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**Please return to:
Planning & Development**

**STORY COUNTY IOWA
ORDINANCE NO. 310**

AN ORDINANCE AMENDING, CHAPTER 85.08 – DEFINITIONS, CHAPTER 86 – DISTRICT REQUIREMENTS, CHAPTER 87—LAND DIVISION REQUIREMENTS, AND CHAPTER 88 – GENERAL SITE PLANNING STANDARDS, OF THE STORY COUNTY LAND DEVELOPMENT REGULATIONS OF THE STORY COUNTY CODE OF ORDINANCES.

BE IT ENACTED by the Board of Supervisors of Story County, Iowa:

Section 1. Purpose. An Ordinance amending Chapter 85.08—Definitions, Chapter 86—District Requirements, Chapter 87—Land Division Requirements, and Chapter 88—General Site Planning Standards of the Story County Land Development Regulations, as follows, to update the general site planning standards for development located within the unincorporated areas of Story County, including updating protections for critical natural resource areas when development is proposed.

Section 2. Proposed Amendments. The amendments are as shown in Attachment A of this ordinance and are summarized below.

85.08, Definitions:

- Adding several definitions related to natural resources.

86, District Requirements:

- In **86.15**, removing the R C Residential Conservation Design (Overlay) District.

87, Land Division Requirements:

- In **87.07, 87.08, and 87.09**, adding language that specific subdivision plats will denote critical natural resource areas.

88, General Site Planning Standards:

- **In 88.03**, adding criteria for development on slopes of 15% or greater, as well as criteria for requesting lot size reductions when protecting agricultural lands or critical natural resources.
- **In 88.05**, adding requirements for protecting critical natural resources, including wetlands, prairie and savanna remnants, steep slopes, creeks and streams, and significant trees. Additionally, providing thresholds for critical natural resource impacts and mitigation standards. Clarifications to erosion control requirements and post-construction stormwater management plan requirements.

Section 3. Repealer. All ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

Section 4. Saving Clause. If any section, provision, or part of this ordinance shall be adjudged invalid or unconstitutional, such adjudication shall not affect the validity of the ordinance as a whole or any section, provision or part thereof not adjudged invalid or unconstitutional.

Section 5. Effective Date. This ordinance shall be effective after its final passage, approval and publication of the ordinance or a summary thereof, as provided by law.

Action upon FIRST Consideration: _____
DATE: TBD

Moved by: _____
Seconded by: _____
Voting Aye: _____
Voting Nay: _____
Not Voting: _____
Absent: _____

Action upon SECOND Consideration: _____
DATE: TBD

Moved by: _____
Seconded by: _____
Voting Aye: _____
Voting Nay: _____
Not Voting: _____
Absent: _____

Action upon THIRD Consideration: _____
DATE: TBD

Moved by: _____
Seconded by: _____
Voting Aye: _____
Voting Nay: _____
Not Voting: _____
Absent: _____

ADOPTED THIS _____ day of _____, _____.

Chairperson, Board of Supervisors

Attest:

County Auditor

ROLL CALL	Latifah Faisal	Yea___	Nay___	Absent___
FOR ALLOWANCE	Lisa Heddens	Yea___	Nay___	Absent___
	Linda Murken	Yea___	Nay___	Absent___

ALLOWED BY VOTE OF BOARD	Yea___	Nay___	Absent___
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_____ CHAIRPERSON	Above tabulation made by _____
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ATTACHMENT “A”

Definitions—to be revised in Chapter 85.08 of the Story County Land Development Regulations

“Aquatic bed wetland” means wetland habitats dominated by plants that grow principally on or below the surface of the water for most of the growing season in most years.

“Archaeological features” means those materials documenting past human life and activities and having cultural and/or historic significance. This includes, but is not limited to, ancient burial grounds, pioneer cemeteries, and Native American mounds.

“Basal Diameter” means the diameter of a shrub’s stem measured at the top of the root collar, just above the ground.

“Coniferous trees” means those tree species that are cone-bearing and mostly do not seasonally lose their needles.

“Deciduous trees” means those tree species that seasonally lose all of their leaves.

“Development yield” means the net acreage of a parcel, lot, or tract divided by one (1) unit per acre. The resulting yield is the number of buildable lots allowed to be created by a proposed subdivision.

“Critical natural resource area” means areas including wetlands, lakes, reservoirs, streams, steep slopes, archaeological resources, native prairie, native savanna, significant trees, and other areas deemed sensitive by the Story County Conservation Board and/or the Countywide Watershed Assessment. These areas may be mapped as Natural Resource Areas on the C2C Future Land Use Map or as Environmentally Sensitive Areas on the Ames Urban Fringe Plan Land Use Framework Map, and other areas as identified on the Restoration and Protection maps available on the Story County website under watershed planning.

“Farmed wetland” means those wetlands defined by the Natural Resources Conservation Service (NRCS) as wetlands that have been manipulated in some way, generally through tiling, but still have surface water or soil saturation meeting the criteria for a wetland according to a qualified professional.

“Forested wetland” means a wetland characterized by woody vegetation that is 6 meters tall or taller.

“Grading permit” means a permit issued by the Planning and Development Director of Story County, Iowa, or their designee, for ground disturbing activities and vegetation removal associated with site preparation for construction activities, including altering topography for drainage. In critical natural resource areas, grading permits are also required for tree grubbing and other vegetation removal.

“Hydric soils” means soils that are saturated, flooded or ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic vegetation. A list of hydric soils is available at the Natural Resources Conservation Service (NRCS).

“Impact” means any disturbance to a critical natural resource area that negatively alters its form and function, including, but not limited to, grading and earth disturbance, construction, vegetation removal, and vehicle or heavy machinery movement. Impact does not include critical area restoration,

maintenance, and other best management practices.

“Iowa Coefficient of Conservatism” means plant species in Iowa that have been assigned a coefficient of conservatism (ranging from 0 to 10) according to the latest Iowa Natural Resources Conservation Services list, and representing the probability that a species is likely to occur in a landscape relatively unaltered from a pre-settlement condition.

“Limits of disturbance” means an area delineated on a site plan, subdivision plat, or use permit that establishes the maximum extent of allowed impact to steep, critical, or protected slopes. Impact to areas beyond the limits of disturbance constitutes a violation of the approved permit.

“Mitigation” means the restoration, establishment, or preservation of critical natural resource areas or other areas deemed sensitive by the Story County Conservation Board and/or the Countywide Watershed Assessment.

“Mitigation, compensatory” means the restoration, establishment, or preservation of aquatic resources, including wetlands, streams, hydric soils and stream riparian buffer areas.

“Mitigation plan” means a plan that outlines procedures for avoiding, minimizing, and compensating adverse impacts to critical natural resource areas, and includes, but is not limited to, outlining provisions for long-term management, permanent protection, suitable remedial action, and monitoring and reporting.

“Old growth forests” means forest stands that have developed, undisturbed, over a long period of time and contain large tree species and a complex stand structure.

“Savanna, remnant” means areas containing a mixed association of native open grown trees, frequently oaks and hickories, in grassland and forbs, including understory that has been degraded and converted to cool season grasses.

“Native woodland shrubs” means those shrub species typically found among forest stands endemic to Iowa and does not include those identified as invasive species by the Iowa Department of Natural Resources.

“Natural resource areas” is a designation on the *Cornerstone to Capstone (C2C) Future Land Use Map* and includes critical natural resource areas.

“Prairie, remnant” means prairie that has remained relatively untouched or undisturbed by development, including tillage and over-grazing, and was once part of the larger, original landscape.

“Protected areas” means critical natural resource areas that shall only be impacted in accordance with provisions of Chapter 88.05 of the Story County Land Development Regulations.

“Qualified professional” means an individual who can demonstrate that they have completed appropriate training, certification, and/or experience to evaluate individual or multiple critical natural resource area types, including, but not limited to, prairie remnants, savanna remnants, native trees and shrubs, riparian areas, and archaeological resource areas, and complete a site assessment and/or mitigation plan.

“Replacement plan” means a plan that outlines how and where significant trees and/or shrubs will be replaced when a zoning or grading permit causes over one (1) acre of significant trees and/or shrubs to be impacted on a parcel. This plan type may be approved by the Planning and Development Director.

“Riparian buffer areas” means those vegetated or previously vegetated areas that are adjacent to or near rivers, streams, watercourses, or wetlands and populated by native vegetation species.

“Riverine wetland” means those wetlands found in floodplains and riparian zones associated with stream channels.

“Significant tree” means a **native**, deciduous tree with a caliper of greater than four inches measured four feet off the ground or a **native**, coniferous tree taller than 15 feet **and does not include those trees identified as invasive species by the Iowa Department of Natural Resources** (See Figure 7).

“Significant shrub” means a native shrub with a basal diameter of at least three inches.

“Slopes, significant” means slopes on the natural terrain of at least fifteen percent (15%). These slopes are susceptible to erosion, sliding, or collapsing. Slopes created through the addition of fill are not covered under this definition.

“Suitable remedial action” means corrective action taken in the event that a mitigation plan for a critical natural resource area fails.

“Vegetation classes” means those categories of wetland indicator plants found in the U.S. Army Corps of Engineers’ *National Wetland Plant List Indicator Rating Definitions* and the current, adopted *National Wetland Plant List*.

“Watercourse” means any natural or improved stream, river, creek, ditch, channel, canal, conduit, gutter, culvert, drain, gully, or swale, **or other drainageway** in which waters flow either continuously or intermittently.

“Wetlands” means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. The diagnostic characteristics of wetlands are vegetation, hydric soils and hydrology.

“Wetland specialist” means an individual certified by the Society of Wetland Scientists or has taken the forty (40) hour United States Army Corps of Engineers Wetland Delineator Certification Training Program. Wetland Specialists shall demonstrate to the Director that they have expertise in wetland science.

Amendments to Chapter 86 of the Story County Land Development Regulations for District Requirements

86.15 – R-C RESIDENTIAL CONSERVATION DESIGN (OVERLAY) DISTRICT.

~~—1. Statement of Intent. The purpose of the Residential Conservation Design (Overlay) District is to establish housing developments in a rural setting characterized by compact lots and common open space where the natural features of land are maintained to the greatest extent possible. The intent is to establish rural housing in a way that respects and conserves the rural character, maintains natural resources, and protects environmental amenities.~~

~~—2. Applicable Base Districts. The provisions of this section may apply to residential development within the following districts: A-R, Agricultural Residential, R-1, Transitional Residential, and R-2, Urban Residential.~~

~~—3. Subdivision Application Procedure and Approval Process. Applications to develop land within the R-C Residential Conservation Design (Overlay) District are subject to the process defined in this section.~~

~~—A. Conceptual Review. Before submitting an application for a subdivision located within the Residential Conservation Design (Overlay) District, the subdivider shall schedule a conceptual review meeting with the members of the Interagency Review Team to discuss the procedure for approval of a subdivision, including submittal requirements and design standards.~~

~~—B. Subdivision Plat Review. After the conceptual review meeting, a subdivision plat may be submitted for review by the Planning and Zoning Commission and Board of Supervisors. If the applicant so chooses, application to rezone with the R-C Residential Conservation Design (Overlay) District and application for subdivision may be processed concurrently.~~

~~—4. Design and Improvement Requirements.~~

~~—A. Land Suitability. No land shall be developed which is held to be unsuitable for any proposed use if identified as being environmentally sensitive. Areas identified as being environmentally sensitive include:~~

~~—(1) All wetlands and hydric soils by the Natural Resource Conservation Service or Story County Conservation, including a 50-foot buffer around all such identified wetlands.~~

~~—(2) Native prairie remnants.~~

~~—(3) Significant trees and cover.~~

~~—(4) All areas having slopes greater than 14 percent.~~

~~—(5) Areas that provide habitat for rare, threatened or endangered species.~~

~~—(6) Burial sites and Native American mounds.~~

~~—(7) Drainage ways that contain running water during spring runoff, during storm events or when it rains. A 30-foot buffer along each side of the drainage way shall be included.~~

~~Areas determined to be environmentally sensitive may be included as common open space in a conservation subdivision but shall not be included in the development yield analysis in paragraph B of this subsection. These lands shall be identified as an outlot or other designation indicating land is not available for development.~~

~~—B. Development Yield. The number of dwellings for a parcel shall be determined in accordance with the following:~~

~~—(1) The development yield analysis shall establish the base development yield for the parcel.~~

~~—(2) The base development yield may be increased if the development complies with one or more of the following standards. Each standard provides a development yield bonus of five percent in addition to the maximum number of dwellings allowed in the base development yield. By adjusting the average lot size (net) accordingly, the maximum bonus permitted is 20 percent.~~

~~—a. Creating an endowment where the principal would generate sufficient annual interest to cover the conservation easement holder's yearly costs (taxes, insurance, maintenance, enforcement, etc.).~~

~~—b. Providing for access by the general public to trails, parks, or other recreational facilities, excluding golf courses.~~

~~—c. Providing affordable housing, to include a minimum of 25 percent of all units that would be affordable to moderate income households and below, as defined by the U.S. Department of Housing and Urban Development.~~

— d. Reusing historical buildings and structures, including those sites inventoried by the Iowa State Historic Preservation Office or the National Register of Historic Places. The U.S. Secretary of the Interior's Standards for Rehabilitation of Historic Properties shall apply.

