



# **Boulder County Planning Commission**

**October 19, 2016**

## **Docket DC-15-0003**

**Proposed Boulder County Land Use Code Amendments to Article 4 and  
Article 18 Regarding Firing Ranges  
Staff Planners: Dale Case and Amy Oeth**

# AGENDA

- 1. County Staff Presentation**
- 2. Planning Commission Q & A**
- 3. Public Comment**  
(3-min allowance per individual speaker)
- 4. Planning Commission Discussion & Action**

# BACKGROUND

- **June 9, 2015 – BOCC authorized** Land Use staff to moved forward as the present regulations do not offer sufficient protections to health and safety.
- **Northern Front Range Recreational Sport Shooting Management Partnership** – has been working to address issues around dispersed shooting for several years. Partners include: Boulder County, U.S. Forest Service, Arapaho & Roosevelt National Forests and Pawnee National Grassland, Colorado Parks & Wildlife- Northeast Region, Clear Creek County, Gilpin County, and Larimer County.
- There are **potential impacts** to residents and recreational users in areas near proposed ranges. However, the impacts of dispersed shooting on safety and the general ability of members of the public to enjoy the outdoors are of concern.

## BACKGROUND cont'd

- **Dedicated locations** with proper safety and noise requirements **will better protect values** and allow the Forest Service to reduce the areas available for dispersed shooting.
- **This docket is not about any particular site**, but it is an effort for provide the county with the appropriate regulatory framework for reviewing a site. Firing Ranges are currently allowed under the Outdoor Recreation use classification.
- The proposed regulations would permit a shooting range by Special Review in Light Industrial, General Industrial, Forestry, and Agricultural Zoning Districts.

# PUBLIC COMMENTS & REFERRALS

**2 referrals (Parks and Open Space and Transportation)**

**5 detailed public comments regarding the proposed regulations**

**4 public comments regarding site placement (a separate county process)**

- 14 changes were made to the proposed regulations based on comments received during the referral period. General formatting updates and minor text edits were also included.
- 15 suggestions were not integrated into the proposed regulations (see memo)
- Themes:
  - Review process
  - Setback distances from residential structures, trails, etc.
  - Acceptable noise levels
  - Hours of operation
  - Enforcement

# PROPOSED TEXT AMENDMENTS

# PROPOSED REGULATIONS OVERVIEW

- Article 18 – New Definitions
  - 18-195A: Shotfall Zone
  - 18-207A: Surface Danger Zones
- Article 4-510 – New Use – Firing Range, Outdoor
- Article 4-602 – Special Provisions, Special Review for Firing Range, outdoor use

# PROPOSED AMENDMENTS - ARTICLE 18

*Article 18 Definitions* - new definitions

**18-195A: Shotfall Zones:** The area of a shotgun firing range where spent shotgun shot falls to the earth and where development, other than trap or skeet houses or the equivalent facilities for other types of shotgun events, and human occupancy, other than operators of the trap, skeet or equivalent facilities, is prohibited during shooting.

**18-207A: Surface Danger Zone:** The area, determined by an applicant's Professional Engineer, that may reasonably expect projectile impact. The zone spans the area that could receive projectile impact resulting from direct fire, including misdirected and accidental discharges, and ricochets from any firearm. The boundaries of the zone (i.e., the length of the range and the width of the firing point or points) accommodate the ballistics of the highest powered firearms, and the range of ammunition that may be used in the permitted firing activities. Spatial requirements may be reduced or expanded in consideration of natural topographic features or manmade improvements, including but not limited to backstop and side berms, bullet traps, ricochet catchers, and overhead or ground safety baffles which will provide sufficient safety measures to protect adjacent properties.



# PROPOSED AMENDMENTS - ARTICLE 4-510

## *Article 4-510 Recreation Uses* – new use definition

### **A. Firing Range, Outdoor**

1. Definition: A facility inclusive of its component shooting ranges, Surface Danger Zone or Shotfall Zones, parking areas, all structures for classrooms, administrative offices, ammunition storage areas and other associated improvements, for which the primary use is to provide a place for the discharge of various types of firearms. The definition excludes hunting and shooting activity occurring outside of identified and approved shooting ranges, and occasional target practice by individuals on property owned or leased by the individuals.
2. Districts Permitted: By Special Review in F, A ,GI, LI,
3. Parking Requirements: to be determined through review
4. Loading requirements: none

