

CHAPTER 4 – ENTRANCE AND DRIVEWAY

4.1.1 Policy

Iowa Code Section 318.8, as amended, requires that permits be acquired from Mills County, Iowa prior to making physical alterations within county road right-of-way. It is the policy of Mills County to permit access to private land via entrances connected to its public roads subject to the regulations set forth within this Ordinance. Mills County strives to provide for motorist safety while minimizing road maintenance costs and maintaining drainage.

4.1.2 Definitions

This Section defines words and terms used within the body of the Ordinance. Any definitions not contained herein are set forth in the Urban Standard Specifications for Public Improvements or the Urban Design Standards for Public Improvements.

- a.** AASHTO: American Association of State Highway Transportation Officials
- b.** County: Mills County, Iowa
- c.** Crown: The grading of an entrance with its centerline higher than the shoulders, so that water will drain off.
- d.** Engineer: The Mills County Engineer
- e.** Fore slope: The slope extending down from the shoulder edge-line of a road or entrance down into the ditch.
- f.** Iowa D.O.T: The Iowa Department of Transportation
- g.** Joint access driveways/shared drives: A driveway servicing no more than two parcels or divisions of land or platted lots. Joint access shall require mutual consent and both landowners sign the driveway permit. A shared drive will constitute one driveway for location purposes.
- h.** Major Subdivision: All subdivisions not classified as either a minor subdivision, parcel split or property line adjustment, including but not limited to any size subdivision requiring new public roads, or the extension of any public facilities, or the creation of any public improvements.
- i.** Micro-paving: Placement of asphalt or bituminous paving less than three inches thick.

- j. Seal Coat: A road and entrance surfacing constructed by embedding a cover aggregate in a bituminous material.
- k. Sight Distance: The distance from 4 feet above the road surface to an obstruction in the road as per AASHTO guidelines.
- l. Toe-of-slope: The point or line where a slope ends, and flat grade begins.

For the purpose of this Ordinance, the terms “driveway” and “entrance” are the same.

4.1.3 Entrance Permit Application and Approval

The County regulates the placement of entrances along the public roads under its jurisdiction and each entrance must have a county permit. All entrances built prior to the effective date of this Ordinance may continue in use and shall be considered to have valid permits. In the event that the use of the driveway changes and/or is modified, or if the traffic is expected to increase, it shall comply with current standards.

All parcels of land existing prior to September 1, 1996, will be guaranteed at least one entrance, per Section 4.1.4(e), below.

a. Permit for Entrance to an Existing Parcel or Tract of Land

A property owner desiring to install a new entrance and/or modify an existing entrance to an existing parcel or tract of land shall file an application with the Mills County Secondary Roads Department and pay the required fee. The application shall identify the road and location of said entrance. The Engineer shall conduct a detailed review of the proposed entrance site and application to determine if it will comply with the location requirements set forth in this Ordinance. In the event this Ordinance does not cover a circumstance, then the driveway must conform to the Urban Design Standards for Public Improvements.

If the site satisfies all criteria, the Engineer may issue a permit as well as establish the culvert diameter and length. If the proposed entrance location fails to meet one or more location and/or design requirements, the Engineer may reject the application, explaining the reasons for such action and advising what changes are necessary to obtain a permit.

b. Permit for Entrance to a New Parcel or Tract of Land

A property owner desiring to install an entrance to a new parcel or tract of land, split or subdivided from an existing parcel or tract of land, shall file an application with the Mills County Secondary Roads Department and pay the required fee for each requested entrance. Each application shall identify the road and location of said entrance. The Engineer shall conduct a detailed review of the proposed entrance site and application to determine if the entrance will comply with the location requirements set forth in this Ordinance. In the event this Ordinance does not cover a circumstance, then the entrance must conform to the Urban Design Standards for Public Improvements.