— e. Planting and incorporating native vegetation.

— f. Providing for alternative forms of energy.

— g. Creating constructed wetlands.

— 5. Bulk Requirements. The bulk requirements listed in Table 86-10 shall apply to all development within the R-C Residential Conservation (Overlay) District.

Table 86-10 – Bulk Requirements – R-C Overlay District

Permitted Uses	Front Setback (Min.)	Side Setback (Min.)	Side Setback Corner Lot (Min.)	Flag Yard Setback (Min.)	Rear Setback (Min.)	Lot Width (Min.)	Structure Area (Min.)	Maximum Height
Single-Family Dwelling:								
Private Systems	30 feet	6 feet	25 feet	20 feet	20 feet	60 feet	400 square feet	40 feet
Common Systems	30 feet	6 feet	25 feet	20 feet	20 feet	60 feet	400 square feet	40 feet
Other Permitted Uses:								
Private Systems	40 feet	25 feet	25 feet	35 feet	20 feet	60 feet	400 square feet	40 feet
Common Systems	40 feet	25 feet	25 feet	35 feet	20 feet	60 feet	400 square feet	40 feet
Accessory Buildings	same as required front	same as required side	same as required side corner	same as required flag	2 feet*	no minimum	no minimum	dependent on base district
* 5 feet from alley lines								

~~—6. Design Standards.~~

~~—A. The residential lot shall be large enough to accommodate a house and two-car garage. The average minimum lot size (net) is dependent on base zone district requirements, unless development yield bonus as defined in subsection 4, paragraph B of this section is applied.~~

~~—B. Residential lots shall be configured to minimize the amount of impervious surfaces. Maximum percentage of impervious surface allowable for each lot (excluding impervious surface within the established right-of-way) is 35 percent (includes buildings and other impervious surfaces).~~

~~—C. Residential lots shall be configured to minimize the amount of road length required for the subdivision.~~

~~—D. Development envelopes shall be configured to minimize loss of woodlands.~~

~~—E. If agricultural uses are being maintained, residential lots shall be configured in a manner that maximizes the usable area remaining for such agricultural uses.~~

~~—F. The subdivision shall be designed to include a minimum of 50 percent solar-oriented lots to maximize solar gain in the winter months.~~

~~—G. A 30-foot native vegetation buffer shall be maintained around open water areas, unless a specific common beach or grassed area is identified.~~

~~—H. The use of the following storm water management practices are required:~~

~~—(1) Minimize the use of curb and gutter and maximize the use of open swales.~~

~~—(2) Drain roof down spouts to porous surfaces.~~

~~—(3) Peak discharges during the two- and ten-year storm events shall be no more than pre-developed conditions.~~

~~—(4) Capture 80 percent of the sediments/pollutants from the one-year storm event.~~

~~—(5) Use landscape plantings to increase infiltration and decrease runoff.~~

~~—(6) Preserve and enhance natural open drainage systems.~~

~~—(7) Incorporate rain gardens.~~

~~—7. Street Standards.~~

~~—A. Neighborhood streets may take the form of a two-way street, a pair of one-way streets on either side of a landscaped median, or a one-way loop street around a small neighborhood green. Streets shall be developed according to the following standards that promote road safety, assure adequate access for fire and rescue vehicles, and promote adequate vehicular circulation.~~

~~—B. The applicant must demonstrate that access to the development has the capacity to handle traffic generated by the proposed project and will not endanger the safety of the general public.~~

~~—C. The right-of-way width for each road shall be wide enough to provide for all public services, including roadway drainage, sidewalks, trails, and walkways, utilities, and snow storage. The maximum right-of-way shall be provided in accordance with the following:~~

Table 86-11 – Right-of-Way Requirements – R-C Overlay District

Right-of-Way ADT Less Than 250	ADT Over 250
One-way roadway—20 feet	One-way roadway—30 feet

Two-way roadway—40 feet	Two-way roadway—50 feet
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— D. Travel lane widths for local roads shall be determined by the expected average daily traffic (ADT) and shall be within the following ranges:

Table 86-12 – Lane Width Specifications – R-C Overlay District

Travel Lanes ADT Less Than 100	Travel Lanes ADT 100 – 250	Travel Lanes ADT Over 250
Two-way roadway* 18 to 24 feet	Two-way roadway* 20 to 26 feet	Two-way roadway* 22 to 28 feet
One-way roadway* 11 to 13 feet	One-way roadway* 11 to 13 feet	One-way roadway* 11 to 14 feet
(Curbed sections**) 13 feet		
Shoulder or gutter pan width 2 to 4 feet		
*Does not include shoulder or gutter pan		

— E. Additional Standards:

- (1) Design Speed: maximum 25 miles per hour.
- (2) Vertical Curves: minimum 50 feet (when grade difference less than one percent, no curve is needed).
- (3) Horizontal Curves: minimum radius of 125 feet.
- (4) Road Grades: maximum grade eight percent.
- (5) Super elevation: maximum $e = 0.04$ feet/feet.
- (6) Pavement Strength: 7 ton minimum.
- (7) Clear Zones:
 - a. Shoulder sections: 10 feet from edge of travel lane.
 - b. Curbed sections: 2 feet from face of curb.

— F. Cul de sacs should be designed as semi-circular and circular loop roads. Minimum 30-foot outside radius around a landscaped island with an minimum 10-foot radius.

— G. Sidewalks, trails, and other walkways shall have maximum five foot width, constructed of pervious pavement or non-paved surfaces unless determined at the time of Interagency Review Team that impermeable paving is necessary to prevent erosion.

— H. Shade trees shall be planted on both sides of the street.

— I. Street connections to adjacent parcels shall be provided, where appropriate, in logical locations to avoid creating landlocked parcels and provide for connecting street patterns.

— J. Street names shall be determined in conformance with Section 88.02(2)(E).

(Ch. 86 – Ord. 297 – Sep. 22 Supp.)

Amendment to Chapter 87 of the Story County Land Development Regulations for Land Division Requirements

87.07 RESIDENTIAL PARCEL SUBDIVISION PLATS.

1. Submittal Process.

A. Formal Application Submitted. A Residential Parcel Subdivision Plat application shall be submitted to the Planning and Development Department.

(1) A subdivision may be submitted for review and approval as a Residential Parcel Subdivision Plat when all of the following are true:

a. The development lots created by the subdivision are intended to be used for residential purposes.

b. Only two development lots may be created.

c. The Assessment Property Record Card for the property shall show a single-family dwelling and/or farmstead, as defined in Section 85.08, in existence.

d. The subdivision includes no land set apart for new streets, alleys, parks, dedicated open space, school property, or public use.

e. The subdivision lies wholly within the A-1 District. For parcels located within the boundaries of the Ames Urban Fringe Plan, the subdivision must be both zoned A-1 Agricultural and lie wholly within the Rural Service and Agricultural Conservation Area designation.

f. Both development lots (created by the Residential Parcel Subdivision Plat) shall contain a minimum of one acre (net) each. All side and rear yard setback requirements must be met.

g. All resulting development lots shall have access to an adjoining public roadway by actual road frontage or easement.

h. No variances from subdivision or zoning standards shall be granted in order to accomplish the Residential Parcel Subdivision Plat.

i. The existing parcel shall not have been created through a previously approved Residential Parcel Subdivision Plat.

B. Interagency and Staff Review of Subdivision. Following submittal of a completed Residential Parcel Subdivision Plat application, including applicable filing fee, Planning and Development staff shall review submitted materials for compliance with the requirements of Section 87.07, as applicable, and other requirements of the Land Development Regulations. The application also shall be reviewed by members of the Interagency Review Team.

C. Meeting Notice for Board of Supervisors.

(1) Notice to Cities within Two Miles. Planning and Development staff shall send notice to any city located within two miles of the proposed subdivision outlining the location, time and date of the public meeting before the Board of Supervisors.

(2) Notice to Surrounding Property Owners. Planning and Development staff shall send a notice via mail to all surrounding property owners within one-fourth mile of the proposed subdivision outlining the location, time, and date of the public meeting before the Board of Supervisors.

(3) The failure to notify as provided in this section shall not invalidate any recommendation made under the terms of the Ordinance, provided such failure was not intentional, and the omission of the name of any owner of property who may, in the opinion of the Board of Supervisors, be affected by such amendment or change shall not invalidate any recommendation adopted hereunder, it being the intention of this subsection to provide, to the fullest extent possible, due notice that an application is pending before the Board of Supervisors.

D. Discussion, Consideration, and Action Before the Board of Supervisors. Following completion of interagency and staff review, the Residential Parcel Subdivision Plat application, subdivision plat drawing, and other applicable documents, as well as a resolution prepared by Planning and Development staff, shall be placed on the Board of Supervisors agenda for consideration and action. A staff report setting forth findings concerning the conformance of the application to this chapter and other requirements of the Land Development Regulations, as applicable, and any recommendations for requirements or conditions to be imposed on the proposed subdivision, shall be prepared and presented by Planning and Development staff at the Board of Supervisors meeting. Any person may submit comments or request to speak on the item prior to the start of the meeting. The meeting shall be scheduled according to standard agenda procedures. The Board of Supervisors shall officially adopt a resolution acting on the proposed subdivision, and such action shall become official upon the recordation of the resolution, plat, and list of items required under Section 354.11 of the Code of Iowa.

2. Detailed Submittal Requirements for Residential Parcel Subdivision. The plat shall be drawn at an appropriate scale to reflect the readability of the subdivision elements. The plat shall be signed by a licensed land surveyor. Any application for a Residential Parcel Subdivision Plat not containing all of the following information shall not be considered by the Board of Supervisors. Residential Parcel Subdivision Plats must incorporate all the general site planning standards outlined in Chapter 88, where applicable, including denoting protected areas on the subdivision plat in accordance with Environmental and Natural Resource Standards of 88.05.

A. The following materials shall be shown on the face of the plat:

(1) Those requirements for subdivision plats pursuant to Section 354.6 and 355.8 of the Code of Iowa, as amended.

(2) The type of subdivision and the title under which the proposed subdivision is to be recorded, with the name and address of the proprietor(s); also arrow indicating the northern direction, scale, date, and the name and address of surveyor.

(Ordinance No. 266)

(3) The complete legal description of the property to be platted including descriptive boundaries of the subdivision.

(4) All proposed and remaining easements located on the land to be divided, including (but not limited to) conservation easements, access easements, and septic and well easements.

(Ordinance No. 266)

(5) All dimensions, both linear and angular, necessary for locating boundaries of the subdivided area, or of the lots, existing streets and alleys, easements, and building setbacks, and any other similar public or private uses. The linear dimensions shall be expressed in feet and decimals of a foot.

(6) Radii, arc and chords, points of tangency, central angles for all curvilinear streets and radii for rounded corners.

(7) All lot lines, lot numbers, and building lines in accordance with the applicable zone district requirements.

(8) The location of all structures and setbacks thereof from each proposed lot line, public easement or right-of-way, and the location of existing wells and septic systems and setbacks thereof from existing structures.

(9) All existing adjacent subdivisions and tract lines of acreage parcels together with the names of record owners of parcels of land immediately adjoining the proposed subdivision.

(10) The name, location, width, and dimensions of all existing roads.

(11) The districts in which the land to be subdivided is located, including (but not limited to) drainage districts, emergency services districts (ambulance and fire), school districts, zoning districts, utility districts, and watershed districts.

(Ordinance No. 266)

(12) Established boundaries of the one percent Special Flood Hazard Area (if the property contains any areas wherein a detailed study was completed by FEMA or other entity, the Floodway and Floodway Fringe boundaries shall be depicted.)

(13) Existing rural 911 addresses.

a. Existing rural 911 addresses shall be shown on the plat unless it is determined by the Planning and Development Department that a new address would better be in accordance with Chapter 32.

b. The plat shall contain the following notation: "All new lots shall require a 911 address for inhabited structures, including residences and businesses, telecommunications towers and facilities, and for any public assembly area including open-air, outdoor activities. 911 addresses shall be assigned by Story County at the request of the property owner."

B. Signed copies of the following materials:

(1) Signed originals of the attachments to subdivision plats required by Section 354.11 of the Code of Iowa.

(2) A signed original of any protective covenants or restrictions to be imposed upon the plat shall be submitted for approval.

(3) Other submittal requirements as defined by the Planning and Development Department.