# PROPOSED AMENDMENTS - ARTICLE 4-510 cont'd

## 5. Additional Provisions:

### a. Shooting and target area setbacks

- (i) In the direction of fire and potential shotfall zone, at least the distance of travel of the largest caliber weapon to be fired. This distance can be reduced based on an engineered study and proper mitigation which reduces the Surface Danger Zone, but except where noted below shall not be closer than 1,320 feet from residential structures (whether permanent or seasonal), lodging or other occupiable or occupied structures not on the subject property, a County platted subdivision, County townsites, recreational trails, open space areas where off-trail use is allowed, designated campgrounds whether public or private, and/or any other potential hazards as identified through special use review. This setback may be reduced with a signed agreement with property owners within 1,320 feet. In all other directions, the boundary of any outdoor shooting area shall be no closer than 400 feet from residential structures (whether permanent or seasonal), lodging or other occupiable or occupied structures not on the subject property, a County platted subdivision, County townsites, recreational trails, open space areas where off-trail use is allowed, designated campgrounds whether public or private, and/or any other potential hazards as identified through special use review. This distance may be increased based on range design and noise studies during the review process.
- (ii) Default zoning district setbacks are applicable to office, restrooms, classroom space, or other related range areas where weapons are not being fired.

# PROPOSED AMENDMENTS - ARTICLE 4-602

## *4-602 Special Provisions - (new criteria/development standards)*

### **A. Special Review for Firing Range, outdoor use**

1. The following standards shall apply to the development of proposed outdoor firing ranges upon application for a special use permit. The County may vary from these standards where the applicant has demonstrated and a County-approved engineer has verified that the proposed facility includes alternative designs and features, either natural or manmade, that will otherwise mitigate the potential adverse impacts to the health, safety and welfare of owners or users of neighboring properties and the general public. County may also impose stricter standards based on range design, environmental resources and other site specific factors.

- |                      |                                   |
|----------------------|-----------------------------------|
| a. Range Design      | g. Roads, trails, waterways       |
| b. Security          | h. Environmental stewardship plan |
| c. Parking           | i. Operational Requirements       |
| d. Noise             | j. Enforcement                    |
| e. Range Orientation | k. Substantial modification       |
| f. Backstops         |                                   |

# PROPOSED AMENDMENTS - ARTICLE 4-602 cont'd

## a. Range Design

- (i) Pistol and Rifle Firing Ranges. Pistol and rifle firing range design shall include sufficient land area under control of the applicant for the surface danger zone (direct fire zone, safety zones, and ricochet zones) to accommodate the ballistics of the highest powered firearms and ammunition to be used on the range. Such geographic areas shall be based on industry-accepted range design guidelines, standards, and best practices. Such spatial requirements may be reduced in consideration of natural topographic features or manmade improvements, including but not limited to, backstop and side berms, bullet traps, ricochet catchers, and overhead or ground safety baffles which will provide sufficient safety measures to protect persons or adjacent properties. The range design and operation will impact the setbacks through defining the Surface Danger Zone.
- (ii) Shotgun Ranges. Trap ranges shall have a shotfall zone on property under control of the applicant, as established by a line which extends 50 yards to the right and 50 yards to the left of, and perpendicular to, the centerline of the trap house. From each end of said line, boundary lines having interior angles of 130 degrees shall extend down range for 300 yards. Skeet ranges shall have shotfall zones on property under control of the applicant which are a complete semi-circle with its center point located at the center point of a defined station and a radius of the semi-circle being 300 yards. Shotfall zones for trap live bird simulators, sporting clays, or other shotgun firing ranges shall be determined on a case-by-case basis.

# PROPOSED AMENDMENTS - ARTICLE 4-602 cont'd

- b. Security. The entire perimeter of Firing Range shall be fenced and signed to reduce the potential for trespass onto the property. In some areas topography or natural barriers may make fence placement unnecessary. In addition, warning signs identifying the range shall be posted around the perimeter of the parcel or parcels on which the shooting range is located such that each sign is visible and legible from the next (generally 200 yards but more frequently placed, depending on topography and vegetation). Fencing where wildlife is a concern should be designed and installed to be wildlife safe while maintaining all measures to secure a firing range and reduce potential for trespass on the property.
- c. Parking. At a minimum, there shall be 1.5 parking places for each firing position.

