# VILLAGE OF LOMBARD REQUEST FOR BOARD OF TRUSTEES ACTION

For Inclusion on Board Agenda

X	Resolution or Ordinance (Blue) Recommendations of Boards, Commissi Other Business (Pink)	
TO:	PRESIDENT AND BOARD OF TRUS	TEES
FROM:	David A. Hulseberg, Village Manager	ah
DATE:	March 11, 2011 (B of	T) Date: March 23, 2011
TITLE:	Text Amendments to Title 15, Chapter 1 Inspections)	150 of the Village Code (Parking Structure
SUBMITTED BY:	The Department of Community Develop	oment W
The Board of Building for your consideration		ent of Community Development transmits or 150 of the Village Code adding Section es.
The Board of Building	g Appeals (BOBA) recommended approv	ral of this request.
Please place this item	on the March 23, 2011 Board of Trustees	s agenda.
Fiscal Impact/Funding	z Source:	
Review (as necessary)	):	
Village Attorney X		Date
Finance Director X	<u> </u>	Date
Village Manager 🛴	aved a Hallach	Date <u>3/16/11</u>
	must be submitted to and approved by the prior to the Agenda Distribution.	e Village Manager's Office by 12:00 noon,

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VILLAGE OF LOMBARD

255 E. Wilson Ave. Lombard, Illinois 60148-3926 (630) 620-5700 Fax (630) 620-8222 www.villageoflombard.org

Village President William J. Mueller

Village Clerk Brigitte O'Brien

#### Trustees

Greg Alan Gron, Dist. 1 Keith T. Giagnorio, Dist. 2 Zachary C. Wilson, Dist. 3 Dana L. Moreau, Dist. 4 Laura A. Fitzpatrick, Dist. 5 William "Bill" Ware, Dist. 6

Village Manager David A. Hulseberg

"Our shared Vision for Lombard is a community of excellence exemplified by its government working together with residents and businesses to create a distinctive sense of spirit and an outstanding quality of life."

"The Mission of the Village of Lombard is to provide superior and responsive governmental services to the people of Lombard." March 23, 2011

Mr. William J. Mueller, Village President, and Board of Trustees Village of Lombard

Subject: Text Amendments to Title 15, Chapter 150 –Parking Garage Inspections

Dear President and Trustees:

The Board of Building Appeals (BOBA) transmits for your consideration its recommendation regarding the above-referenced request. The Village of Lombard is requesting text amendments to Title 15, Chapter 150, of the Lombard Building Code pertaining to inspection requirements for parking structures.

On March 1, 2011 BOBA met to review this request. Mr. Steiskal presented information about three parking garage collapses in the past three years in major cities. The causes were discussed as well as an inspection program that would require all elevated parking structures be inspected by a structural engineer by 12/31/2012. Staff explained that this is a more costly inspection compared to the bowstring truss inspection, and as such will require additional time for building owners to budget for.

Mr. Mueller asked where the ten year amount came from.

Staff explained the attachment failures, or concrete pre-cast panel failures that are typical of collapses are failures that do not typically happen in a short amount of time.

Staff also explained that engineers will be given direction as with the bowstring trusses to keep in mind that the next inspection will not be for another ten years.

Mr. Mueller agreed that as long as the engineer knew up front that they needed to note what may need to be checked before the next inspection in ten years, he felt comfortable.

March 23, 2011 Parking Garages Page 2

Staff agreed to make that direction to the engineers clear.

Mr. Mueller proposed the question as to how the Village of Lombard will enforce these inspections. Staff stated that letters will be sent out along with copies of the new ordinance. Proof of inspections will have to be provided to the Village of Lombard, Building Division staff.

On a motion by Mueller and seconded by Flint BOBA voted unanimously 4 to 0 to recommend to the Board of Trustees for approval that inspections of parking garages be completed by December 31, 2012 and inspected every 10 years thereafter.

Respectfully,

VILLAGE OF LOMBARD

Board of Building Appeals

# THE VILLAGE OF LOMBARD

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# Inspection ordinances for "bowstring trusses" and elevated parking structures

Community Development Department

The Building Division 2/23/2011

This document is to highlight two potentially dangerous and costly building systems, and recommend two ordinances that help prevent some of the tragedies that have occurred in other communities.