(Ordinance No. 215)

87.08 MINOR SUBDIVISION PLATS.

1. Submittal Process.

A. Conceptual Review Meeting. Before an applicant can submit an application for a Minor Subdivision Plat, including applicable filing fee, the applicant must attend a conceptual review meeting with County departments and other applicable entities as appropriate. The applicant shall submit a conceptual review application prior to the meeting, including proposed site development plan and a narrative of the proposed development. A conceptual review meeting may be waived, upon written request to the Director or his/her designee, by all members of the Interagency Review Team.

B. Formal Application Submitted. A Minor Subdivision Plat application shall be submitted to the Planning and Development Department in accordance with Section 87.08. A subdivision may be submitted for review and approval as a Minor Subdivision Plat when all of the following are true:

- (1) The subdivision contains no more than four new development lots.
- (2) All development lots within the subdivision are fronted on an existing public street.
- (3) The subdivision includes no land set apart for new streets, alleys, parks, dedicated open space, school property or public use.
- (4) No Agricultural or Minor Subdivision Plats have been approved for the tracts being divided after December 31, 2003.

C. Interagency and Staff Review of Application. Following submittal of a completed Minor Subdivision Plat application, including applicable filing fee, Planning and Development staff shall review application materials for compliance with the requirements of Section 87.08 and other requirements of the Land Development Regulations. The application shall also undergo review by members of the Interagency Review Team.

D. Meeting Notice for Planning and Zoning Commission.

(1) Notice to Cities within Two Miles. Planning and Development staff shall send notice to any city located within two miles of the proposed subdivision outlining the location, time and date of the public meeting before the Planning and Zoning Commission.

(2) Notice to Surrounding Property Owners. Planning and Development staff shall send a notice via mail to all surrounding property owners within one-fourth mile of the proposed subdivision outlining the location, time and date of the public meeting before the Planning and Zoning Commission.

(3) The failure to notify as provided in this section shall not invalidate any recommendation made under the terms of the Ordinance, provided such failure was not intentional, and the omission of the name of any owner of property who may, in the opinion of the Planning and Zoning Commission, be affected by such amendment or change shall not invalidate any recommendation adopted hereunder, it being the intention of this subsection to provide, to the fullest extent possible, due notice that an application is pending before the Planning and Zoning Commission.

E. Public Meeting before the Planning and Zoning Commission. A staff report setting forth findings concerning the conformance of the application to this chapter and other requirements of the Land Development Regulations, as applicable, a copy of the subdivision plat, any other applicable documents, and any recommendations for requirements or conditions to be imposed on the proposed development, shall be prepared and presented by the Planning and Development staff at the Planning and Zoning Commission meeting. Any person may submit comments or request to speak on the item prior to the

start of the public meeting. The public meeting shall be scheduled according to standard agenda procedures. After reviewing the application at a public meeting, the Commission shall recommend to the Board of Supervisors whether it concurs in whole or in part with the staff's proposed findings and recommendations. To the extent the Commission does not concur, the Commission shall propose its own recommendations and provide supporting reasons.

F. Meeting Notice for Board of Supervisors.

(1) Notice to Cities within Two Miles. Planning and Development staff shall send notice to any city located within two miles of the proposed subdivision outlining the location, time and date of the public meeting before the Board of Supervisors.

(2) Notice to Surrounding Property Owners. Planning and Development staff shall send a notice via mail to all surrounding property owners within one-fourth mile of the proposed subdivision outlining the location, time and date of the public meeting before the Board of Supervisors.

(3) The failure to notify as provided in this section shall not invalidate any recommendation made under the terms of the Ordinance, provided such failure was not intentional, and the omission of the name of any owner of property who may, in the opinion of the Board of Supervisors, be affected by such amendment or change shall not invalidate any recommendation adopted hereunder, it being the intention of this subsection to provide, to the fullest extent possible, due notice that an application is pending before the Board of Supervisors.

G. Discussion and Consideration before the Board of Supervisors and Board of Supervisors Action. Following a recommendation by the Planning and Zoning Commission, the Minor Subdivision Plat application, subdivision plat, and resolution prepared by the Planning and Development staff shall be placed on the Board of Supervisors agenda for consideration and action. A staff report setting forth findings concerning the conformance of the application to this chapter and other requirements of the Land Development Regulations, as applicable, a copy of the subdivision plat, and any recommendations for requirements or conditions to be imposed on the proposed subdivision, shall be prepared and presented by the Planning and Development staff at a Board of Supervisors meeting. Any person may submit comments or request to speak on the item prior to the public meeting. The public meeting shall be scheduled according to standard agenda procedures. The Board of Supervisors shall officially adopt a resolution acting on the proposed Minor Subdivision Plat, and such action becomes official upon the recordation of the resolution, plat, and list of items required under Section 354.11 of the Code of Iowa.

(Ordinance No. 266)

2. Detailed Submittal Requirements for Minor Subdivisions. The plat shall be drawn at an appropriate scale to reflect the readability of the subdivision elements. The plat shall be signed by a licensed land surveyor. Any application for Minor Subdivision Plat not containing all of the following information shall not be considered by the Planning and Zoning Commission. Minor subdivision plats must incorporate all general site planning standards outlined in Chapter 88, where applicable, [including denoting protected areas on the subdivision plat in accordance with Environmental and Natural Resource Standards of 88.05.](#)

A. The following materials shall be shown on the face of the plat:

(1) Those requirements for subdivision plats pursuant to Section 354.6 and 355.8 of the Code of Iowa, as amended.

(2) The type of subdivision and the title under which the proposed subdivision is to be recorded, with the name and address of the proprietor(s); also arrow indicating the northern direction, scale, date, and the name and address of surveyor.

(Ordinance No. 266)

(3) The complete legal description of the property to be platted including descriptive boundaries of the subdivision.

(4) All proposed and remaining easements located on the land to be divided, including, but not limited to, conservation easements, access easements and septic and well easements.

(5) All dimensions, both linear and angular, necessary for locating boundaries of the subdivided area, or of the lots, existing streets and alleys, easements, and building setbacks, and any other similar public or private uses. The linear dimensions shall be expressed in feet and decimals of a foot.

(6) Radii, arc and chords, points of tangency, central angles for all curvilinear streets and radii for rounded corners.

(7) All lot lines, lot numbers and building lines in accordance with the applicable zone district requirements.

(8) The location of property lines and all such surface features as buildings, railroads, utilities, water courses and similar items affecting the development. Also, the location and size of such sub-surface features such as existing or nearest available storm and sanitary sewers, water mains, culverts, gas mains, above and below ground electric transmission lines or cables, and drain tiles.

(9) The location of all structures and setbacks thereof from each proposed lot line, public easement or right-of-way, and the location of existing wells and septic systems and setbacks thereof from existing structures.

(10) All existing adjacent subdivisions and tract lines of acreage parcels together with the names of record owners of parcels of land immediately adjoining the proposed subdivision.

(11) The name, location, width and dimensions of all existing roads.

(12) The districts in which the land to be subdivided is located including, but not limited to, drainage districts, emergency services districts (ambulance and fire), school districts, zoning districts, utility districts, and watershed districts.

(Ordinance No. 266)

(13) Established boundaries of the one percent Special Flood Hazard Area (if the property contains any areas wherein a detailed study was completed by FEMA or other entity, the Floodway and Floodway Fringe boundaries shall be depicted).

(14) Existing rural 911 addresses.

a. Existing rural 911 addresses shall be shown on the plat, unless it is determined by the Planning and Development Department that a new address would better be in accordance with Chapter 32.

b. The plat shall contain the following notation: "All new lots shall require a 911 address for inhabited structures, including residences and businesses, telecommunications towers and facilities, and

for any public assembly area including open-air, outdoor activities. 911 addresses shall be assigned by Story County at the request of the property owner.”

(15) Existing contour intervals of not more than five feet, provided, however, that a minimum of two contours shall be shown on any plat. Contour intervals of less than five feet may be required at the County Engineer’s discretion. This requirement may be waived if determined not applicable by the Interagency Review Team at the conceptual review meeting.

(Ordinance No. 155)

B. Copies of the following materials shall accompany the signed plat:

(1) Signed originals of the attachments to subdivision plats required by Section 354.11 of the Code of Iowa.

(2) A signed original of any protective covenants or restrictions to be imposed upon the plat shall be submitted for approval.

(3) Written and signed statements of the appropriate officials of the availability of water, gas and electricity to the proposed subdivision.

(4) Site evaluation conducted by a certified engineer or soils professional for septic systems.

(5) Letter of acknowledgement from applicable fire chief.

(6) Other submittal requirements as defined by the Planning and Development Department.

(Ordinance No. 184, 208, and 266)

87.09 MAJOR SUBDIVISION PLATS.

1. Submittal Process.

A. Conceptual Review Meeting. Before an applicant may submit an application for a Major Preliminary Subdivision Plat, including applicable filing fee, the applicant must attend a conceptual review meeting with County departments and other applicable entities as appropriate. The applicant shall submit a conceptual review application and a Traffic Impact Analysis prior to the meeting, including a proposed site development plan and a narrative of the proposed development. A conceptual review meeting may be waived, upon written request to the Director or his/her designee, by all members of the Interagency Review Team.

(Ord. 275 - Jan. 19 Supp.)

B. Formal Application Submitted. An application for a Major Preliminary Subdivision Plat shall be submitted to the Planning and Development Department. Subdivisions that cannot be submitted as Agricultural or Minor Subdivision Plats shall be considered Major Subdivision Plats and are subject to preliminary and final platting requirements outlined in Section 87.09.

C. Interagency and Staff Review of Application. Following submittal of a completed application for a Major Preliminary Subdivision Plat, including applicable filing fee, Planning and Development staff shall review application materials for compliance with the requirements of this chapter and other requirements of the Land Development Regulations. The application shall also be reviewed by members of the Interagency Review Team.

D. Meeting Notice for Planning and Zoning Commission.

(1) Notice to Cities within Two Miles. Planning and Development staff shall send notice to any city located within two miles of the proposed subdivision outlining the location, time and date of the public meeting before the Planning and Zoning Commission.

(2) Notice to Surrounding Property Owners. Planning and Development staff shall send a notice via mail to all surrounding property owners within one-fourth mile of the property included in the proposed subdivision outlining the location, time and date of the public meeting before the Planning and Zoning Commission.

(3) The failure to notify as provided in this section shall not invalidate any recommendation made under the terms of the Ordinance, provided such failure was not intentional, and the omission of the name of any owner of property who may, in the opinion of the Planning and Zoning Commission, be affected by such amendment or change shall not invalidate any recommendation adopted hereunder, it being the intention of this subsection to provide, to the fullest extent possible, due notice that an application is pending before the Board of Supervisors.

E. Public Meeting before the Planning and Zoning Commission. A staff report setting forth findings concerning the conformance of the application to this chapter and the other requirements of the Land Development Regulations, as applicable, a copy of the subdivision plat, any other applicable documents, and any recommendations for requirements or conditions to be imposed on the proposed development, shall be prepared and presented by the Planning and Development staff at the Planning and Zoning Commission meeting. Any person may submit comments or request to speak on the item prior to the start of the public meeting. The public meeting shall be scheduled according to standard agenda procedures. After reviewing the application at a public meeting, the Commission shall make recommendations to the Board of Supervisors whether it concurs in whole or in part with the staff's proposed findings and recommendations. To the extent the Commission does not concur, the Commission shall propose its own recommendations and provide supporting reasons.

F. Meeting Notice for Board of Supervisors.

(1) Notice to Affected Cities. Planning and Development staff shall send notice to any city within which the area under consideration lies within two miles of said corporate boundaries outlining the location, time and date of the public meeting before the Board of Supervisors.

(2) Notice to Surrounding Property Owners. Planning and Development staff shall send a notice via mail to all surrounding property owners within one-fourth mile of the proposed subdivision outlining the location, time and date of the public meeting before the Board of Supervisors.

(3) The failure to notify as provided in this section shall not invalidate any recommendation made under the terms of the Ordinance, provided such failure was not intentional, and the omission of the name of any owner of property who may, in the opinion of the Board of Supervisors, be affected by such amendment or change shall not invalidate any recommendation adopted hereunder, it being the intention of this subsection to provide, to the fullest extent possible, due notice that an application is pending before the Board of Supervisors.

G. Public Meeting before the Board of Supervisors and Board of Supervisors Action. Following a recommendation by the Planning and Zoning Commission, the Major Preliminary Subdivision Plat application, subdivision plat drawing, any other applicable documents and resolution prepared by Planning and Development staff shall be placed on the Board of Supervisors agenda for consideration and action. A staff report setting forth findings concerning the conformance of the application to this

chapter and the other requirements of the Land Development Regulations, as applicable, a copy of the subdivision plat, and any recommendations for requirements or conditions to be imposed, shall be prepared and presented by the Planning and Development staff at the Board of Supervisors meeting. Any person may submit comments or request to speak on the item prior to the start of the public meeting. The public meeting shall be scheduled according to standard agenda procedures. The Board of Supervisors shall officially adopt a resolution acting on the proposed Major Preliminary Subdivision Plat, and such action shall become official upon the recordation of the resolution, plat, and list of items required under Section 354.11 of the Code of Iowa.