# PROPOSED AMENDMENTS - ARTICLE 4-602 cont'd

## d. Noise

(i) All firing line locations shall be located and maintained such that the sound levels generated by the discharge of firearms on the range do not exceed a 65 dB peak impulse response at existing residential structures (whether permanent or seasonal), lodging or other occupiable or occupied structures not on the subject property. The burden of proof that the proposed range will meet this standard shall rest with the applicant. All noise studies shall be performed by a professional engineer registered in the State of Colorado or other equally qualified individual.

e. Range Orientation. All firing lines should be aimed at target lines to the northeast, north or northwest unless there is sufficient screening, natural or manmade, to eliminate the effects of glare from the sun.

f. All backstops shall have sufficient depth of sand or other similar soft earthen material that is free of rocks, stones and other hard objects that may result in ammunition ricochets. All manmade berms shall be vegetated to reduce the potential for erosion. A manmade, mechanical backstop may be substituted upon approval. All backstops and berms shall be maintained to perform their intended functions.

# PROPOSED AMENDMENTS - ARTICLE 4-602 cont'd

- g. Firing ranges shall be developed such that there are no traveled roadways, trails, streams, ponds, lakes, or other watercourses or wetlands located within the Surface Danger Zone or within any Shotfall Zone.
- h. The developer/operator of the firing range facility shall provide to the Land Use Department at the time of application for the building permit final inspection a certification prepared by a Colorado registered engineer that the firing range facility has an environmental stewardship plan. The environmental stewardship plan may include semi-annual soil and water sampling, regular liming of the soil to prevent lead migration, reclamation and recycling of expelled ammunition and lead, and must comply with the Best Management Practices, specifically relating to lead management, as specified by the Environmental Protection Agency's (EPA's) most current edition of Best Management Practices for Lead at Outdoor Shooting Ranges.

# PROPOSED AMENDMENTS - ARTICLE 4-602 cont'd

## i. Operational Requirements

- (i) Hours of operation will be limited to the hours between 7:00 a.m. to 7:00 p.m. with the exception of shooting for educational activities which will be allowed until 9 p.m. up to one day per week, unless more restrictive hours are necessary to address impacts to surrounding areas.
- (ii) Alcohol or drugs must not be permitted on site.
- (iii) No tracer rounds or incendiary rounds permitted.
- (iv) Fire Safety and Response Plan must be filed and approved by local fire protection district and Sheriff.
- (v) Safety Plan must be filed and approved with Land Use Department and the Sheriff and range rules posted.
- (vi) At each firing range, there shall be operational large fire extinguisher(s), always immediately available for emergency use, stored at all shooting and target area. Number of extinguishers to be determined during the special use review process.
- (vii) On site emergency communication system required.
- (viii) Through the Special Review process the Board of County Commissioners (BOCC) may require periodic reviews to assure effective monitoring and operation of the range to protect the health and safety of those in the area and to ensure compliance with the special review approval. If at any time the BOCC finds the operation does not meet the design or operational expectations, they may modify existing conditions or impose additional conditions to address concerns including, without limitation, requiring on-site range staff, cameras, or corrective design measures.



# PROPOSED AMENDMENTS - ARTICLE 4-602 cont'd

j. Enforcement.

(i) Shooting range noise ordinance violations will be enforced if the following criteria are met:

1. A civil action or criminal penalty shall be sought against an approved range or its owners or operators on the grounds of noise emanating from such range that results from the operation or use of the range only upon a written complaint from a resident of Boulder County.
2. Written complaints must contain the name and address of the complainant, how long the complainant has resided at the address indicated, and the times and dates upon which the alleged excessive noise occurred. Enforceable complaints must meet the criteria of C.R.S. § 25-12-109, as amended.

(ii) Notwithstanding j.(i) above, any other of the provisions of this section may be enforced under Article 17 of the Code or by any legal or equitable means recognized by the Colorado State Statutes and the Colorado Court Rules, as amended.

k. Any future expansion that results in additional firing positions, a lengthened daily period of operations or increasing the length of the direct fire zone or the area of the shotfall zone in order to accommodate the use of firearms not identified in the then existing special use permit application would constitute a substantial modification under 4-603 of this Code.

# SUMMARY AND RECOMMENDATION

- The overall goal of these the proposed regulations is mitigate the effects of dispersed shooting by setting regulations that will allow dedicated shooting locations with proper safety and noise requirements.
- Staff finds that proposed Land Use Code amendments meet the criteria in Art. 16-100 of the Land Use Code in that:
  1. *the existing text is in need of the amendment;*
  2. *the amendment is not contrary to the intent and purpose of this Code;*
  3. *the amendment is in accordance with the BCCP*
- **Land Use staff recommends that the Boulder County Planning Commissioners approve Docket DC-15-0003: Proposed Boulder County Land Use Code Amendments to Article 4 and Article 18 regarding firing ranges.**