Two building systems that have been in the news but have no State or Federal requirement to correct the problem are bowstring roof collapses and parking garage collapses. They each have different reasons why they are happening, but a simple inspection of these existing systems can highlight most problems prior to them causing a catastrophic event.

Tragedies that have occurred over the past several years have highlighted the need to address the aging wood "bowstring roof trusses" and elevated parking garages. While wood bowstring roof trusses have long been a concern of firefighters due to their tendency to collapse in a sudden catastrophic failure, they now are collapsing from heavy snow loading and from excess wear on the bottom wood cords of the trusses. These unique trusses can have extreme tension applied to the bottom cord during heavy snow loading or due to extreme loads caused by adjoining truss failure. In addition, the wood ends of these trusses can deteriorate due to roof leakage at parapet walls. Lastly, snow drift loads were not always taken into account when these roof systems were originally designed. While drift loads are required to be calculated into the roof design now, it was not a requirement in the past. As we have witnessed through the years, the end result of any one of these failures can be deadly for fireman and the building occupants.

We are proposing an ordinance requiring all the buildings with wood bowstring roof systems be inspected by a structural engineer by the end of 2011. In addition, the roofs would be inspected every 10 years thereafter. Some of the building owners have already had their bowstring roofs inspected, but most do not know about the risk that is over them. The ordinance would also require a plaque stating the existence of bowstring trusses be installed next to the "Knox Box". This would be a warning to all fire companies reporting to a structure fire that this system exists. With a bow string roof in good condition, these trusses fail all at once in a fire.

We are also proposing a similar ordinance for elevated parking garages. Several parking garage collapses have occurred from failed connections that may have been noticed during an inspection of the structure. While these type inspections are common, many building owners are not doing them or understand the risks. In addition to the risk to life, there is the financial risk. Some buildings have transferred ownership through condominium conversions and later discovered that repairs are needed in the hundreds of thousands of dollars to continue to use the parking structures. We are proposing that all elevated parking garages not built within the past ten years be inspected by 12/31/2012. They would also have to inspect these type structures every ten years thereafter. This could help avoid what has happened in Milwaukee, Atlanta, and Charlotte NC in the past few years.

Copies of the two proposed ordinances are below:

150.092 (G) Section PM 304.4.1

All property owners that have elevated parking structures constructed prior to 2002 shall have the parking structure and its supporting structural components inspected under the direction of an Illinois Licensed Structural Engineer by 12/31/2012, and shall be inspected every 10 years thereafter. The Engineer's report will need to be submitted to the Lombard Building Division by 12/31/12. In the event a building owner has an elevated parking structure that has been constructed after 2002, that parking garage will be required to be inspected at the point it reaches ten years of age, and every ten years thereafter. The cost of the inspection shall be at the expense of the building owner.

## 150.092 (H) Section PM 304.4.2

All property owners that have buildings constructed using wood "bow-string-roof-trusses" shall have the trusses inspected under the direction of an Illinois Licensed Structural Engineer by 12/31/2011, and shall be inspected every 10 years thereafter. The engineers report will need to be submitted to the Lombard Building Division by 12/31/2011. The cost of the inspection shall be at the expense of the building owner.

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# AN ORDINANCE APPROVING TEXT AMENDMENTS TO TILE 15, CHAPTER 150 OF THE LOMBARD VILLAGE CODE

**BE IT ORDAINED** by the President and Board of Trustees of the Village of Lombard, DuPage County, Illinois, as follows:

WHEREAS, the Village of Lombard maintains a Building Code which is found in Title 15, Chapter 150 of the Code of Lombard, Illinois; and,

WHEREAS, the Board of Trustees deem it reasonable to periodically review said Building Code and make necessary changes; and

WHEREAS, the Director has identified and recommends text amendments to the Building Code relative to the inspection of elevated parking structures as set forth herein; and

WHEREAS, the Board of Building Appeals (BOBA) convened on March 1, 2011 to consider the text amendments to the Building Code and has filed its recommendations with the President and Board of Trustees recommending approval of the text amendments described herein; and

WHEREAS, the President and Board of Trustees approve and adopt the findings and recommendations of BOBA and incorporate such findings and recommendations herein by reference as if they were fully set forth herein.

