Purpose
The purpose of this policy is to reduce the severity of crashes associated with vehicles that leave the traveled way by removing or mitigating obstructions within county secondary road system Rights-of-Way (ROW).

Scope
This policy applies to all Linn County Secondary Roads. It applies to all obstructions including headwalls, utility poles, fences, trees and mailbox supports existing within the County ROW. County policy is to remove obstructions when practical and to maintain adequate clear zones within county road ROW for utility poles and other obstructions that are not removed.

Objectives
The objectives of this policy are to provide safer roadways by reducing roadside hazards due to obstructions and to establish a process for this to be accomplished. The County Engineering and Secondary Road Department will attempt to provide a “clear zone” within which obstructions are removed or shielded to protect drivers from potentially severe crashes. The department will also facilitate establishment of recovery areas within county ROW.

Definitions
1. Obstruction: Any object that presents an abrupt vertical surface that could be potentially impacted directly by a vehicle leaving the traveled way.

2. Traveled Way: Designated driving surface of a road (excluding the shoulder).

3. Rights-of-Way (ROW): Property obtained through deed or permanent easement reserved for construction of and/or maintenance of transportation facilities (typically 33’ to 60’ from centerline on each side of county roads).

4. Roadside: Areas within R.O.W. that are outside the Traveled Way.
5. Clear Zone: A distance from the outside edge of the traveled way away from the road (minimum of 10').

6. Culvert: A conduit for conveying surface water through an embankment. Secondary roads are usually constructed upon embankments that cross through drainage areas unless a bridge is required. Driveways are also constructed upon embankments for the purpose of crossing a ditch, which usually requires a culvert to maintain drainage.

7. Headwall: A vertical cutoff wall (of any material) constructed to a height above the surface of greater than six inches usually at the inlet, or outlet end of a culvert or drain.

8. 1:1 Slope: A 45 degree incline or 1 unit horizontal distance for the same vertical distance.

9. 3:1 Slope: 3 units horizontal distance for each unit vertical distance.

10. 4:1 Slope: 4 units horizontal distance for each unit vertical distance.

11. 6:1 Slope: 6 units horizontal distance for each unit vertical distance.

12. 10:1 Slope: 10 units horizontal distance for each unit vertical distance.

**Procedures**

**Background**

Counties and other road maintenance jurisdictions have been working for years to remove or shield hazardous roadside objects or obstructions in order to minimize the chance of these objects being struck by errant vehicles. Signs and mailboxes are placed on breakaway supports; culvert headwalls are either removed or shielded with guardrail and grates. Often culverts themselves can be extended, fore-slopes flattened, and trees removed to create a more "forgiving roadside". This forgiving roadside concept seeks to give drivers who lose control of their vehicles a recovery area outside of the traveled way within which they can either recover control or bring their vehicle to a stop without striking a solid obstruction.

Driveway headwalls, as a vertical obstruction, constitute a severe hazard to errant vehicles within the ROW and especially in the clear zone. The consequences of striking a vertical driveway headwall are disastrous for the driver and vehicle. The collision with a driveway headwall is as severe as driving into a concrete or brick wall. Proper design calls for driveways to be sloped so that they are traversable by an errant vehicle. For a driveway to be traversable, it must be flatter in slope than a 3:1 for low speed roads and 6:1 for higher speed roads. Optimum driveway slopes are 10:1 or flatter.

Headwalls are one type of obstruction concern. These structures have been constructed within the ROW without permission or discussion with county road officials. The law places property owners who have driveway headwalls in violation of the Code of Iowa. A Non-crash worthy mailbox support is another common example of an obstruction that can cause severe injury in a collision.
Authority
Counties are charged with a right and a duty to remove obstacles identified as obstructions from within road ROW under Chapter 318 Section 5 of the Code of Iowa.

Furthermore, alterations and other changes may not be made within the county ROW without a permit as stated in Chapter 318 Section 8 of the Code of Iowa. It has been longstanding county policy to prohibit the construction of obstructions within the ROW.

Notice to Remove Obstructions
County efforts will be to remove all obstructions in the clear zones on roads with speed limits of 45 mph or greater as they are discovered with or without notice because they represent a clear hazard. Obstructions discovered on lower speed roadways will result in property owners being sent a notice to remove if the obstruction does not pose an immediate danger. Iowa Code requires property owners remove the obstruction within 48 hours following the notice. If the property owner does not remove the obstruction within the 48 hour period, or contact the county engineer for a time extension, the county will remove the obstruction and bill the cost of the work to the property owner. The cost of the work will be collected as provided in the Code of Iowa.

Obstruction Agreement
Obstructions allowed to remain by the Linn County Board of Supervisors within the county right-of-way require an agreement between the County Engineer and the property owner. Obstructions outside the clear zone for the road may be allowed by agreement only. Obstructions within the clear zone allowed to remain by the Linn County Board of Supervisors shall have agreements providing insurance with liability limits set by the Board and naming Linn County as additional insured.
RESOLUTION FOR SETTING INSURANCE REQUIREMENTS
Linn County Resolution No. 2013-S-91

WHEREAS, the Board of Supervisors, Linn County, Iowa has a policy controlling obstructions within the county right-of-way, and

WHEREAS, the Board of Supervisors, Linn County, Iowa, requires obstructions retained by agreement within the county clear zone as defined in policy to provide insurance naming Linn County as additional insured.

NOW, THEREFORE, BE IT AND IT IS HEREBY RESOLVED by the Board of Supervisors, Linn County, Iowa this date met in lawful session, that the insurance required by policy provide the following limit:

Liability coverage of no less than $1,000,000 per occurrence.

Resolution adopted this 21st day of May, 2013

Linn County Board of Supervisors

Chairperson

Vice Chairperson

Supervisor

Supervisor

ATTEST:

Linn County Auditor