-mesh reinforcing tape, "battered in" with joint compound and sanded out for painting. There were also two noted areas where the walls have the plaster falling off and signs of minor deterioration (see Photos #12 and #13). These cosmetic repairs should be addressed once the repairs to the foundation have been completed. There are signs of unevenness in the floors throughout the house, which is related to the framing methods used (see Photos #9 through #11). However, several areas do show signs of significant foundation issues, as noted below.

The closets that are located near the center of the home, oriented front to rear, have a dropped ceiling installed. Upon investigation of the attic space, this ceiling appears to have no structural significance. Therefore, the ceiling height can be increased to bear on the double top plate height of the load-bearing walls, as is typical throughout the house.

It was noted during the inspection of the exterior that at the right side of the house at the triple window unit in the dining room area, the wall is leaning outward. (see Photos #14 through #16) During investigation of this area, the roof did not appear to be

sagging in the area of the triple window. It is recommended that this wall section be framed pursuant to Code.

During the inspection of the exterior, significant bowing of the masonry curtain wall was noted at several locations around the perimeter of the house. (see Photos #17 through #20) Investigation of the crawlspace revealed that the curtain wall around the perimeter had a reveal above grade of approximately one foot. However, there are varying depths below grade, with the front foundation wall of the house retaining approximately four feet of soil. Throughout the crawlspace, there are signs of failure in the masonry curtain wall, due to these lateral pressures. (see Photos #21 through #29) This has resulted in lateral displacement of these walls and created apparent outward rotation at the top. It is recommended that the entire curtain wall be removed and replaced with an 8" masonry foundation wall per Code. The footing is to be a minimum 8"x16" concrete footing with two #4 reinforcing bars continuous around the perimeter. This should be investigated further if the renovation desired includes a second floor addition. The footing size is based on 2,000 pounds per square foot allowable soil bearing capacity.

It was also noted during inspection of the crawlspace and as viewed from the exterior, that the front porch is sloping toward the house. (see Photos #30 through #32) Inspection of the crawlspace showed that the framing was constructed on the curtain wall at varying heights, which has induced the slope toward the girder supporting the front wall of the house. (see Photo #33) This main girder has in turn experienced water damage and deterioration. (see Photos #34 through #36). The front porch should be reconstructed so as to slope any runoff water away from the house at a slope of $\frac{1}{8}$ " per foot. Proper flashing per Code should be verified or installed at this intersection. There were other signs of notable deterioration throughout the crawlspace in the girders and exterior band. (see Photos #37 through #41) All damaged or rotted wood members should be removed and replaced with new lumber of equivalent dimensions and species.

At several locations, the ends of several girder lines are improperly supported, thus causing differential deflection in those areas. It is recommended that 8"x16" concrete masonry piers be installed on 24"x24"x8" footings at these locations. The floor joists themselves are 2x8s, with varying spacings between 19" and 22" on center. These members span various lengths, with the maximum span measured at approximately 14 feet. This has caused noticeable dips seen in the floor system, and led to the racking of several doors which are oriented parallel to the span of the joists. There

were signs of repair work that has been performed by installing dropped girders at several locations. These dropped girders have been improperly installed on dry-stacked concrete masonry units. (see Photos #42 through #47) We recommend that triple 2x10 Southern-yellow-pine #2 dropped girders be installed and supported by 8"x16" concrete masonry unit piers per Code on 24"x24"x8" footings spaced at 8'-0" on center maximum. These footings are based on 2,000 pound per square foot allowable soil bearing capacity.

This report does not constitute an overall review or inspection of all aspects of this property. It only represents a report of the items specifically covered by this report. The evaluation does not include destructive or invasive testing. Nothing is implied or can be assumed on any items not mentioned in this report. Should you have any questions regarding this report, please feel free to contact us at the number provided above.

Sincerely,



Timothy O. Lawrence, E.I.
Staff Professional

TL/JLT:vgw

Enclosures: Photos



2/20/08



Verna Engineering, P.C.

424 E. Tremont Avenue



Above: Cracked Plaster, Photo 4
Below: Cracked Plaster, Photo 6





Above: Bowed Masonry Curtain Wall, Photo 18
Below: Failed Masonry Curtain Wall, Photo 27





Above: Failed Masonry Curtain Wall, Photo 29

Below: Water Damaged Girder, Photo 34





Above: Water Damaged Girder, Photo 35

Below: Deteriorated Girder, Photo 41