H. Duration of Approval of Major Preliminary Subdivision Plat. The approval of a preliminary plat by the Board of Supervisors shall be valid for one year from the date of such approval; after which such approval shall be void; and the subdivider shall take no action requiring the precedent approval of a preliminary plat except upon application for and approval of an extension of such period of validity by the Board of Supervisors.

I. Final Plat Review. See Section 87.09(3) for submittal requirements for Major Final Subdivision Plat review.

(1) Meeting Notice for Board of Supervisors.

a. Notice to Cities within Two Miles. Planning and Development staff shall send notice to any city located within two miles of the proposed subdivision outlining the location, time and date of the public meeting before the Board of Supervisors.

b. Notice to Surrounding Property Owners. Planning and Development staff shall send a notice via mail to all surrounding property owners within one-fourth mile of the proposed subdivision outlining the location, time and date of the public meeting before the Board of Supervisors.

c. The failure to notify as provided in this section shall not invalidate any recommendation made under the terms of the Ordinance, provided such failure was not intentional, and the omission of the name of any owner of property who may, in the opinion of the Board of Supervisors, be affected by such amendment or change shall not invalidate any recommendation adopted hereunder, it being the intention of this subsection to provide, to the fullest extent possible, due notice that an application is pending before the Board of Supervisors.

(2) Discussion, Consideration, and Action by the Board of Supervisors. The Major Final Subdivision Plat application and resolution prepared by Planning and Development staff shall be placed on the Board of Supervisors agenda for consideration and action. A staff report setting forth findings concerning the conformance of the application to this chapter and the other requirements of the Land Development Regulations, as applicable, a resolution prepared by Planning and Development staff, and any recommendations for requirements or conditions to be imposed, shall be prepared and presented by the Planning and Development staff at the Board of Supervisors meeting. Any person may submit comments or request to speak on the item prior to the start of the public meeting. The public meeting shall be scheduled according to standard agenda procedures. The Board of Supervisors shall officially adopt a resolution acting on the proposed Major Final Subdivision Plat, and such action shall become official upon the recordation of the resolution, plat, and list of other items required under Section 354.11 of the Code of Iowa.

(Ordinance No. 266)

2. Detailed Submittal Requirements for Major Final Subdivision Plat Review. Following preliminary plat approval and completion of public improvements and/or submittal and acceptance of an approved form of financial security and approved Development Agreement, as defined in Section 88.14, the final plat will be submitted. The final plat and all accompanying plan sheets shall be drawn at an appropriate scale to reflect the readability of the subdivision elements. The final plat shall be signed by a licensed land surveyor. Any application for Major Final Subdivision Plat review not containing all of the following information shall not be considered by the Board of Supervisors.

(Ord. 275 - Jan. 19 Supp.)

A. The following materials shall be shown on the face of the preliminary plat:

(1) Those requirements for subdivision plats pursuant to Section 354.6 and 355.8 of the Code of Iowa.

(2) The type of subdivision and the title under which the proposed subdivision is to be recorded, with the name and address of the proprietor(s); also arrow indicating the northern direction, scale, date, and the name and address of surveyor.

(Ordinance No. 266)

(3) The complete legal description of the property to be platted, including descriptive boundaries of the subdivision.

(4) All proposed and remaining easements located on the land to be divided, including (but not limited to) conservation easements, access easements, and septic and well easements.

(Ordinance No. 266)

(5) All dimensions, both linear and angular, necessary for locating boundaries of the subdivided area, or of the lots, existing streets and alleys, easements, and building setbacks, and any other similar public or private uses. The linear dimensions shall be expressed in feet and decimals of a foot.

(6) Radii, arc, and chords, points of tangency, central angles for all curvilinear streets and radii for rounded corners.

(7) All lot lines, lot numbers and building lines in accordance with the applicable zone district requirements.

(8) The location of property lines and all such surface features as buildings, railroads, utilities, watercourses and similar items affecting the development. Also, the location and size of such sub-surface features such as existing or nearest available storm and sanitary sewers, water mains, culverts, gas mains, above and below ground electric transmission lines or cables, and drain tiles.

(9) The location of all structures and setbacks thereof from each proposed lot line, public easement or right-of-way, and the location of existing wells and septic systems and setbacks thereof from existing structures.

(10) All existing adjacent subdivisions and tract lines of acreage parcels together with the names of record owners of parcels of land immediately adjoining the proposed subdivision.

(11) The name, location, width, and dimensions of all existing roads.

(12) The name, location, width, and dimensions of all streets proposed to be dedicated for public or private use.

(13) The districts in which the land to be subdivided is located including, but not limited to drainage districts, emergency services districts (ambulance and fire), school districts, and zoning districts, utility districts, and watershed districts.

(Ordinance No. 266)

(14) Established boundaries of the one percent Special Flood Hazard Area (if the property contains any areas wherein a detailed study was completed by FEMA or other entity, the Floodway and Floodway Fringe boundaries shall be depicted.)

(15) Existing rural 911 addresses.

a. Existing rural 911 addresses shall be shown on the plat unless it is determined by the Planning and Development Department that a new address would better be in accordance with Chapter 32.

b. The plat shall contain the following notation: “All new lots shall require a 911 address for inhabited structures, including residences and businesses, telecommunications towers and facilities, and for any public assembly area including open-air, outdoor activities. 911 addresses shall be assigned by Story County at the request of the property owner.”

(16) Existing contour intervals of not more than five feet, provided, however, that a minimum of two contours shall be shown on any plat. Contour intervals of less than five feet may be required at the County Engineer’s discretion. This requirement may be waived if determined not applicable by the Interagency Review Team at the conceptual review meeting.

(Ordinance No. 155)

(17) The location of any critical natural resource areas in accordance with Chapter 88.05, the limits of protection areas for those resources, and the amount of impact to the resources from the development, if impact is allowed per Chapter 88.05.

B. Copies of the following materials:

(1) Any protective covenants or restrictions to be imposed upon the plat shall be submitted for approval.

(2) Plan and profiles shall be submitted of all streets and alleys, 100 feet horizontal scale and 10 feet vertical scale recommended. Profiles shall show location, size and grade of all conduits, sewers, pipelines, and other improvements to be placed under streets and alleys. Profiles of east and west streets shall be drawn so that the west end of the profile shall be at the left side of the drawing and profiles of north and south streets shall be drawn so that the south end of the profile shall be at the left side of the drawing.

(3) Letter of Financial Security, if applicable;

(4) Written and signed statements of the appropriate officials of the availability of water, gas, and electricity to the proposed subdivision.

(5) Letter of acknowledgement from the applicable fire chief.

(6) Other submittal requirements as defined by the Planning and Development Department.

(Ordinance No. 184, 208, and 266)

3. Detailed Submittal Requirements for Major Final Subdivision Plat Review. Following preliminary plat approval and completion of public improvements and/or submittal and acceptance of an approved form of financial security and approved Development Agreement, as defined in Section 88.14, the final plat will be submitted. The final plat and all accompanying plan sheets shall be drawn at an appropriate scale to reflect the readability of the subdivision elements. The final plat shall be signed by a licensed land surveyor. Any application for Major Final Subdivision Plat review not containing all of the following information shall not be considered by the Board of Supervisors.

A. All final plats shall contain all of the following information:

(1) Those requirements for subdivision plats pursuant to Section 354.6 and 355.8 of the Code of Iowa.

(2) The type of subdivision and the title under which the proposed subdivision is to be recorded, with the name and address of the proprietor(s); also arrow indicating the northern direction, scale, date, and the name and address of surveyor.

(Ordinance No. 266)

(3) The complete legal description of the property to be platted including descriptive boundaries of the subdivision.

(4) All proposed and remaining easements located on the land to be divided, including (but not limited to), conservation easements, access easements, and septic and well easements.

(Ordinance No. 266)

(5) All dimensions, both linear and angular, necessary for locating boundaries of the subdivided area, or of the lots, existing streets and alleys, easements, and building setbacks, and any other similar public or private uses. The linear dimensions shall be expressed in feet and decimals of a foot.

(6) Radii, arc and chords, points of tangency, central angles for all curvilinear streets and radii for rounded corners.

(7) All lot lines, lot numbers and building lines in accordance with the applicable zone district requirements.

(8) The location of property lines and all such surface features as buildings, railroads, utilities, watercourses and similar items affecting the development. Also, the location and size of such sub-surface features such as existing or nearest available storm and sanitary sewers, water mains, culverts, gas mains, above and below ground electric transmission lines or cables, and drain tiles.

(9) The location of all structures and setbacks thereof from each proposed lot line, public easement or right-of-way, and the location of existing wells and septic systems and setbacks thereof from existing structures.

(10) All existing adjacent subdivisions and tract lines of acreage parcels together with the names of record owners of parcels of land immediately adjoining the proposed subdivision.

(11) The name, location, width, and dimensions of all existing roads.

(12) The name, location, width, and dimensions of all streets proposed to be dedicated for public or private use.

(13) The districts in which the land to be subdivided is located including, but not limited to drainage districts, emergency services districts (ambulance and fire), school districts, and zoning districts, utility districts, and watershed districts.

(Ordinance No. 266)

(14) Established boundaries of the one percent Special Flood Hazard Area (if the property contains any areas wherein a detailed study was completed by FEMA or other entity, the Floodway and Floodway Fringe boundaries shall be depicted.)

(15) Existing rural 911 addresses.

a. Existing rural 911 addresses shall be shown on the plat unless it is determined by the Planning and Development Department that a new address would better be in accordance with Chapter 32.

b. The plat shall contain the following notation: "All new lots shall require a 911 address for inhabited structures, including residences and businesses, telecommunications towers and facilities, and for any public assembly area including open-air, outdoor activities. 911 addresses shall be assigned by Story County at the request of the property owner."

(16) The location of any critical natural resource areas in accordance with Chapter 88.05, the limits of protection areas for those resources, and the amount of impact to the resources from the development, if impact is allowed per Chapter 88.05.

B. The following materials shall accompany the signed plat:

(1) Signed originals of the attachments to subdivision plats required by Section 354.11 of the Code of Iowa.

(2) A signed original or any protective covenants or restrictions to be imposed upon the plat shall be submitted for approval.

(3) Site evaluation conducted by a certified engineer or soils professional for septic systems.

(4) A signed original of a Development Agreement, as defined in Section 88.14, if applicable.

(5) Letter of Financial Security, if applicable (if improvements are completed in advance of the submittal of a final plat, approval, and certification of the improvements by the County Engineer shall be submitted).

(6) Fees for installation of street corner markers for new subdivision streets, as established by Chapter 32.

(7) Traffic Impact Study, as required.

(8) Other submittal requirements as defined by the Planning and Development Department.

(Ord. 275 - Jan. 19 Supp.)

**Amendments to Chapter 88 of the Story County Land Development Regulations for
General Site Planning Standards**

88.03 LOTS.

1. Public Utility Easements. Easements of not less than 10 feet in width shall be provided on each side of all rear lot lines and/or side lot lines where necessary for poles, wires, conduits, and storm utilities. Easements of greater width may be required along lines or across lots where necessary for the extension of main sewers and similar utilities.

2. Lot Arrangement and Design. The lot arrangement and design shall be such that they are topographically desirable building sites and avoid unstable landforms or significant slopes prone to erosion and collapse, which includes significant slopes, as defined in Section 85.08. Maintaining vegetative cover and limiting disturbance on significant slopes reduces property losses and water quality issues related to erosion. ~~all lots will provide satisfactory and desirable building sites properly related to topography~~ Lot design shall also preserve critical natural resource areas to the fullest extent possible.

A. Lot Arrangement and Design for Significant Slopes (greater than or equal to 15%).

- (1) Determination and classification of significant slopes shall be completed by the applicant, using United States Geological Survey topographic maps featuring the contour lines at two-foot intervals or a survey. Applicants may request such contour maps from the Story County Planning and Development Department.
- (2) When development is proposed on natural slopes greater than or equal to 15% or within a buffer measured two (2) feet for every one (1) foot of vertical rise from the toe or summit of a significant slope (see Figure 1) on lots, parcels, or tracts existing prior to the adoption of this ordinance, as well as buildable parcels and lots in subdivisions of two or fewer lots created after the adoption of this ordinance:
 - i. An erosion and sediment control plans as outlined in 88.05(3) shall be required and the development shall be subject to inspections for conformance to erosion and sedimentation prevention best practices.
 - ii. A geotechnical analysis is encouraged to be completed and the analysis reviewed by an Iowa licensed engineer for special design considerations and recommendations, including for foundation design, construction sequencing, retaining walls, slope stability, excavation, and shoring for existing structures on the subject property and any neighboring properties.
 - iii. Limits of disturbance shall be denoted on site plans, and on-site.

