

Inspection Services
Michael J. Nugent
Manager

Department of Urban Development
Joseph E. Gray, Jr.
Director



CITY OF PORTLAND

Send to Mrs. Dilworth

Fax # 978448-5793

*I called and Betsey has Received the Fax
at 12:08 PM 9-30-99 I also sent
Reg mail to Danforth St. (TR)*

September 28, 1999

Betsey & Warden Dilworth
350 Danforth St.
Portland, ME 04102
978 448 5793

RE: 350 Danforth St.
CBL: 061-H-011



Dear Mr. & Mrs. Dilworth:

After receiving a phone call from Mrs. Dilworth on September 17, 1999, she asked me to inspect your residence at 350 Danforth Street. This inspection is done to look at a question raised by an inspection report generated by Criterium Mooney Engineers dated September 13, 1999.

What I found is that you had a building permit #971278 issued November 25, 1997, for interior renovations only. One inspection was done for the framing on January 23, 1998. One of the conditions of approval was #30, which states "this permit doesn't authorize any exterior work".

I found when I visited the property on September 27, 1999 that you had 2 decks and 1 exterior shed that are built without a permit. We would like you to apply for a building permit showing as built plans and setbacks from properties lines. We will issue a permit that requests you bring your construction into compliance with your engineer's report of September 13, 1999.

Thanks in advance for your cooperation in attending to this matter within 45 days or November 12, 1999.

Sincerely,

Tom Reinsborough
Code Enforcement Officer

m.j.

Nbw/

CRITERION MOONEY ENGINEERS

September 13, 1999

Mr. Warden Dilworth
350 Danforth Street
Portland, ME 04101

ATTN: Tom Rainsboro

650 BRIGHTON AVENUE
PORTLAND ME 04102
TEL 207 775-1969
TOLL FREE 1 800 922-1969
FAX 207 775-4405

Re: Wooden Deck Located at Above Address
CME Project No. 99-183

Dear Warden:

As you requested, we have performed an inspection of your deck, an analysis of the structure, and provided a written report of the findings. Our inspection was limited to visual observation and therefore, assumptions were made about those elements of the structure which were not accessible or could not be seen.

Based on the information described in this report, we have determined that your deck does not meet code requirements for the minimum required design load capacity. Your deck does not show signs of structural distress because apparently, the deck has not yet been subjected to the magnitude of load equal to design load. Under any circumstances, however, it is recommended that the load carrying capacity of the deck be improved to meet design loads. Described below is how we arrived at this conclusion.

During our inspection of your deck, we conducted an assessment of its general condition. We also collected information such as individual member sizes, condition, and method of construction in order to perform an analysis of the structure in accordance with current code.

In general, the condition of the individual members of the deck appears good. It was noted that the deck boards were placed without a gap between them permitting entrapment of moisture and water. This will accelerate deterioration of the deck boards. The concrete footings appear to be in good condition and it is assumed their depth is a required minimum of 4 feet. Various connection details with nails and lag screws appear questionable; however, these connections are associated with the railing posts and bracing, which are discussed below.

The analysis performed is consistent with the National Design Specifications for wood construction. The design loads used are in accordance with the BOCA National Building Code. The design loads are the minimum loads that your deck is required to support. The findings are as follows:

- The columns are adequate to support the design loads.
- There are an insufficient number of bolts connecting the deck to the house.

LICENSED
PROFESSIONAL
ENGINEERS

BUILDING DIAGNOSTICS
INSPECTIONS
ANALYSIS
MAINTENANCE PLANNING
DESIGN



Mr. Warden Dilworth
September 13, 1999
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- The 4x6 beam which supports the deck joists is inadequate to carry the design loads.
- The connections of the railing posts to the deck are inadequate to resist the lateral design loads. This condition includes all posts except the corner posts.
- The bracing on the front of the deck does not adequately stabilize the deck under lateral load.
- The deck joists and deck boards are adequate to support the design load.
- The bracing on the sides of the deck appears adequate. An analysis of this bracing was not done. The purpose of this brace is to improve the stability of the column in the direction of the brace.
- The splice at the end of the ledger board appears adequate. An analysis on this was not done. This splice, because of its size and location, is not a critical element in the overall structural integrity of the deck.

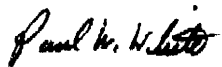
An assessment of the general condition and an analysis of the structural integrity of your deck in accordance with the applicable codes indicates that your deck does not meet certain code requirements as discussed in this report. We recommend that your deck be upgraded for purposes of satisfying code requirements.

It was our understanding that our services would be limited to the scope as discussed in this report

We would be happy to discuss with you the necessary details required to upgrade your deck to a level of compliance with code requirements.

We look forward to working with you on this project. If you have any questions or comments, please do not hesitate to give us a call.

Sincerely,



Paul W. White, P.E.

PWW/ja

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