

**ORDINANCE NO. \_\_\_\_\_**

**AN ORDINANCE AMENDING TITLE 15, CHAPTER 150 OF THE LOMBARD VILLAGE CODE IN REGARD TO THE INSTALLATION OF RADIO AMPLIFICATION SYSTEMS IN CERTAIN BUILDINGS**

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**BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF LOMBARD, DU PAGE COUNTY, ILLINOIS, AS FOLLOWS:**

**SECTION 1:** That, effective June 1, 2006 Title 15, Chapter 150 of the Lombard Village Code is hereby amended to add new sections 150.350 through 150.361 thereto, which shall read in there entirety as follows:

**RADIO AMPLIFICATION SYSTEMS IN CERTAIN BUILDINGS**

**§150.350 RADIO COVERAGE**

(A) Except as otherwise provided in Section 150.360 below, no person shall erect, construct, maintain or modify any building or structure or any part thereof, or cause the same to be done in such a manner which fails to support adequate radio coverage within said building or structure for Village of Lombard public safety services, including, but not limited to, emergency management, police, fire and public works services. A Certificate of Occupancy may not be issued for any building or structure which fails to comply with this requirement.

(B) The frequency range, which must be supported, shall be 150-160 MHzFD, 450-480 MHzPD, 746-776 MHz, and 794-806 MHz, or as otherwise established and required in writing by the Village as being necessary for public safety purposes.

(C) For purposes of Sections 150.350 through 150.361 of this Code, adequate radio coverage shall be defined as a minimum signal level of DAQ (Delivered Audio Quality 3) available in 95% of the area as agreed to be in the coverage acceptance test plan by the Village of Lombard and the radio system manufacturer prior to system testing.

**§150.351 RADIO AMPLIFICATION SYSTEM ALLOWED**

(A) Buildings and structures may be equipped with any of the following, in order to achieve adequate radio coverage:

- (1) A radiating cable system;
- (2) An internal multiple antenna system with FCC Type Accepted Bi-Directional VHF and UHF Amplifiers as needed to encompass the frequency range stated in Section 150.350 (B) above or frequency range subsequently established by the Village; or

- (3) A system that has been approved by the Village as being capable of providing amplification to meet the requirements of Sections 150.350 through 150.361 of this Code.

(B) The radio amplification system shall be capable of operating on an independent battery and / or generator system for a period of at least twelve (12) hours without external power input. The battery system shall automatically charge in the presence of external power input. There shall be no connection between the radio amplification system and the fire alarm system.

### **§ 150.352 ACCEPTANCE TEST PROCEDURES**

(A) Acceptance testing for an in-building/structure radio amplification system is required, upon completion of the installation of the radio amplification system. It is the building owner's responsibility to have the radio amplification system tested to ensure that two (2) way coverage on each floor of the building is a minimum of DAQ3.

(B) Each floor of the building / structure shall be divided into a grid of approximately forty (40) equal areas. A maximum of two (2) nonadjacent areas will be allowed to fail the test. In the event that three (3) of the areas fail the test, in order to be more statistically accurate, the floor may be divided into eighty (80) equal areas. In such event, a maximum of four (4) nonadjacent areas will be allowed to fail the test. If the radio amplification system continues to fail the test after eight (8) testing attempts, the building / structure owner shall repair, replace, alter or upgrade the radio amplification system to meet the DAQ 3 coverage requirement. Talk back testing from the site to the Village's E911 PSAP Communications Center shall use a four (4) watt UHF portable transceiver with public safety speaker / microphone and flexible antenna attached, and a five (5) watt VHF transceiver with speaker/microphone and flexible antenna. A spot located approximately in the center of a grid area will be selected for the test, then the radio will be keyed to verify two (2) way communication to and from the outside of the building / structure. Once the spot has been selected, use of another spot within the grid area will not be permitted. Field strength testing instruments are to be recently calibrated (within the past twelve (12) months) and of the frequency selective type incorporating a flexible antenna similar to the ones used on the hand held transceivers.

(C) The gain values of all amplifiers shall be measured and the results kept on file with the building/structure owner so that the measurements can be verified each year during the annual tests. In the event that the measurements results become lost, the building / structure owner will be required to rerun the acceptance test to reestablish the gain values.

**§ 150.353 ANNUAL TEST**

When an in-building / structure radio amplification system is installed, the building/ structure owner shall test all active components of the radio amplification system including, but not limited to the amplifier, the power supplies and the back-up batteries, a minimum of once every twelve (12) months. Amplifiers shall be tested to ensure that the gain is the same as it was upon initial installation and acceptance of the radio amplification system. Back-up batteries and power supplies shall be tested under load for a period of one (1) hour to verify that they will operate during an actual power outage. All other active components shall be checked to determine that they are operating within the manufacturer's specification for the intended purpose.