If the site satisfies all criteria, the Engineer may approve entrance location as well as establish the culvert diameter and length. The installation of the entrance shall not take place until the plat of survey or final plat of the subdivision is recorded with the Mills County Recorder. An entrance permit shall be issued by the Engineer after the property owner presents a recorded copy of the plat of survey or final plat of the subdivision to the Engineer.

c. Access Rights and Requirements

All parcels of land created before September 1, 1996 are entitled to have one entrance to be located at the safest possible location along the road on which the parcel fronts. Parcels created thereafter must meet all requirements of paragraphs 4.1.1 through 4.1.4.

d. Variance procedure

If a property owner desires to build an entrance at a location that fails to meet the criteria set forth in this Ordinance, he/she may file a request for a variance. Such a request should identify the location of the proposed entrance and describe how full compliance with ordinance requirements constitutes an undue hardship. The variance application form along with the application fee shall be provided to the Engineer, who shall present it to the Board of Supervisors within twenty (20) days of receipt. After consideration of the request and any other relevant information, the Board of Supervisors will approve or deny the variance.

e. Permit Time Limit

An entrance permit shall become null and void if the entrance it pertains to has not been installed within one hundred eighty (180) days following the date of issue. A time extension may be requested in writing and approved at the sole discretion of the Engineer. There shall be no fee associated with a time extension.

4.1.4 Entrance Location Regulations

To assure safe driving conditions and minimize adverse impacts on road maintenance, entrances shall be connected to public roads only at locations that comply with the requirements set forth in this Ordinance.

a. Sight Distance

Entrances may be approved at any location where the available sight distance equals or exceeds the desirable sight distance specified in this Section. Driveways and roads may not be approved unless they meet the minimum sight distance requirements of this Section.

(1) Main Line County Roads

All driveways, field or business entrances, and subdivision street intersections shall meet the following specifications for sight distance and constructions standards.

Minimum Sight Distance Requirements:

15 mph	170 feet
20 mph	225 feet
25 mph	280 feet
30 mph	335 feet
35 mph	390 feet
40 mph	445 feet
45 mph	500 feet
50 mph	555 feet
55 mph	610 feet

Speed limits shall be posted or as set forth in Iowa Code Section 321.285, as amended.

The County reserves the right to make exceptions in extraordinary circumstances to the sight distance requirements at the discretion of the Engineer where the exercise of sound and reasonable engineering judgment indicates that literal enforcement of the Ordinance is not practical or in the best interests of the public. Public safety will not be compromised in such circumstances.

(2) Major Subdivisions

A minimum sight distance of 280 feet may be used for locating entrances along access roads internal to rural residence subdivision provided the posted speed limit on the roadway is twenty-five (25) miles per hour or less.

(3) Sight Distance Measurement

Sight distance determinations shall be performed using AASHTO guidelines.

b. Entrances Prohibited Adjacent to Public Road Intersections

An entrance from a road must be offset at least 300 feet from intersecting roads. The offset distance shall be measured from center of entrance to center of intersection.

c. Offset From Drainage Structures

Entrances must be located at least 100 feet from the ends of bridges, and fifty (50) feet from the ends of culverts having a diameter or span over sixty (60) inches. Entrances may be located closer to smaller culverts so long as the entrance does not obstruct the flow of drainage into the culvert.

d. Minimum Separation Between Entrances

The minimum separation between all entrances shall be 50 feet, except that the Engineer has the authority to increase this distance based on surrounding land uses and traffic volumes.

For Major Subdivision roads, the minimum spacing requirement will be relaxed to permit one entrance to each lot, provided such entrances comply with paragraphs 4.1.4(a) and 4.1.4(c), above.

e. Right of County to Require Relocation

The County may require that an entrance be relocated for any of the following reasons:

- (1) To improve road safety;
- (2) To eliminate road maintenance problems; and
- (3) To facilitate reconstruction of the road.

The County will pay the cost of such relocation.

4.1.5 Entrance Design and Construction Requirements

This Section specifies how driveways are to be laid out and built.

a. Entrance Embankment

(1) Width, Crown, and Alignment

Width of driveways measured at the right-of-way line shall be as specified below:

- (a)** Geometry of the driveway shall be in accordance with the following:

	Minimum	Maximum
Residential Drives	15 ft.	24 ft.
Shared Residential Drive	24 ft.	24 ft.
Agriculture	20 ft.	45 ft.
Commercial/Industrial	24 ft.	45 ft.

- (b)** Entrances shall be crowned to shed water into the road ditches.
- (c)** Entrances should intersect with public roads at a ninety (90) degree angle and may not intersect at an angle less than seventy-five (75) degrees.

- (d) The first twenty (20) feet off the shoulder of the road shall be straight and have a minimum minus two percent (-2%) slope. Horizontal curves must be outside that range.

(2) Foreslopes

Entrance fore slopes, from edge-of-shoulder down to toe-of-slope, shall have slope ratios as specified below: (The notation, x: 1, indicates a slope with a ratio of “x” feet of horizontal measure per 1 foot of fall.)