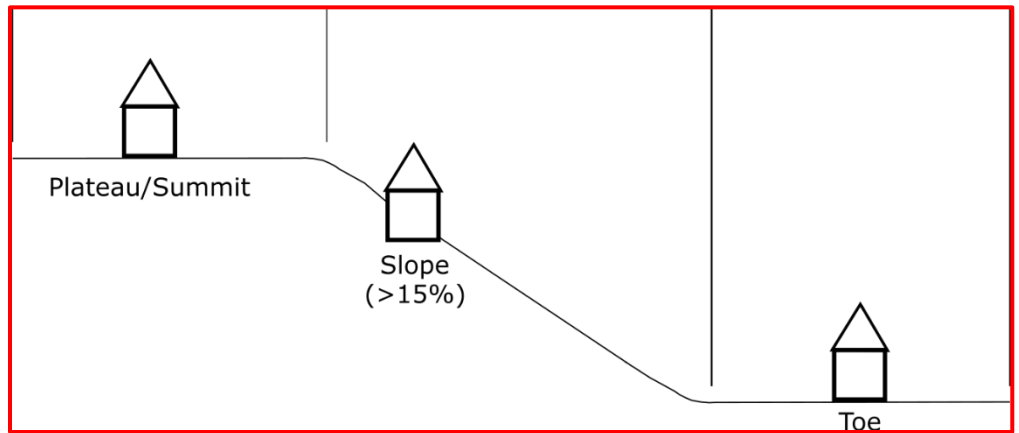


Figure 1 Significant Slope Diagram

- (3) For subdivision plats with three or more development lots, conditional use permits, or commercial site plans submitted after the adoption of this ordinance, the following standards shall apply:
- i. A development envelope will be shown on the site plan or the preliminary and/or final plat for each lot that contains significant, natural slopes to show the area where a dwelling or other proposed development may be sited. The development envelope shall meet the required setbacks for the applicable zoning district and shall be large enough to accommodate a 1,200-square-foot dwelling with a two-car garage or other proposed use.
 - ii. When the development envelope includes slopes greater than or equal to 15%, or includes an area within a buffer of two (2) feet for every one (1) foot of vertical rise measured from the toe or summit of a significant slope, a geotechnical analysis shall be required, and shall be submitted with the site plan or preliminary plat. The analysis shall be completed/reviewed by an Iowa-licensed engineer to ensure the suitability of a site for development and any special design considerations and recommendations, including for foundation design, construction sequencing, retaining walls, slope stability, excavation, and shoring for existing structures on the subject property and any neighboring properties. These recommendations may be included as conditions of approval. Lots and/or development envelopes determined to be unsuitable for development shall be reconfigured to provide a suitable building site that accommodates the required development envelope.
 - iii. Slopes with a grade greater than 35%, shall be considered protected. The area within a buffer measured two (2) feet for every one (1) foot of vertical rise, not to exceed fifty (50) feet, from the summit and toe of a slope with a grade greater than 35%, shall also be considered protected. These areas shall not be impacted for any reason, including by any impervious surface such as gravel or concrete driveways, with the exception of installing required erosion control practices, or the installation of essential utilities.
 - iv. Major disturbance to the natural terrain to create a site suitable for development is discouraged. Major disturbance includes removal of the natural slope or terracing to create a building pad.
 - v. An erosion control plan and a plan to re-vegetate the site shall be required, completed by a qualified professional such as an Iowa-licensed engineer, landscape architect, or other professional certified in erosion and sediment control plan development.
 - vi. Limits of disturbance shall be denoted on site plans, and on-site when development is proposed.

B. Reduction in Minimum Lot Sizes. A reduction in minimum lot size may be allowed when 50% or more of agricultural lands are preserved as an outlot, in an easement, or through a deed or other permanent restriction to provide buffering to other adjacent agricultural lands or when critical natural resources are preserved in accordance with 88.05.

- (1) The reduction shall be allowed so that the development yield is equivalent to a net

- density of one unit per acre prior to the preservation of agricultural lands and critical natural resources.
- (2) Lot sizes may be reduced to a minimum of 10,000 square feet. All bulk standards for the applicable or requested zoning district shall be met.
 - (3) For the reduction to apply, the development shall meet Iowa Department of Natural Resources requirements for minimum separation distances for dwellings and wells from open feedlots and confined animal feeding operations. These distances shall be maintained from existing operations. Buffers of no less than 250 feet shall also be maintained from other agricultural uses.
 - (4) The reduction shall be allowed only when a site evaluation is conducted by a certified engineer or soils professional for septic systems. In the case of a subdivision plat, the evaluation shall accompany the plat. In the case of a major subdivision, the evaluation shall accompany the preliminary plat.
 - i. All lots shall comply with Story County Environmental Health or Iowa Department of Natural Resources requirements for common or private sewage disposal systems. For lots under a half-acre, a common wastewater treatment system may be necessary and is encouraged.
 - ii. A subdrain system may be required to divert discharged effluent away from critical natural resource areas.

88.05 ENVIRONMENTAL AND NATURAL RESOURCE STANDARDS.

1. **Protections for Critical Natural Resource Areas.** ~~When property is developed, it shall be done so that proposed physical elements of the development are~~ the development is designed and arranged ~~on the site to protect natural areas and critical natural resource areas.~~ features of the site. The purpose of these standards is to further the goals of the Cornerstone to Capstone (C2C) Plan and the Countywide Watershed Assessment by providing protections for areas that are environmentally or culturally significant. It is also to achieve the purpose of the Story County Land Development regulations to balance land use rights of individual landowners and the economic, social, and environmental concerns of the public. Critical natural resource areas include wetlands, watercourses and waterbodies, steep slopes, significant trees, archaeological resources, and remnant prairies and savannas. These areas are mapped as Natural Resource Areas on the C2C Plan Future Land Use Map or as Environmentally Sensitive Areas on the Ames Urban Fringe Plan Land Use Framework Map. However, not all critical natural resource areas are mapped and individual developments will need to consider site specific characteristics. Disturbance shall be minimized and/or mitigated where avoidance is not possible. ~~The development shall be designed and arranged to ensure that disturbance to natural areas and the plants and wildlife inhabiting those areas as a result of the development shall be minimized.~~
 - A. **General Requirements.** The following standards apply to all critical natural resource areas that are not otherwise exempt.
 - (1) **Impact.** Impact to critical areas is permitted only in accordance with the provisions of this chapter. Protected areas shall be denoted on the site plan or subdivision plat, if applicable, and shall be marked on the site prior to any construction activities, including any ground disturbance or vegetation removal. Markings shall consist of lath or another marking at maximum intervals of every 50 feet along the edge of the critical natural resource area. A greater interval may be required as necessary to provide visibility between the markings. Fencing or a buffer from the edge of a resource may be required for extremely critical resources. During the construction stage of development, the applicant shall not clean

equipment or material or store or dispose of waste such as paints, oils, solvents, asphalt, concrete, motor oil, or other harmful material in the critical natural resource area.

- (2) Mitigation Plan. In all cases where mitigation is permitted and required due to exceeding allowed thresholds for disturbance, a mitigation plan shall be developed and implemented in accordance to the following standards. These requirements shall not supplant regulatory mitigation required through the U.S. Army Corps of Engineers or other regulatory agency or governmental body. If the provisions under this chapter of the Story County Land Development Regulations are in excess of another governmental entity or body's standards, then the County provisions shall still apply.
- a. Qualified Professional. All mitigation plans shall be developed and implemented by a qualified professional as defined in Chapter 85.08.
 - b. Responsible Party. The party responsible for maintenance and their contact information, if different from the property owner or permit applicant, shall be included.
 - c. Methods of Mitigation. Required mitigation may be accomplished through preservation and enhancement of off-site critical natural resource areas, reconstruction of critical natural resource areas, or a combination thereof.
 - d. Location. All mitigation shall occur within Story County unless the applicant can demonstrate that mitigation in accordance to this section is not feasible within the County or otherwise permitted by a specific resource subsection.
 - e. Standards for Permanent Protection. Areas preserved, reconstructed, or created to meet mitigation requirements shall be permanently protected from development through a conservation easement, deed restriction, or donated to a public agency for protection. They shall also be placed in an outlot in the case a subdivision plat is proposed.
 - i. Conservation easements shall be held by an accepted third party land conservation organization (e.g. Iowa Natural Heritage Foundation, The Nature Conservancy) or Story County Conservation.
 - ii. Land donations to public agencies would include entities such as the Story County Conservation Board, Iowa Department of Natural Resources, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, etc. If donation to a public agency is infeasible, land donations to conservation non-profits may be permissible.
 - iii. A long-term management plan, with provisions for monitoring and reporting to the County, and a process for addressing necessary changes due to failure of plans shall also be provided within the mitigation plan.
 - iv. Suitable remedial action by the responsible party will be required if all or part of a reconstructed critical area fails to become established in the timeframe indicated in the plan.
 - f. Approval. Mitigation plans shall be approved by the Board of Supervisors after a recommendation from the Story County Conservation Board.
 - i. If the Board of Supervisors does not approve the mitigation plan, then no permit or other approval may be granted for a development project.
- (2) Easements. Easements or other permanent protections may be required over critical natural resource areas and their applicable buffers as a condition on rezonings, subdivisions of more than two development lots, conditional use permits, and commercial site plans. This

shall be required for watercourses and waterbodies included in subdivisions of more than two development lots and the easement shall include provisions for maintenance and upkeep.

- (3) Violation. If a responsible party fails or refuses to meet the requirements of the approved mitigation plan or any provision of this ordinance, the County shall notify the party responsible for implementation and maintenance of the mitigation plan in writing following the procedure for Notice of Violations in Chapter 93 of the Story County Land Development Regulations. Depending on the severity of the violation, the permitted timeframe to submit a compliance schedule may be reduced. If the violator does not correct/abate the violation or provide an acceptable schedule to correct/abate the violation, or does not comply with the schedule, a citation for a County infraction may be issued in accordance with Chapter 93 of the Story County Land Development Regulations.

~~1. Easements Along Streams. Whenever any stream or major surface water course is located in an area being subdivided, the subdivider shall provide and dedicate to the County an easement along each side of the stream, which easement shall be for the purpose of widening, improving or protecting the streams, if necessary. The width of such easement shall be adequate to provide for any necessary channel relocation and straightening, but in no case shall such easement be less than 30 feet on both sides of the center of the watercourse.~~

~~—A. Suitable provisions for maintenance and upkeep of easements shall be provided through a homeowners association, deed covenants, or through other similar provisions as approved by the Board of Supervisors.~~

~~—2. Protection of Natural Vegetation Cover. Whenever a site to be developed contains naturally occurring resources, as defined in Section 85.08, Definitions, no more than 15 percent shall be removed due to surface earth grading, roadway construction, building site clearance, or any other construction activity associated with site improvement.~~

~~(Ordinance No. 184)~~

~~—A. Prior to and during construction, barriers shall be erected around all naturally occurring resources.~~

~~—(1) Such barriers shall be orange fencing at a minimum of four feet in height, secured with metal T posts, no closer than six feet from the trunk or one half of the drip line of any tree line, or no closer than 20 feet of any identified resource, whichever is greater.~~

~~(Ordinance No. 184)~~

~~—(2) Storage or movement of equipment, material, debris or fill within the protection zone is prohibited.~~

~~—B. Whenever removal of more than 15 percent of the naturally occurring resources is deemed necessary and unavoidable a mitigation replanting measure shall be implemented as follows.~~

~~(Ordinance No. 184)~~

~~—(1) Within the drip line of any significant tree, there shall be no cut or fill over a four inch depth unless a qualified arborist, forester or representative from the Story County Conservation Board has evaluated and approved the disturbance.~~

~~(Ordinance No. 184)~~

~~—(2) During the construction stage of development, the applicant shall prevent the cleaning of equipment or material or the storage and disposal of waste materials such as paints, oils, solvents, asphalt, concrete, motor oil or any other material harmful to the life of the natural vegetation cover.~~

~~—(3) No damaging attachment, wires, signs or permits may be fastened to any significant tree.~~

~~—C. Where it is not feasible to protect and retain significant trees or to transplant them to another on-site location, the applicant shall replace such trees according to the following schedule and~~

requirements. Replacement trees shall be planted either on the development site or in the closest available planting site within 1,320 feet of the development site.

~~— D. A significant tree that is removed shall be replaced with not less than one or more than six replacement trees sufficient to mitigate the loss of value of the removed significant tree. The loss of such significant tree shall be determined based on appraisal of the tree to be removed by using the most recent published methods established by the Council of Tree and Landscape Appraisers.~~

~~— E. Replacement trees shall meet the following minimum size requirements:~~

~~— Canopy Shade Trees — three inch caliper, balled and burlap or equivalent~~

~~— Ornamental Trees — two and one half inch caliper, balled and burlap or equivalent~~

~~— Evergreen Trees — eight foot height, balled and burlap or equivalent~~

~~— F. Significant trees that meet one or more of the following removal criteria shall be exempt for the requirements of this subsection:~~

(Ordinance No. 184)

~~— (1) Dead, dying or naturally fallen trees, or trees found to be a threat to public health, safety or welfare;~~

~~— (2) Trees that are determined to substantially obstruct clear visibility at driveways and intersections;~~

~~— (3) Tree species that are identified as nuisance tree species.~~

B. Requirements for Significant Trees and Native Woodland Shrubs. Native trees and shrubs provide wildlife corridors and habitat for Story County’s wildlife species. They also provide water quality benefits, supply oxygen, and store atmospheric carbon.

