

**Testimony of Department of Buildings
New York City Council
Committee on Housing and Buildings
Introduction 1007, House Raising
March 11, 2013**

Good afternoon Chairman Dilan, and members of the Committee. I am Thomas Fariello, First Deputy Commissioner of the Department of Buildings, and have with me; Gus Sirakis, Executive Director of Technical Affairs. Thank you for allowing me the opportunity to testify on this issue.

In the aftermath of Sandy many homeowners may look for ways to protect their homes from future storms, and, comply with insurance requirements. One of the most common retrofitting methods is elevating a house to a required or desired design flood elevation . When a house is properly elevated, the living area will be above all but the most severe floods (such as the 500-year flood). While several elevation techniques are available, this proposed legislation looks to offer homeowners some regulatory and quality assurance protections from the process known as house raising or lifting.

The Department will require a licensed Professional Engineer to file the work as an Alteration Type application (in most cases an Alt 2) for Structural work. This creates a responsible party (the Engineer) whom the Department can hold responsible for planning and sequencing the lifting operation. The contractor lifting the home would then need to notify the Department, in writing, 48 hours in advance of the start of operations. Similar to our excavations

notification, we would accept this via letter or fax. However for this important matter we also will set up a special email address that the Applicant can use that will go directly to the engineering and enforcement units inside the Department that will be responsible for oversight of the operation.

Operationally speaking, this process involves lifting the house and extending the existing foundation below it to a level above grade. During the elevation process houses are separated from their foundations, raised on hydraulic jacks, and held by temporary supports while a new or extended foundation is constructed below. The living area is raised and only the foundation remains exposed to flooding. When houses are lifted with this technique, the new or extended foundation can consist of continuous walls or separate piers, posts, columns, or pilings.

First, holes are made at intervals in the foundation wall so that a series of steel I-beams can be installed at critical points under the floor framing. The I-beams are placed so that they run perpendicular to the floor joists. A second set of beams is then placed below and perpendicular to the first set. The two sets of beams extend the width and length of the house and form a cradle that supports the house as it is being raised. A tower of cribbing is created and the jacks are set on top. Once the beams and jacks are in place, the elevation process begins. The jacks will extend only so high; so at intervals during the process, the house and jacks are supported temporarily on cribbing while the jacks are raised. After the house is elevated, it is again supported on cribbing while the foundation walls are extended to the desired height with concrete blocks or poured concrete. The house is then lowered onto the extended foundation walls, the I-beams are removed, and the holes where the beams passed through are filled.

Before this work can be permitted by the Department, the proposed legislation would require a Special Inspection. According to the 2008 NYC Construction Code, Special Inspections are inspections of selected material installations, and construction operations; these inspections confirm compliance with approved construction documents and referenced standards required by the Building Code or its referenced standards. In Section 1704.4.27 a periodic inspection shall be required to ensure the lifting operation is being performed according to the plans filed with the department. We will promulgate rules for these special inspections, but a minimum of two inspections, one during operation and a second at completion will be mandatory. In addition, the Special Inspector will be required to certify the work was completed according the plans before the work is signed off by the Department.

The Department supports this proposed legislation. We understand that while this operation may be one that can be done efficiently and often without incident, it is important to have a responsible party and quality assurances for homeowners.

Thank you. We would be happy to answer any questions you may have.

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THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. 1007-A Res. No. _____

in favor in opposition

Date: _____

Name: Marla Tepper (PLEASE PRINT)

Address: _____

I represent: Dept of Corrections Affairs

Address: 42 Broadway, 8th Floor

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Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

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Date: _____

Name: Thomas Fariello (PLEASE PRINT)

Address: First Deputy Commissioner

I represent: Dept of Buildings

Address: 280 Broadway

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Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

in favor in opposition

Date: _____

Name: Gus Sinakis (PLEASE PRINT)

Address: Executive Director Technical Affairs

I represent: Dept of Buildings

Address: 280 Broadway

Please complete this card and return to the Sergeant-at-Arms