Paved Roads:	4:1 – Standard minimum 6:1 – If traffic volume exceeds 600 vehicles per day 8:1 – If traffic volume exceeds 800 vehicles per day
Oiled Roads:	4:1 – Standard minimum 6:1 – If traffic volume exceeds 800 vehicles per day
Gravel Roads:	3:1 – Standard minimum 4:1 – If fill height exceeds 8 feet
Dirt Roads:	2:1 – Standard minimum 3:1 – If fill height exceeds 8 feet

(3) Grading and Slopes

Entrance centerline profiles shall match the shoulder slope between edge of pavement and road shoulder line, then descend at half ($\frac{1}{2}$) inch per foot to a point twenty (20) feet offset therefrom. Beyond that point, the entrance may curve up or down, as required by the lay of the land. An entrance sloping up to the road shall not be steeper than five (5) percent within public right-of-way. Entrances descending towards the road shall not be steeper than four (4) percent within public right-of-way.

(4) Ditches

If storm runoff follows a driveway towards a public road, the County may require that side-ditches be excavated along the driveway to intercept the water and carry it down into the road ditch. Such side-ditches shall be at least eighteen (18) inches deep, have a flat bottom two (2) feet wide, and may be required, as a condition of permit approval, to extend up to twenty (20) feet inside the private land.

b. Culverts and Drainage

Unless an entrance is located at a point where the road ditch drains away from the entrance in both directions, the entrance shall have a culvert. Culverts shall be set as far from the road fore slope as possible.

(1) Allowable Pipe Materials

All culvert pipes shall be new, riveted, annular corrugated, galvanized or aluminized steel pipe that complies with Iowa D.O.T Specification 4141. Concrete pipe and spiral pipe are not acceptable materials for entrance culverts. Pipe wall thickness shall be determined according to the depth of cover tables contained in the Iowa D.O.T. Standard Road Plan No. RF-32. $2 \frac{2}{3} \times \frac{1}{2}$ corrugations may be used for pipe diameters up to thirty-six (36) inches. Forty-two (42) inch through 120-inch diameter pipe shall have 3 x 1 corrugations. The Engineer shall determine and specify the gauge of the culvert. A professional engineer licensed in the State of Iowa shall design pipes larger than 120 inches.

When required, the new culvert pipe diameter shall match existing pipe diameter. The installer shall properly join existing and new culverts utilizing only manufacturer recommended jointing methods.

(2) Diameter and Length

The Engineer shall determine the required diameter and length for each culvert based on the entrance width, road grade, ditch depth, traffic volume, and drainage area served by the culvert; however, no culvert may be less than eighteen (18) inches in diameter.

(3) Design Types

A standard, straight-line grade culvert is permissible unless the total drop from inlet to outlet exceeds six (6) feet. For larger drops, the County may require the culvert be built with nearly level inlet and outlet sections connected together by a steeper section.

(4) Culvert Accessories

In certain situations, culverts shall be built with special accessories.

(a) Pipe Aprons

The Engineer has sole discretion to require the installation of pipe aprons along paved roads having a traffic volume in excess of 800 vehicles per day. In such cases, the property owner shall install a Safety Slope Apron, per Iowa D.O.T. Standard Road Plan DR-211, which can be found here.

<https://www.iowadot.gov/erl/current/RS/Navigation/nav.htm>

(b) Headwalls

The Engineer has sole discretion to require culverts of diameter forty-eight (48) inches and larger to have a reinforced concrete headwall and slope collar installed on the inlet end. The property owner also may be required to install outlet headwalls.

(c) Anti-Seepage Collars

The County may require the installation of a metal diaphragm or concrete anti-seepage collars to prevent entrance washouts.

(d) Wood, Brick, Concrete or Stone End-Walls

Wood, brick, concrete, stone, or masonry end-walls/retaining walls shall not be erected within the public right of way unless approved by the Engineer.