(1) Applicability. The provisions within this section apply to all zoning and grading permits, conditional use permits, commercial site plans, and subdivisions of more than two (2) development lots. These shall be hereinafter referred to as “development.” The provisions do not apply to general tree/shrub management, i.e. thinning of trees or removal of invasive or dead/dying trees not associated with or intended to facilitate development.

(2) Identification. Significant trees are native, deciduous trees with a caliper greater than four (4) inches, measured four (4) feet off the ground, or a native coniferous tree taller than fifteen (15) feet. Significant native shrubs have a basal diameter of three (3) inches. Significant trees and native shrubs that meet one or more of the following removal criteria shall be exempt from the requirements of this subsection:

a. Tree stands that are low quality replantings. These shall be identified through historic aerial imagery taken between the 1930s and 1980 to determine cropping history and locations of old-growth stands. Stands planted post-1980 may be considered low quality plantings.

b. Dead, dying or naturally fallen trees, or trees found to be a threat to public health, safety or welfare;

c. Trees that are determined to substantially obstruct clear visibility at driveways and intersections; or

d. Tree or shrub species identified as invasive species by the Iowa Department of Natural Resources.

(3) Impact. Impact to significant trees and/or shrubs shall be avoided where possible, and the burden of persuasion as to why impact is unavoidable will at all times be on the applicant. Mitigation for impact to significant trees or shrubs shall be required in Natural Resource Areas, as mapped on the C2C Plan Future Land Use Map or Environmentally Sensitive Areas on the Ames Urban Fringe Plan Land Use Framework Map. Cut or fill over a four-inch depth or compaction within the drip line of any significant tree shall be considered impact. The following mitigation standards shall be required in addition to those general standards in Chapter 88.05(1)(A).

- a. Zoning and grading permits for parcels intended for residential development, or for subdivision lots created before the adoption of this ordinance, may impact up to one (1) acre of significant trees and/or shrubs without mitigation. Impacts over one (1) acre shall require mitigation.
- b. Commercial site plans, conditional use permits, or subdivision plats of more than two (2) development lots may impact up to 15% or five (5) acres, whichever is less, of the wooded acres on a development site (including across multiple parcels or phases of development). Impacts over 15% or five (5) acres, whichever is less, shall require mitigation.
- c. Prior to impact, a replacement plan or mitigation plan shall be submitted as part of a development application.
 - i. For zoning and grading permits, a replacement plan may be approved by the Planning and Development Director in lieu of a mitigation plan approved by the Board of Supervisors. The replacement plan shall outline why the impact is unavoidable and include a site plan showing where trees are being replanted and the number and species.
 - ii. For subdivisions creating more than two development lots, conditional use permits, and commercial site plans, a mitigation plan shall be completed by a qualified professional and shall include additional information regarding the long-term management of the wooded area(s), including outlining when it may be necessary to remove native trees or shrubs due to overgrowth and for the overall health of the wooded area(s). When the removal of native, significant trees and/or shrubs is deemed appropriate by a qualified professional for the overall health of the wooded area(s), such removal shall not count towards replacement ratios. A qualified professional may be a professional in natural resource science or management, or forestry.
- d. The replacement or mitigation plan shall also meet and or/address the following standards:
 - i. Replacement trees shall be planted either on the development site or in an alternative planting site within Story County when infeasible. Allowable alternative planting sites are the following: County-owned parks or preserves; eligible areas undergoing riparian buffer improvements; privately owned land under a conservation easement or in a land trust, with permission of the property owner. Planting areas shall be appropriate locations for native trees based on where old growth forests currently, or historically, are located, and shall not cause detriment to other critical natural resource areas and shall be appropriate for the tree or shrub species involved.
 - ii. For zoning and grading permits requiring mitigation, a significant tree or shrub that is impacted shall be replaced at a ratio of 1:1, and a 20% mortality buffer shall be added to the total number of replacement trees or shrubs (e.g. if thirty (30) trees are the minimum needed for the replacement ratio, then at least thirty-six (36) shall be planted). Replacement costs shall be at the applicant's expense.
 - iii. For commercial site plans, conditional use permits, or subdivisions of more than two development lots, significant trees or shrubs shall be replaced at a minimum ratio of 1:1. A greater ratio, up to 6:1, may be required if recommended by a qualified professional based on species and size. A 20% mortality buffer shall be added to the total number of replacement trees or shrubs (e.g. if thirty (30) trees

are the minimum needed for the replacement ratio, then at least thirty-six (36) shall be planted). Replacement costs shall be at the applicant's expense.

- iv. Replacement trees and/or shrubs shall meet the following minimum size requirements and shall be primarily native species in order to restore and enhance the site as nearly as practicable to its pre-settlement character. Coniferous trees shall not be permitted as replacement trees.

Deciduous Trees—one and one-half inch (1.5 inch) caliper

Native Shrubs—five gallon pot size

C. Requirements for Wetlands. Wetlands provide wildlife habitat, downstream water quality protection, and natural flood/stormwater attenuation.

- (1) Applicability. The provisions within this section shall be applicable to all proposed rezonings, conditional use permits, commercial site plans, and subdivisions of more than two (2) development lots. These shall be hereinafter referred to as "development." Zoning permits and grading permits on subdivision lots established before the adoption of this ordinance, or on unplatted parcels or tracts, are exempt. The provisions do not apply to general management, i.e. mowing of vegetation.

- (2) Identification. When an application for development is submitted, the following identifying features and sources shall be referenced to identify wetlands. Applicants are encouraged to consult these sources prior to making a submittal.

a. Wetlands identified on the Story County Countywide Watershed Assessment maps and/or U.S. Fish and Wildlife Service National Wetland Inventory.

b. Hydric soils identified on the Story County Soil Survey maps.

c. Depressions and evidence of ponding on U.S. Geological Survey Topographic Maps and aerial imagery.

d. Soil borings provided by a registered soil engineer and/or a survey of plant material completed by a botanist, landscape architect, engineer, or other qualified professional.

- (3) Wetland Delineation Required. When development is proposed within one hundred and fifty (150) feet of an identified wetland, a qualified wetland specialist shall be hired to provide wetland delineation. The delineation shall use the methods in the U.S. Army Corps of Engineers Wetland Delineation Manual and Regional Supplement. If the delineation occurs outside of the normal growing season, the applicant may be required to amend the delineation with information on plant species during the growing season, if vegetation may impact the wetland classification. The delineation shall be completed at the applicant's expense.

- a. Wetland Classification. The delineation shall classify the wetland based on the following types. When the areas of any wetland are hydrologically connected and/or have contiguous buffers, the connected areas shall be added together to determine the wetland's size for wetland classification purposes. Vegetation classes identified during the delineation shall adhere to those adopted by the U.S. Army Corps of Engineers in the National Wetland Plant List Indicator Rating Definitions and current National Wetland Plant List.

Class 1 Wetlands.

- i. Wetlands that are used by species listed by the federal or state

- government as endangered or threatened, or which have an outstanding natural habitat for those species; or
- ii. Wetlands which have forty to sixty percent open waters in dispersed patches with two or more wetland vegetation classes; or
- iii. Wetlands which are equal to or greater than ten (10) acres in size and have three or more wetland vegetation classes, one of which is an aquatic bed wetland; or
- iv. Wetlands with plant associations of infrequent occurrence according to the Iowa Coefficient of Conservatism (a Coefficient score greater than or equal to seven).

Class 2 Wetlands.

- i. Wetlands which are greater than one acre in size; or
- ii. Wetlands which are equal to or less than one acre in size, and have three or more wetland vegetation classes; or
- iii. Wetlands which are equal to or less than one acre in size and with a forested wetland vegetation class.

Class 3 Wetlands.

- i. Wetlands which are equal to or less than one acre in size and have two or fewer wetland vegetation classes.
- b. Restoration Recommendations. The delineation shall also include recommendations to improve the wetland's function, including removal of invasive species and drain tiles, reseeding and planting, ongoing maintenance recommendations, and restoring the vegetative buffer around the wetland area.

(4) Implementation. After a delineation is completed and the wetland(s) is classified in accordance with the wetland classification section, the proposed development shall comply with the following:

- a. Buffering. The following buffers are required around the delineated area:
 - i. Class 1 Wetlands: One hundred (100) feet.
 - ii. Class 2 Wetlands: Seventy-five (75) feet.
 - iii. Class 3 Wetlands: Fifty (50) feet.
- b. Activities Allowed. Only the following activities are allowed in buffer areas:
 - i. Minor land-disturbing activities for erosion control or revegetation.
 - ii. Fencing.
 - iii. Utilities.
 - iv. Unpaved trails and paths.
- c. Buffer Averaging. Buffers may be averaged so that the total area of the buffer is not reduced, and the width of the buffer at any one point is not decreased by more than fifty (50) percent of the required buffer width, if the following is demonstrated by the wetland delineation:
 - i. The wetland is less than one (1) acre in area; and
 - ii. Does not contain species listed by the federal or state government as endangered or threatened, or critical or outstanding natural habitat for those species; and
 - iii. Does not contain diverse plant associations of infrequent occurrence or of regional significance; and
 - iv. Buffer averaging will improve the buffer function, wetland protection, and/or enhance the vegetative cover; and
 - v. The area being removed from the buffer does not contain other critical

natural resource areas or act as a buffer for those areas, such as native trees or prairie remnants.

d. Buffer Reduction. At the recommendation of the Story County Conservation Board, the Board of Supervisors may approve plans where the required buffer is reduced in size by no more than (50) percent of the required buffer width when sufficient protective measures are in place to identify and protect a wetland(s) from impacts, such as fencing installed by a developer. This shall not apply in conjunction with buffer averaging. The reduction in buffer size may not result in any impacts, as determined by a qualified wetland specialist, to:

- i. Species listed by the federal or state government as endangered or threatened, or critical or outstanding natural habitat for those species; or
- ii. Diverse plant associations of infrequent occurrence or of regional significance; or
- iii. The function or health of the wetland, including ensuring a sufficient vegetated area around the wetland is maintained to filter pollutants or slow surface runoff; and
- iv. The area being removed shall not contain other critical natural resource areas or act as a buffer for those areas, such as native trees or prairie remnants.

(5) Impact. To meet the goal of no net-loss of wetlands in Story County, impact to delineated wetlands, including, but not limited to, grading and earth disturbance, construction, vegetation removal, and vehicle or heavy machinery movement, shall be limited to the following when permitted based on the wetland class: management activities necessary for restoration and maintenance of the wetland; infrastructure necessary for access to a property, such as drive entrances and access roads; and rural water lines, gas lines, or other public utilities. These impacts shall be the minimum necessary to accomplish the needs of the infrastructure project or utility installation. Wetlands shall not be used for stormwater retention or detention basins. If impacts are permitted, the applicant shall provide a written statement from the U.S. Army Corps of Engineers stating that development fully complies with all applicable federal wetland regulation as established in the Clean Water Act.

a. Class 1 Wetlands. Shall not be impacted for any purpose other than public infrastructure projects.

b. Class 2 and Class 3 Wetlands. Impact shall only be allowed when the impacts are strictly for the infrastructure and utility installation listed in 88.05(1)(C)(5). The applicant shall demonstrate that avoiding and minimizing the impact to a wetland is unreasonable and that siting said infrastructure in other locations is infeasible.

(6) Compensatory Mitigation. Compensatory mitigation is required for any delineated wetland impact that equals or exceeds one tenth (0.10) of an acre. The following mitigation standards shall be required in addition to those general standards in Chapter 88.05(1)(A):

a. Mitigation areas for wetlands shall be located in the same HUC-12 subwatershed as the original wetland. If that is shown to be infeasible, then the same HUC-10 could be used upon extenuating circumstances and with approval as part of the mitigation plan.

b. For mitigation areas preserving existing wetlands off-site, wetlands shall be preserved at a ratio of 1:1. For mitigation areas reconstructing or creating wetlands, wetlands shall be replaced at a ratio of 2:1. For mitigation areas restoring previously drained or impacted wetlands, wetlands shall be restored at a ratio of 2:1.

c. Story County Conservation shall approve of all seeds used in the mitigation area prior to planting. No invasive or foreign species shall be planted in the mitigation area.

(7) Restoration. Restoration to improve the wetland's function, including removal of invasive species and drain tiles, reseeded and planting, restoring the vegetative buffer around the

wetland area, and placing the area in a conservation easement that includes provisions for ongoing maintenance, may be required as a condition of the applicable permit for the development. When the wetland in question is a farmed wetland and commercial or residential development is proposed, restoration of the farmed wetland shall be required.