NOW, THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF LOMBARD, DU PAGE COUNTY, ILLINOIS, as follows:

**SECTION 1:** That Title 15, Chapter 150, Section 150.092 of the Village Code is hereby amended to add Section 150.092(G) to include inspection requirements of elevated parking structures to read as set forth in Exhibit A attached hereto and made a part hereof.

**SECTION 2**: That this ordinance shall be in full force and effect from and after its passage, approval and publication as provided by law.

Passed on first reading this	day of	, 2011
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First reading waived by action of the l	Board of Trustees this _	day of	, 2011.
Passed on second reading this da as follows:	y of	_, 2011, pursua	ant to a roll call vote
Ayes:			_
Nays:			_
Absent:			_
Approved by me this, day of		, 2011.	
7	William J. Mueller, Vill	age President	
ATTEST:			
Brigitte O'Brien, Village Clerk			
Published by me in pamphlet form this	s day of	·····	, 2011.
Ē	Brigitte O'Brien, Village	Clerk	

#### **Building Code**

Handicapped Requirements. All passenger elevators shall comply with the "Environmental Barriers Act" (EBA) (410 ILCS 25/1 et seq.). January 3, 1997.

One elevator in any building having one or more elevators shall be designed to accommodate a Fire Department stretcher (cab size shall be a minimum of 6'8" in width and 4'3" in depth and have a side opening door of 3'6" min in width). The above is not applicable to one and two family residences.

Ord. 3244, passed 4/19/90; Ord. 5481, passed 5/6/04.

#### INTERNATIONAL PROPERTY MAINTENANCE CODE—2009 EDITION

Deleted: 2000

#### § 150.090 TITLE; SCOPE.

This subchapter shall be known as the Basic Minimum Property Maintenance Code and shall apply to all structures and properties, including all dwelling units for human occupancy. (Ord. 2561, passed 10-28-82)

#### § 150.091 ADOPTION BY REFERENCE.

The International Property Maintenance Code, 2009 Edition as published by the International Code Council, is hereby adopted by reference as the Minimum Property Standards Code of the Village, subject to any amendments made thereto and as enumerated in § 150.092 hereof. (Ord. 2561, passed 10-28-82; Ord. 5481, passed 5/6/04)

Deleted: 0

#### § 150.092 ADDITIONS AND DELETIONS.

The provisions of this section shall supersede and amend the provisions of the code hereby adopted in § 150.091:

- A) All words and terms used in said International Property Maintenance Code shall be defined pursuant to the provisions of the village zoning ordinance; provided, however, that a word or term not defined in said zoning ordinance shall be defined as per Article 2 of said International Property Maintenance Code. The Board of Appeals of the village shall constitute the Appeal Board designated in Section PM-111.2, et seq.
  - (B) Section 101.1 Insert; The Village of Lombard.
  - (C) Section 103.1 Delete "Department of Property Maintenance Inspection" and insert "Building Division".
  - (D) Section 106.4; See the fee and penalty sections of this ordinances.
- (E) Sections 110.1 to 110.1 inclusive and entitled "Demolition" are hereby deleted. Refer to §150.206 for demolition provisions.
  - (F) Section PM-304.14 Add the following dates: June 1 through November 1.
- (G) Section PM 304.4.1 All property owners that have elevated parking structures constructed prior to 2002 shall have the parking structure and its supporting structural components inspected under the direction of an Illinois Licensed Structural Engineer by December 31, 2012, and shall be inspected every 10 years thereafter. The Engineer's report will need to be submitted to the Lombard Building Division by 12/31/11. The cost of the inspection shall be at the expense of the building owner
- (H) Section PM 304.4.2 All property owners that have buildings constructed using wood "bow-string-roof-trusses" shall have the trusses inspected under the direction of an Illinois Licensed Structural Engineer by December

Deleted: Section 104.7 is amended to read as follows: Official Records: an official record shall be kept of all business and activities of the department specified in the provisions of this code and all such records shall be open to public inspection, except building department records which do not result in a formal complaint being issued (preliminary investigative reports, etc.) at all appropriate times and under reasonable regulations established by the Code Official to maintain the integrity and security of such records.

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