(5) Fill Material

Fill material shall consist of earth capable of supporting vegetation. Rubble such as broken concrete and fieldstone may not be used as fill material. Also, no contaminated soil as defined by the Iowa Department of Natural Resources or debris is allowed as fill material.

c. Entrance Bridges

When ditches carry more water than culverts can handle, the County may require the property owner to install an entrance bridge in lieu of an earth-fill entrance. The property owner shall be responsible for the design and construction costs of the bridge. The bridge shall be constructed in accordance with County standards and approved by the Engineer prior to construction. The property owner is responsible for all necessary state and federal permits. Once the bridge is constructed and approved by the Engineer, ownership lies with the County.

d. Entrance Accessories

(1) Entrance Surfacing

Subject to the County's approval, entrances may be surfaced with rock, seal coat, asphalt, or concrete at the property owner's expense. The County shall not be liable for any surfacing cost or for damage to entrance surfacing caused by road operation and maintenance. A property owner shall obtain prior written approval from the Engineer before installing a seal coat, asphalt or concrete surface.

If a culvert under a surfaced entrance must be repaired or replaced, the property owner shall be responsible for the cost of surface removal and replacement; however, if the County rebuilds or modifies the entrance as part of a road project, it will replace all surfacing in kind.

(a) Rock Surfacing

Rock surfacing shall use crushed stone or gravel with maximum particle size not to exceed one and one half (1 ½) inches.

(b) Paved Surfacing

All paved entrances along a seal coat/micro paved county roadway shall terminate at least five (5) feet back from the paved roadway edge.

Paved entrances along a full depth concrete or full depth asphalt county roadway may abut the roadway, except a one (1) inch wide expansion joint shall be installed between the edge of the pavement and any portland cement concrete (PCC) entrance surfacing.

(2) Joint Access Drives

A new joint or shared drive shall have the same surfacing material in all of the county right-of-way. Drives having the same surfacing material shall be abutted together and provide drainage away from the county road.

(3) Gates

Gates shall not be installed and/or open into County right-of-way.

(4) Stock Guards

Stock guards may be built partially within the public right-of-way. The stock guard shall encroach no more than three (3) feet into the right-of-way and must remain at least sixteen (16) feet from the road shoulder line. Guards shall not obstruct the flow of drainage in the road ditch.

(5) End of Driveway Markers

Property owners may install reflective delineators at the ends of their entrance to facilitate night access, but such devices shall use only blue lenses and shall be set at least ten (10) feet off the edge of the road.

(6) Extra Drives

No lots will be granted an additional driveway unless the second drive meets the specifications of this Ordinance.

e. Entrance Construction Requirements

An installer shall mechanically compact entrance fills. Culverts shall be laid only on uniformed, prepared bedding and the backfill around them shall be thoroughly tamped by the installer. Excess or waste materials shall be removed from the public right-of-way. Entrance embankments shall be built to have the exact top width specified in the permit and no more. Grades and slopes shall be as specified within this Ordinance.

4.1.6 Entrance Installation and Maintenance

All new entrances, installation costs and culverts shall be at the expense of the property owner. The County will provide entrance installation subject to the conditions set forth in this Section.

a. New Entrances

The County will provide entrance installation upon request of the property owner and payment of all necessary costs by the property owner. The County will charge the property owner for the cost of labor, equipment, and non-culvert material expenses. A property owner shall furnish and pay for the culvert. After installation, the culvert becomes property of the County.

b. Work by County Approved Contractor

The property owner may hire, at his/her expense, a private contractor to install an entrance. The Engineer shall approve such contractors before the contractor engages in any work. The Engineer shall issue instructions and guidelines to all approved entrance installers as circumstances dictate.

(1) Contractor Requirements

Prior to performing any entrance work, a contractor shall apply to the Engineer's office to obtain written authorization to perform entrance work. To obtain authorization, contractors must:

- (a)** Have adequate equipment for excavating, hauling, and compacting dirt.
- (b)** Present evidence of satisfactory liability insurance.
- (c)** Receive a copy of this Ordinance.
- (d)** Have personnel with grading/excavating experience; and
- (e)** Have adequate traffic work zone signs.

Developers and other parties may act as their own contractor as long as they meet the criteria in this Section. The County may rescind the approval of any contractor who ceases to fulfill the criteria or build entrances that do not comply with this Ordinance.

Prior to receipt of authorization to build entrances, each contractor shall submit an insurance certificate showing coverage at least equal to those required by Iowa D.O.T. specifications 1107.02 and list Mills County as a named insured on the contractor's insurance policy. Entrance contractors may not excavate materials from County road ditches unless the Engineer provides written authorization.

(2) County Driveway Inspection

After completing a new entrance, contractors shall notify the Engineer, which shall inspect the work and either accept or reject it. If the work is rejected, the entrance may not be placed into service until the relevant deficiencies have been corrected and re-inspected by the Engineer.