- D. Requirements for Watercourses and Waterbodies. Watercourses and waterbodies are areas that store and/or convey surface water, including but not limited to rivers, streams, creeks, drainageways, ponds, and lakes. These areas provide floodwater conveyance and storage, and their riparian areas improve water quality. Additionally, they provide habitat and recreational opportunities. The requirements of this section shall be in addition to the applicant’s obligation to satisfy all other applicable local, state, or federal regulations and permits.
- (1) Applicability. The provisions within this section apply to all zoning and grading permits, conditional use permits, commercial site plans, and subdivisions with two (2) or more development lots. These shall be hereinafter referred to as “development.”
- (2) Identification. The existence of watercourses and waterbodies shall be identified or ruled out in accordance with the following procedures:
- a. Use of Story County Countywide Watershed Assessment maps, critical resource area maps, or FEMA Flood Insurance Rate Maps (FIRMs) may be used to identify or rule out the existence of watercourses and waterbodies.
- (3) Implementation. If watercourses or waterbodies are located on the site, the proposed use and development shall comply with the following:
- a. Buffering. An undisturbed buffer shall be provided in accordance to the following requirements:
- i. Rivers and streams within the Special Flood Hazard Area (SFHA) for which no floodway is identified on the effective Flood Insurance Rate Map (FIRM) shall require a minimum 50-foot undisturbed buffer on each side of the stream’s belt width, which is the stream flows measured between the outsides of opposing meander bends. (See Figure 2)
- ii. Rivers and streams within the SFHA for which floodway is identified on effective FIRM maps shall require a minimum 75-foot undisturbed buffer on each side of the floodway boundary, measured from the edge of the floodway boundary, or the belt width as described for streams with no floodway, whichever creates the largest stream buffer.
- iii. Other mapped watercourses and surface waterbodies not within the SFHA shall have an undisturbed buffer 50 feet in width, measured from the edge of the watercourse or surface waterbody.
- iv. The buffer size shall be required to be increased to cover the entirety of a riverine wetland, including a buffer in accordance with Section 88.05(1)(C)(4), wetland buffers by class.

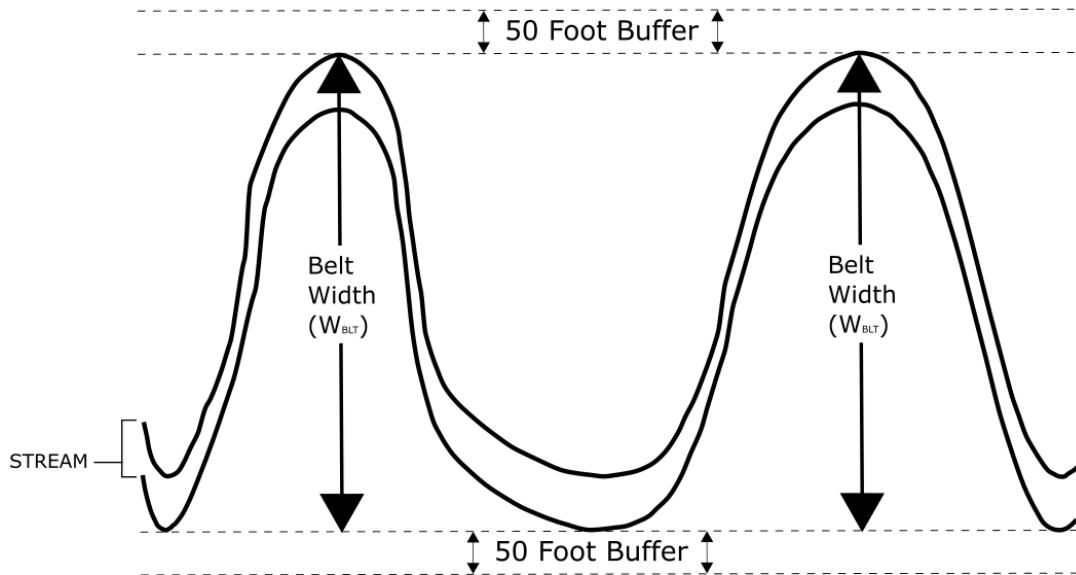


Figure 2

b. Permitted Uses. The following uses are permitted in a required buffer zone or easement area:

- i. Agricultural uses, such as grazing and fencing
- ii. Legal, nonconforming uses
- iii. Minor land-disturbing activities for erosion control and bank stabilization, desilting of waterbodies, or revegetation
- iv. A perpendicular stream crossing by a driveway, street, or utility lines
- v. A street or driveway where buffer intrusion is the only option to provide access to a property
- vi. Paved and unpaved trails and paths for use
- vii. Public water supply intake or public wastewater outfall structures
- viii. Public access facilities that must be on the water, including boat ramps, docks, foot trails leading directly to the stream or watercourse, fishing platforms, and overlooks
- ix. Utility lines and easements running parallel with the stream, except that all easements (permanent and construction) and clearing and grading shall recognize the sensitivity of the streams and use Best Management Practices (BMPs) to limit and repair the disturbance within the buffer area. This includes such impervious cover as necessary for the operation and maintenance of the utility, including but not limited to manholes, vents, and valve structures.

(4) Impact. Development shall be designed to avoid and minimize impact to all streams and watercourses. Development in the floodplain is discouraged. Watercourse alterations or relocations (channel changes and modifications) or any proposed development in the floodplain shall be in accordance with Chapter 80 Floodplain Management Program of the Story County Code of Ordinances or other State or Federal requirements. Only the following types of development shall be permitted to encroach on a required buffer: management

activities necessary for restoration and maintenance of the stream or watercourse; infrastructure necessary for access to a property, such as drive entrances and access roads; and rural water lines, gas lines, or other public utilities. These impacts shall be the minimum necessary to accomplish the needs of the infrastructure project or utility installation.

(5) Restoration. Restoration to improve riparian buffer areas along watercourses and waterbodies, including removal of invasive species and drain tiles, reseeding and planting, restoring the riparian buffer, and placing the area in a conservation easement that includes provisions for ongoing maintenance, may be required as a condition of a rezoning, conditional use permit, commercial site plan, and/or subdivision with more than two development lots.

E. Requirements for Prairie Remnants and Savanna Remnants. Prairie remnants are characterized by areas containing an association of native grasses, sedges, and forbs. Savanna remnants are characterized by a mixed association of native trees and shrubs in grassland and forbs. The native trees are open grown and are frequently oaks and hickories. Prairie remnants and savanna remnants provide habitat to Story County’s wildlife species and pollinators, reduce soil erosion, and improve water quality through infiltration. Determination of prairie remnants and savanna remnants shall be made by a qualified professional.

(1) Applicability. The provisions within this section shall be applicable to all proposed rezonings, conditional use permits, commercial site plans, and subdivisions with more than two (2) development lots. These shall be hereinafter referred to as “development.” Zoning permits and grading permits on subdivision lots established before the adoption of this ordinance, or on unplatted parcels or tracts, are exempt. The provisions do not apply to general tree/shrub management, i.e. thinning of trees or removal of invasive or dead/dying trees not associated with or intended to facilitate development.

(2) Identification. When an application for development is received, identification of prairie remnants and/or savanna remnants shall be made in accordance with the following procedures:

a. Review of critical natural areas mapping.

b. Use of historic aerial photographs to determine cropping history of the property. Unplowed or uncropped prairies and savannas shall be considered remnants.

c. If the above procedures do not definitively rule out a prairie remnant or savanna remnant, a qualified professional shall complete an on-site assessment during the prairie growing season, between June 15th and August 15th. A prairie remnant and savanna remnant may only be identified by the flora present, not soil type. For savanna remnants, large (greater than eighteen (18) inches diameter breast height), open grown, native trees, such as Oak or Hickory, must be present.

(3) Prairie Remnant and/or Savanna Remnant Delineation Required. If development is proposed within one hundred fifty (150) feet of a prairie remnant and/or savanna remnant, the full extent of the remnant shall be delineated by a qualified professional such as a biologist or ecologist. The delineation shall be completed at the applicant’s expense.

a. Restoration Recommendations. The delineation shall also include recommendations to improve the prairie remnant and/or savanna remnant, including removal of invasive species, reseeding and planting, ongoing maintenance recommendations, and restoring and/or creating a vegetative buffer around the remnant.

- (4) Implementation. After delineation of a prairie remnant and/or savanna remnant, the proposed use or development shall comply with the following standards:
- a. Buffering. A one-hundred (100) foot vegetated buffer is required around all delineated prairie remnant and savanna remnant, following the delineation's restoration recommendations.
 - b. Buffer Reduction. At the recommendation of the Story County Conservation Board, the Board of Supervisors may approve plans where the required buffer is reduced in size by no more than (50) percent of the required buffer width when sufficient protective measures are in place to identify and protect a prairie remnant and/or savanna remnant from impacts, such as fencing or subdrains installed by a developer. The reduction in buffer size may not result in any impacts to:
 - i. Species listed by the federal or state government as endangered or threatened, or critical or outstanding natural habitat for those species; or
 - ii. Diverse plant associations of infrequent occurrence or of regional significance; or
 - iii. The function or health of the prairie remnant and/or savanna remnant, including ensuring a sufficient vegetated area around the prairie remnant and/or savanna remnant to filter pollutants or slow surface runoff; and
 - iv. The area being removed shall not contain other critical natural resource areas or act as a buffer for those areas, such as native trees or wetlands.
- (5) Impact. Impact to delineated prairie remnant and savanna remnant, including, but not limited to, grading and earth disturbance, construction, vegetation removal, and vehicle or heavy machinery movement, shall be limited to the following: management activities necessary for restoration and maintenance of the remnant; and rural water lines, gas lines, or other public utilities. These impacts shall be the minimum disturbance necessary to accomplish the needs of the infrastructure project or utility installation. Trenchless construction methods may be required.
- (6) Mitigation. The following mitigation standards shall be required in addition to those general standards in Chapter 88.05(1)(A).
- a. In cases where delineated prairie remnant and/or savanna remnant exists on the site and impact to the prairie remnant and/or savanna remnant is allowed as outlined in 88.05(1)(E)(5), the following mitigation procedures shall be required. In all instances, impacted prairie shall be mitigated with prairie, and impacted savanna shall be mitigated with savanna:
 - i. For mitigation areas preserving existing prairie and/or savanna off-site, prairies and/or savannas shall be preserved at a ratio of 1:1. For mitigation areas reconstructing or creating prairie and/or savanna, prairie and/or savanna shall be replaced at a ratio of 2:1.
 - ii. Story County Conservation shall approve of all seeds, plugs, and species used in the mitigation area prior to planting. The seed mix shall be equivalent to the Natural Resources Conservation Service CP42 pollinator mix or another Story County Conservation approved planting plan, with local ecotype seed only, and a ratio of 10 grass seeds to 30 forb seeds per square foot.
- (7) Restoration. Restoration to improve the prairie remnant and/or savanna remnant, including removal of invasive species, reseeded and planting, restoring the vegetative buffer around the remnant, and placing the area in a conservation easement that includes

provisions for ongoing maintenance, may be required as a condition of the applicable permit or rezoning for the development.

- F. Requirements for Archaeological Resources. Those areas containing significant sites of archaeological resources, such as Native American mounds and burial sites, which contain material remains of past human life or of archaeological interest. The requirements of this section shall be in addition to the applicant's obligation to satisfy all other applicable local, state, or federal regulations and permits.
- (1) Applicability. The provisions within this section shall be applicable to all proposed commercial and industrial development and site plans, subdivisions with more than two (2) development lots, rezonings, and conditional use permits within six-hundred fifty (650) feet of a stream.
 - (2) Identification. An archaeological assessment shall be conducted for the entire property to determine whether burial sites and Native American mounds exist on site, in accordance to the following procedures:
 - a. The applicant shall conduct a search of the Iowa Site File for archaeological sites recorded within a one-mile radius of the proposed development through the University of Iowa Office of the State Archaeologist (OSA). The applicant shall indicate in their request to the OSA that the search is required to comply with the Story County Land Development Regulations Chapter 88.05 Environmental and Natural Resource Standards. The OSA report will identify and evaluate known surveys and archaeological resources and include recommendations for further archaeological investigations.
 - b. If OSA does not recommend an archaeological survey, written notice as such from the OSA will suffice for completing this requirement.
 - c. If OSA recommends an archaeological survey, the applicant shall engage a qualified consultant from the Association of Iowa Archaeologists (AIA) Consultants List to complete the survey.
 - d. The consultant shall provide an electronic report of the survey to the Planning and Development Director and OSA. OSA may review the report to determine its adequacy using standard AIA guidelines. The report shall include recommendations regarding further archaeological investigations and appropriate research questions to assist in the event of mitigation.
 - (3) Implementation. If burial sites and/or Native American mounds are found on site, the applicant shall proceed in accordance with the following:
 - a. Buffering. A buffer zone shall be established that measures one hundred (100) feet, or as requested by Native American Nations (or other appropriate descendent communities) around the burial site and/or Native American mounds.
 - (4) Impact. The critical area and its buffer area shall be left undisturbed except for non-invasive/non-ground-disturbing management practices.
 - (5) Mitigation. The following mitigation standards shall be required in addition to those general standards in Chapter 88.05(1)(A).
 - a. Disturbance to the buffer area and/or reduction in buffer size shall only be permitted after recommendation from OSA, which may include consultation between Native American Nations (or other appropriate descendent communities), OSA, the State Historic Preservation Office, the Planning and Development Director, and funding agencies involved to determine mitigation measures.

