

ZONING ORDINANCE CHANGE PETITION REVIEW REPORT

Petition Number: Z13-04

Petitioner: John T. Henderson
Hindo LLC
15531 Manchester Rd.
Ballwin, MO 63011

Agent: None

Project Name: Indoor Shooting Ranges

Location: N/A

Review Date: 5/2/13

Requested Action: Zoning Ordinance Change

Code Section: Zoning Ordinance (Article XIV,
Section 1)

Existing Land Use/Zoning: N/A

Surrounding Land Use/Zoning: N/A

Proposal Description:

A petition has been received from John Henderson of American Arms at 15531 Manchester Rd., asking that Ballwin amend Article XIV of the Zoning Ordinance to make indoor shooting ranges a use allowed by special use exception in the C-1 zoning district. Presently this use is not allowed in any zoning district in the city. Ballwin's regulations contain no design or operations standards for the construction or maintenance of such a facility. It is my belief that there are some unique operational and design/construction issues associated with this use that may justify additional regulations or standards for the approval of such a use. Such regulations would be above and beyond the provisions typically reviewed as a part of the special use exception approval process. Of particular concern from my perspective were issues of building design and range operation relative to projectile confinement, interior and exterior ventilation/air quality and acoustics.

With the assistance of the Planners Advisory Service of the American Planning Association, I have been able to review the zoning ordinance approaches to regulating this use in several cities from around the country. Several types of traditional zoning performance standards were common threads through these districts regulations. The most commonly included standards were district specific designations for the use and distance setbacks form residential uses. Also frequently included were sound attenuation, impenetrable construction

and to a lesser degree insurance, safety and security requirements. With the exception of the occasional specific setback distance, none of these zoning district standards specified any kind of measurable performance criteria for any of these issues. The only standard that was cited in any of these ordinances (North Muskegon, Michigan and Ocala Florida) was the NRA Range Source Book (the most recent edition is dated 2012).

In addition to the NRA sourcebook I was able to find range design manuals produced by the US Department of Energy Office of Health, Safety and Security and US Navy Environmental Health Center. All three of these range design documents covered similar criteria for range design and supported my initial belief that the primary zoning related issues for citing such a facility in Ballwin were projectile confinement, ventilation/air quality and acoustic energy attenuation.

I recommend that if this use is recommended for inclusion as an additional allowed special use in Article XIV that it be permitted subject to the following additional performance criteria:

1. As a new use or as an infill or tenant use in an existing structure, an indoor shooting range shall be built with full masonry or concrete walls, flooring and ceiling with sufficient thickness and strength to assure 100% containment of all projectiles fired within the design parameters of the facility.
2. An indoor shooting range shall be provided with a ventilation system that meets the OSHA Lead Standard for General Industry 29CFR 1910.1025 or such regulation's replacement standard. Construction plans submitted for a building permit must contain a sealed and written certification from an engineer familiar with such systems stating that the ventilation system provided in the plans meets this standard. No building permit will be issued until such certification is provided. Additionally, following construction, the engineer providing the preconstruction certification shall provide a sealed statement that the system installed is as designed and functions in accordance with the applicable OSHA regulations. No occupancy permit or business license will be issued for the facility until such certification has been provided.
3. Lead concentrations in exterior exhaust air and internal recirculated air from the ventilation/filtration system shall not exceed the OSHA Action Level of 30 milligrams per cubic meter. This concentration shall be measured quarterly by an entity certified to conduct such measurements, and a log with the testing company's reports shall be retained on site for public inspection at all times during normal operating hours. Any measurement in excess of the OSHA Action level, or its subsequent replacement level, shall be confirmed by a follow-up retest within 30 days. If the retest shows a second violation of this standard, there shall be a cessation of range activities until the ventilation/filtration equipment is repaired, replaced or improved to meet current OSHA standards.
4. No sound resulting from the discharge of firearms, the operation of ventilation/filtration equipment or any other equipment shall be audible to a person with normal hearing at any location off of the property occupied by the shooting range.
5. All indoor shooting ranges shall be designed and operated in accordance with the general principals and standards outlined in the NRA Range Source Book (2012) or any adopted replacement document.

Thomas H. Aiken, AICP
Assistant City Administrator/City Planner