(3) One-Call Required Before Digging

All contractors are required to notify the Iowa One-Call center and wait for utility company locates before performing any excavation for an entrance. (1-800-292-8989) The County is not liable for a contractor's failure to utilize the Iowa One-Call service.

c. Entrance Repairs

The County will replace deteriorated culverts, rebuild washed out entrances, relay undermined pipes, and rebuild entrance bridges. The County will incur the cost of labor, equipment, and materials required for this work. These repairs are at the discretion of the Engineer.

d. Entrance Maintenance

The property owner will perform entrance maintenance, such as filling small gullies, reshaping side ditches, restoring proper crown and profile, and such other minor, non-culvert related, items as may, in the opinion of the Engineer, be necessary. The County will notify the property owner of noncompliance with this Ordinance. The property owner is responsible for diverting any drainage that goes onto the County road. The County will charge a property owner for any amount over \$250.00 for a single repair on one entrance if the County completes any of the above-mentioned work.

e. Surfacing

Per Section 4.1.5(d)(1) above, property owners are exclusively responsible for any entrance surfacing.

f. Property Owner Activities

Property owners may perform maintenance and/or apply surfacing on their entrances with or without County approved contractors. Property owners shall not change the size of an entrance, relocate it, nor fill in the County road ditches. Property owners may regrade road backslopes and perform landscaping within the public right-of-way if they first secure approval from the Engineer and reseed all disturbed areas. Obstruction will not be allowed in the County right-of-way as defined in Iowa Code Chapter 318, as amended.

4.1.7 Special Requirements Pertaining to Land Subdivision

Property owners shall refer to Chapter 25 – Subdivision Regulations of the Mills County Code of Ordinances for specific regulations concerning entrances for land being partitioned into smaller parts by Plat-of-Survey, Plat of Subdivision, Auditor’s Plat, or deed partitioning. This Section applies to land subdivided after passage and/or amendment of this Ordinance.

4.1.8 Special Items

a. Coordination with Rural Addressing

Property owners shall refer to Chapter 3 - Uniform Rural Address System of the Mills County Code of Ordinances for specific regulations concerning rural addresses.

b. County Cost Participation – Instances and Limitations

If the County has acquiesced to a diversion of natural drainage using a County road ditch, the diversion may necessitate the installation of culverts larger than required prior to the diversion. Property owners benefiting from such diversion shall pay the full cost of any culvert necessary for the diversion of natural drainage.

c. Fees

(1) Application Fees

The property owner shall pay the required fee upon submission of the appropriate application form. The Engineer shall take no action until the property owner pays the required fee in full.

(2) Fee Schedule

The driveway application fee can be found in the Schedule of Fees adopted by resolution by the Board of Supervisors.

d. Abandoned Entrances

When an entrance has ceased to be used, the Engineer may contact the property owner and request permission to remove it. If the property owner agrees, the Engineer shall cause the entrance to be removed at County expense.

4.1.9 Ordinance Administration and Enforcement

a. Ordinance Administration

The Engineer shall implement and administer the terms and requirements of this Ordinance.

b. Administrative Enforcement Procedures

(1) Entrances

If an entrance is constructed or altered without the approval of the Engineer, or if the work is not completed in conformity with an approved permit, the Engineer shall notify the property owner thereof by certified mail of the violation. Furthermore, the Engineer shall notify the property owner of the need to restore the area to the standards that existed immediately prior to construction or alteration and/or advise the property owner of the changes necessary for the entrance to conform to this Ordinance. If after twenty (20) days the property owner has not made the necessary changes, the Engineer may make the necessary changes and immediately send a statement of the cost to the property owner. If the cost is not paid within thirty (30) days of sending the statement, the Engineer may institute proceedings to collect the cost. The Engineer may refuse to grant any new entrance permits to a property owner responsible for a non-complying entrance until the property owner corrects the problem and pays any outstanding invoices.

(2) Contractors

The Engineer may bar a contractor from performing entrance work if the contractor fails to meet all the requirements of Section 4.1.6(b)(1), above, or if the contractor has performed entrance work that violates the requirements of this Ordinance. The Engineer may reinstate a contractor who voluntarily corrects any violation.

c. Legal Enforcement

Any person who fails to comply with this Chapter shall be deemed guilty of committing a county infraction as defined in Chapter 5 – Violations and Penalties of the Mills County Code of Ordinances.