- b. A programmatic agreement or memorandum of understanding or agreement (MOA) or other appropriate protection measures may be developed as part of the recommendation.

—3. 2. Common Open Space Requirement. In all major subdivisions of 10 development lots or more there shall be a minimum of 15 percent of the subdivision dedicated or reserved as common open space, as defined in Section 85.08, Definitions.

A. Common open space shall be clearly designated on plans and shall not include:

- (1) Areas reserved for the exclusive use or benefit of an individual tenant or owner.
- (2) Dedicated streets, alleys, and other public rights-of-way.
- (3) Vehicular drives, parking, loading, and storage areas.

B. Suitable provisions for maintenance and upkeep of common open space shall be provided through a homeowners' association, deed covenants, or through other similar provisions as approved by the Board of Supervisors.

—4. 3. Construction Site Erosion and Sediment Control. Sedimentation and erosion pollute water, degrade land, cause the loss of native vegetation and habitats, and impair drainage. Development activities cause land to become susceptible to erosion and sedimentation by wind and water. The following requirements shall apply to development and land disturbance activities in Story County to mitigate the impacts of erosion and sedimentation, protect public and private property, and to protect natural resources and preserve their functions.

~~A. Any development that disturbs one or more acres is required to obtain a National Pollutant Discharge Elimination System (NPDES) Permit from the Iowa Department of Natural Resources.~~

~~B. Any All~~ development that is not required to obtain an NPDES permit shall submit the following information in addition to other applicable development permit applications or, if no development permits are applicable, a grading permit and the following information. Any development that disturbs one or more acres is required to also obtain a National Pollutant Discharge Elimination System (NPDES) Permit from the Iowa Department of Natural Resources. The Stormwater Pollution Prevention Plan (SWPPP) shall be submitted to the Planning and Development Department as part of a permit or development application submittal.

(1) A site plan showing the area to be disturbed, any slopes, watercourses, floodplain, other features prone to erosion, and the location of Erosion and Sediment Control Best Management Practices (BMPs) selected to meet the requirements of this Chapter;

(2) Other information necessary to illustrate conformance with the Erosion and Sediment Control Requirements in this Chapter including a construction/grading schedule and schedule for the installation of erosion and sediment control BMPs. For example, a schedule of when grading will occur and when temporary erosion control BMPs will be installed or a schedule of staging activities.

(3) The party responsible for maintenance and their contact information if different from the property owner or permit applicant.

~~C.~~ B. Erosion and Sediment Control Requirements.

(1) General Requirements. The following requirements apply to all developments required to submit information on Erosion and Sediment Control in accordance with this Chapter.

a. Erosion and sediment control BMPs shall be installed following the Iowa Statewide Urban Design and Specifications (SUDAS) Design Manual and Standards Manual or other professionally accepted design criteria.

b. Maintenance of erosion and sediment control BMPs shall occur to keep the BMPs functioning in an effective manner.

c. Minimize Disturbed Area.

i. The area of land to be disturbed shall be minimized and staging shall be used to minimize the area disturbed at a given time, as practical. The limits of the development including staging and equipment storage areas shall be delineated/flagged/fenced on the site to protect areas that are not proposed to be disturbed.

ii. Natural plant covering shall be retained and protected to the maximum extent practicable and as consistent with developing the site.

d. Stabilize Disturbed Areas.

i. Final stabilization of disturbed areas shall, at a minimum, be initiated immediately whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site. If final stabilization cannot occur due to the time of year or weather conditions based on SUDAS specifications for a practice, temporary stabilization shall be immediately initiated until such time final stabilization may be completed. Final stabilization BMPs may include seeding and sodding.

ii. Temporary stabilization shall, at a minimum, be initiated on all disturbed areas, including stockpiles, whenever any clearing, grading, excavating or other earth disturbing activities have temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. Temporary erosion control stabilization BMPs may include temporary seeding, geotextiles, mulches, vegetative filter strips.

(2) Requirements for Sites with Sensitive Features. The following requirements apply to all developments required to submit information on Erosion and Sediment Control in accordance with this Chapter where watercourses, floodplain, slopes, or other features prone to erosion are proposed to be disturbed or where work may affect adjacent properties.

~~a. An undisturbed buffer zone shall be provided in accordance with the following minimum buffer sizes measured from the edge of a watercourse/feature. These buffer zones are encouraged to be revegetated where existing native vegetation does not exist. Standards for native revegetation may be used following the Iowa Stormwater Management Manual or other professionally accepted BMPs. For assistance identifying features to be protected by a buffer, maps are available on the Story County website under watershed planning.~~

~~i. Wetlands, priority wetlands, lakes, reservoirs, and environmentally sensitive areas—100 feet~~

~~ii. Priority Streams—75 feet~~

~~iii. Secondary and Other Streams—50 feet~~

~~i.~~

~~b. The following uses are permitted in a required buffer zone:~~

~~i. Legal, nonconforming uses~~

~~ii. Minor land disturbing activities for erosion control and bank stabilization or revegetation~~

~~iii. A perpendicular stream crossing by a driveway, street, or utility lines~~

~~iv. A street or driveway where buffer intrusion is the only option to provide access to a property~~

~~v. Paved and unpaved trails and paths for public use~~

~~vi. Public water supply intake or public wastewater outfall structures~~

~~vii. Public access facilities that must be on the water including boat ramps, docks, foot trails leading directly to the river, fishing platforms and overlooks~~

~~viii. Utility lines and easements running parallel with the stream, except that all easements (permanent and construction) and clearing and grading shall recognize the sensitivity of the streams and~~

~~use BMPs to limit and repair the disturbance within the buffer area. This includes such impervious cover as necessary for the operation and maintenance of the utility, including but not limited to manholes, vents and valve structures.~~

c. Development in the floodplain is discouraged. Any proposed development in the floodplain shall be done in accordance with the adopted Floodplain Management Ordinance (codified in Chapter 80 of this Code of Ordinances) or other State or Federal requirements.

d. Perimeter sediment control BMPs shall be in place prior to disturbing activities when the disturbed areas are above or on a slope to site borders, watercourse, or environmentally sensitive areas. Perimeter sediment control BMPs may be removed after final stabilization of the area above the BMP. The timing and/or installation of the perimeter control installations may be adjusted to accommodate short-term activities such as the passage of vehicles or to accommodate disturbing activities required to install the controls. Perimeter sediment control BMPs may include filter berms, filter socks, wattles, temporary earth diversion structures, vegetative filter strips, and silt fences.

e. On steep or lengthy slopes or for construction sites that show signs of concentrated flows, additional erosion and sediment control BMPs may be required. These practices may include silt fence, filter berms, filter socks, or other flow diversion and flow control BMPs to reduce the amount or velocity of flow a disturbed area receives. Follow the design considerations for a practice in SUDAS.

(3) Requirements for Treatment of Topsoil. The following requirements apply to all developments required to submit information on Erosion and Sediment Control in accordance with this Chapter where topsoil is stripped or otherwise disturbed and its removal and/or disturbance is not required for the function of the proposed project.

a. Practices to reduce compaction including reducing passes made over an area with heavy equipment and not using heavy equipment when soil is wet shall be used.

b. Topsoil that is removed but may be used for restoration after development activities cease shall be preserved on-site where possible. Topsoil shall be respread or restored to create a healthy soil profile following the methods for Soil Quality Management and Restoration in the Iowa Stormwater Management Manual or other professionally accepted methods.

(4) Construction Site Standards. The following requirements apply to all developments required to submit information on Erosion and Sediment Control in accordance with this Chapter where the site does not have an existing stabilized entrance or where a concrete truck will be used.

a. A stabilized entrance shall be designed to minimize tracking of sediment or other debris off the site and/or in the road right-of-way and shall be installed prior to land disturbing activities.

b. Concrete waste must be contained in washout areas installed following SUDAS or other professionally accepted design criteria.

D. C. Inspections and Responsibility.

(1) In no instance shall acceptance of the Erosion and Sediment Control plans and/or approval of the grading permit by Story County be construed as approval of the design, construction, or concurrence by Story County that all criteria have been satisfied. Story County shall not be liable for any damages resulting from erosion and sedimentation.

(2) An inspection for compliance with submitted erosion and sediment control plans and requirements of this Chapter shall be conducted by Planning and Development Staff as part of the required foundation location inspection for a zoning permit or if no development permits are applicable, as part of the grading permit and corresponding inspection after BMPs have been installed but prior to the commencement of land disturbing activities.

(3) Temporary erosion and sediment controls shall not be removed until the Planning and Development Staff have determined that the site has been permanently stabilized through a final

inspection for a zoning permit, or if no zoning permit is required, an inspection once final stabilization is completed.

(4) The applicant or owner of the site agree to provide for access to the BMP and the land it serves at reasonable times for periodic inspection by County or County's designee to ensure that the BMP is maintained in proper working condition to the requirements of this Chapter.

(5) Any amendments or changes to the submitted Grading Permit or Erosion and Sediment Control information shall be communicated to the Planning and Development Department and submitted prior to their implementation on-site. All amendments shall comply with the requirements for Erosion and Sediment Control in this Chapter.

(6) If a responsible party fails or refuses to meet the requirements of the approved plan or any provision of this ordinance or in the event that the erosion or sediment control BMP becomes a danger to public safety or public health, the County shall notify the party responsible for maintenance of the erosion or sediment control BMP in writing following the procedure for Notice of Violations in Chapter 93 of the Story County Land Development Regulations. Depending on the severity of the violation, the permitted timeframe to submit a compliance schedule may be reduced. If the violator does not correct/abate the violation or provide an acceptable schedule to correct/abate the violation or does not comply with the schedule, a citation for a County infraction may be issued in accordance with Chapter 93 of the Story County Land Development Regulations.

E. D. Exemptions. The following exemptions to the Erosion and Sediment Control requirements may apply; however, such uses shall not be exempt from adopted Floodplain Management Ordinance (codified in Chapter 80 of this Code of Ordinances) or other State or Federal requirements.

(1) Agricultural. Except to the extent required to implement Section 335.2, Code of Iowa, the grading permit application and Erosion and Sediment Control requirements shall not apply to development that is primarily adapted, by reason of nature or area, for use for agricultural purposes, while so used.

~~—(2) County Engineer. The County Engineer shall not be required to submit a grading permit application for the maintenance and/or construction of public roads and public road right-of-way.~~

~~5.~~ **4.** Post-Construction Stormwater Management. Stormwater runoff increases nonpoint source pollution, flooding, siltation, stream temperatures, and streambank erosion. The following requirements shall apply to development in Story County to ensure site design minimizes the generation of stormwater runoff and maximizes pervious areas, provide a single, consistent set of performance goals that apply to all developments, protect functional values of all types of natural watercourses, protect life and property from dangers associated with flooding, maintain existing flow patterns, and promote infiltration and recharge of groundwater.

A. Development that meets any of the following thresholds shall be required to submit a Stormwater Management Plan, in addition to other applicable development permit applications, prior to commencing development activities:

(1) Development, including common development, that disturbs an area one-acre or greater in size.

(2) Development that will result in the division of land into more than four development lots.

B. Criteria for Stormwater Management. Developments required to submit a Stormwater Management Plan shall be designed, constructed, and maintained to achieve the purposes of this Ordinance, as stated above, and to prevent flooding, minimize stream channel impacts, and protect water quality in accordance with the following criteria for stormwater management. See the Iowa Stormwater Management Manual for details on the calculation of the criteria. LID practices shall be used where possible to meet stormwater management criteria and in the design of a development.

(1) The site shall be designed to manage the water quality volume of a rainfall depth of 1.25 inches and to manage corresponding recharge volume through infiltration practices.

(2) To protect stream channels, the site shall be designed to provide 24-hours of extended detention of the channel protection volume determined for the 1 year, 24-hour storm.

(3) Stormwater management shall be provided to limit the post development rate of runoff from the site area during the 5-year through the 100-year, 24 hour storm events to the lesser of the following values: runoff rates equivalent to those from a storm event of the same intensity and duration based on ~~predevelopment~~ settlement conditions or runoff rates equivalent to those from the 5 year storm event based on conditions which exist as of the date of the proposed improvement plans (row crop agriculture cover, contoured in good condition and surface soil types as identified from County Soil Maps; unless otherwise approved).