**§ 150.354 OWNER RESPONSIBILITY FOR COMPLIANCE**

It shall be the responsibility of the owner of any existing building or structure to cause said building or structure to come into compliance with the provisions of Sections 150.350 through 150.361 of this Code and to be maintained thereafter in full compliance therewith. All existing buildings or structures shall comply with Sections 150.350 through 150.361 of this Code within one (1) year after being notified by the Village to do so. An extension of one (1) additional year may be granted by the Fire Chief with an approved phase in plan. All buildings or structures constructed after June 1, 2006 (the effective date of the requirements of Sections 150.350 through 150.361 of this Code), shall be constructed and maintained in compliance with the provisions of Sections 150.350 through 150.361 of this Code.

**§ 150.355 FIVE YEAR TEST**

In addition to the annual test as referenced in Section 150.353 above, the building/ structure owner shall perform a radio coverage test at least once every five (5) years to ensure that the radio amplification system continues to meet the requirements of Sections 150.350 through 150.361 of this Code. The acceptance test procedures, set forth above in Section 150.352 shall apply to such tests.

**§ 150.356 INADEQUATE RADIO COVERAGE**

When a building or structure fails to support adequate radio coverage, the owner of same must present a compliance plan to the Village's Fire Chief and the Village's E911 PSAP Communications Center's Chief RF Engineer, within ninety (90) days after the discovery of said failure, to address the inadequate radio coverage. The owner of the building or structure shall, within one (1) year of the approval of the compliance plan, have the approved plan enacted. A one (1) year extension for the implementation of the compliance plan may be granted by the Fire Chief with an approved phase in plan.

**§ 150.357 QUALIFICATIONS OF TESTING PERSONNEL**

All tests under Sections 150.352, 150.353, or 150.355 of this Code shall be conducted, documented and signed by a person in possession of a current FCC general radio telephone operator license. All test records shall be retained at the inspected premises by the building / structure owner, with a copy thereof being submitted to the Village's Fire Chief within thirty (30) days of when the test has been conducted. In the event the test indicates a failure to comply with the requirements of Sections 150.350 through 150.361 of this Code, appropriate repairs shall be made and additional tests conducted until said tests indicate that the building / structure meets the requirements of Sections 150.350 through 150.361 of this Code.

**§ 150.358 INSPECTIONS**

Village personnel, or their agents, after providing reasonable notice to the owner or his / her / their / its representative, shall have the right to enter any building or structure which is subject to the requirements of Sections 150.350 through 150.361 of this Code to conduct field-testing to be certain that the required level of radio coverage is present.

**§ 150.359 PROPERTY OWNER MAINTENANCE RESPONSIBILITIES**

(A) Once a radio amplification system has been found to be in compliance with the requirements of Sections 150.350 through 150.361 of this Code, the building/ structure owner shall be responsible for maintaining said radio amplification system thereafter in full compliance with the provisions of said sections. A maintenance contract shall be provided to the Fire Chief or his designee, with the name of the contractor who will supply a twenty-four (24) hours per day, seven (7) days per week, emergency response within two (2) hours after notification by either the Village or the building / structure owner. The maintenance contract shall contain contact information relative to the contractor including, but not limited to phone numbers. The building / structure owner shall also submit contact information for the building / structure owner to the Village, including but not limited to phone numbers for the building / structure owner.

(B) The building / structure owner shall be responsible for making any repairs, replacements or upgrades to the radio amplification system, as directed by the Village, should the radio amplification system fail to work properly.

**§ 150.360 EXEMPTIONS**

The provisions of Sections 150.350 through 150.361 of this Code shall not apply to buildings or structures less than fifty thousand (50,000) square feet in area unless special construction needs are required in the building or structure whereby the building / structure construction type prohibits adequate radio coverage as defined in Section 150.350 above.

**§ 150.361 PERMIT REQUIRED**

A building permit shall be required for the installation of any radio amplification system. The fee for the permit shall be the minimum permit fee as established by the building permit fee schedule set forth in Section 150.141 of this Code.

**§ 150.362 FAILURE TO COMPLY**

Failure to comply with, or a violation of any of the requirements of, Sections 150.350 through 150.361 of this Code shall subject the violator to a fine of not to exceed seven hundred fifty and no/100 dollars (\$750.00), with each day a violation/non-compliance continues constituting a separate and distinct offense. In addition to the fine, non-compliance with/a violation of any of the requirements of Sections 150.350 through 150.361 of this Code shall be grounds for the Village to revoke any previously issued Certificate of Occupancy for the building or structure.

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

Passed on first reading this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

First reading waived by action of the Board of Trustees this  
\_\_\_\_ day of \_\_\_\_\_, 2006.

Passed on second reading this \_\_\_\_\_ day of \_\_\_\_\_ 2006, pursuant to a roll call vote as follows:

AYES: \_\_\_\_\_

NAYS: \_\_\_\_\_

ABSENT: \_\_\_\_\_

APPROVED by me this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
William J. Mueller  
Village President

ATTEST:

\_\_\_\_\_  
Bridgitte O'Brien  
Village Clerk

Published by me in pamphlet form this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
Brigitte O' Brien  
Village Clerk

