

# LINN COUNTY INTEGRATED ROADSIDE VEGETATION MANAGEMENT PROGRAM PLAN

## I. PREFACE

Calendar year 2015 Linn County IRVM Program

Contributors to the plan / Linn County Roadside Advisory Committee:

- Craig Aldrich / Iowa Sensitive Crop Directory member
- Carol Brannaman / Linn County Farm Bureau
- Jon Gallagher / Soil and Water Conservation – Weed Commissioner
- Steve Gannon / Linn County Engineer
- Dennis Goemaat / Linn County Conservation Department
- John Harris / Linn County Board of Supervisors
- Dustin Hinrichs / Trees Forever
- Greg Johnston / Linn County Pheasants Forever
- Linda Langston / Linn County Board of Supervisors
- Ben Merta / Linn County Operations Superintendent
- Brent Oleson / Linn County Board of Supervisors
- Rob Roman / Linn County Roadside Vegetation Manager
- Jean Wiedenheft / Indian Creek Nature Center

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## II. EXECUTIVE PROGRAM ELEMENTS

The purpose of this plan is to provide a long term approach for the management of vegetation in county-controlled road and highway rights-of-way. The management plan integrates all of Linn County's programs which seek to control erosion, limit sedimentation, promote safer conditions for errant vehicles, maintain sight distance, limit herbicide use, and foster natural settings for wildlife cover and roadside beautification.

Linn County's IRVM program is currently housed within the Engineering and Secondary Road Department. Linn County's IRVM Program was founded with the development of Iowa's Resource Enhancement and Protection Program and the enactment of Iowa Code 314.22. The REAP Act passed in the 1989 session of the Iowa General Assembly, and was signed by Governor Terry Branstad on May 27 of that year. Within the REAP Act is language which justifies its broad scope and significant funding: "The state of Iowa has lost 99.9 percent of its prairies, 98 percent of its wetlands, 80 percent of its woodlands, 50 percent of its topsoils and more than 100 species of wildlife since settlement in the early 1800s. There has been significant deterioration in the quality of Iowa's surface waters and ground waters. Prevention of further loss is imperative. The air, water, soils and biota of Iowa are interdependent and form a complex ecosystem. Iowans have the right to inherit this ecosystem in a sustainable condition, without severe or irreparable damage caused by human activities."

The IRVM decision making process is based on a team of individuals that starts with our elected Board of Supervisors and goes thru our Secondary Road Department system. This document serves to summarize that process and gives examples of various management items that have been put into place to meet the goals of the program. Contributors to this plan include members of our Roadside Advisory Committee and they are listed in the Preface of this document. Applicable state code sections provide goals for our IRVM Program as does jurisdictional recognition and approval. All road and highway rights-of-way under the jurisdiction of the county are a part of this Integrated Roadside Vegetation Management Program. An area map is included in the appendices of this IRVM Plan.

### III. JURISDICTIONAL RECOGNITION AND APPROVAL

Linn County policies approved by the Board of Supervisors outline the scope and objectives of various county programs. Iowa Code 314.22 allows for county plans consistent with the integrated roadside vegetation management plan adopted by Iowa DOT. Iowa Code 314.22 is included in the appendices of this plan as is Linn County Policy Section & Number OP-014.

All Iowa Code and Administrative Rules – State Laws and Regulations and Federal laws that are applicable to counties are applicable to our Linn County IRVM Plan and Program.

Several of these state rules are included in the appendices of this document. Applicable items include but are not limited to the following:

- Iowa Code Chapter 314.1 thru 314.29
- Iowa Code Chapter 317.1 thru 317.26
- Iowa Code Chapter 318.1 thru 318.12

Local laws and rules included in the appendices of this document include:

- Work Within Right-of-Way Permit for Private Vegetation Control in ROW
- Linn County Secondary Road Department Utility Permit
- Linn County Permit to Perform Work in County Right-of-Way

#### IV. PROGRAM ORGANIZATIONAL STRUCTURE

A copy of our Staff Organizational Chart is included with this IRVM Plan. Several position descriptions and listed qualifications are included in the appendices portion of this document. In addition to staff positions recognized on our Organizational Chart, Temporary Roadway Maintenance Workers hired with our Board of Supervisor's Road Clearing Appropriation are involved with IRVM plan and program activities and duties. The Temporary Roadway Maintenance Worker job posting for 2015 is also included in the appendices.

Support services and training for IRVM staff is an ongoing effort in Linn County. With the involvement of so many of our department employees, our Rights-of-Way Workshop has proven to be a great addition to this IRVM training and support. The program brochure for our sixth workshop, held in March of this year at Kirkwood Community College, is included in the appendices of this document. Over 200 people attended the workshop with great support from several utility groups and communities in Linn County.

Linn County shares roads with neighboring counties and with communities in Linn County. Agreements are made to address those shared systems and an example of an agreement for a shared system is included in the appendices. Staff members from the cities of Cedar Rapids and Marion were in attendance this year at our Rights-of-Way Workshop, demonstrating a commitment from those communities in regards to IRVM principles and practices.

#### V. PUBLIC INVOLVEMENT

Linn County's Roadside Advisory Committee was established with members being appointed by the Board of Supervisors beginning in 1991. The current members of our steering committee are listed in the preface of this document. Linn County's committee meets six

times per year on the third Monday of odd numbered months. Terms are for three years for non-department members. Elected and appointed officials terms are as applicable. The approved minutes from the March 16, 2015 Roadside Committee Meeting are included in the appendices of this document. Committee activities are listed in Policy OP-014 t included in the appendices.

To date in 2015, Linn County's Roadside Vegetation Manager has met with the Linn Soil and Water Conservation District, the Linn County Conservation Board, and Linn County Pheasants Forever to discuss roadside vegetation management items and issues. Linn County has an ongoing effort to communicate IRVM plan and program activities with the general public. A copy of our latest news release: Iowa Mowing Laws Designed to Protect Roadside Habitats; is included in the appendices of this document. Linn County Secondary Road Department is participating in each of the two pilot Plant Iowa Native seminars being held this spring. This first was held in Johnson County on May 30<sup>th</sup> and the second will be held in Linn County on June 20<sup>th</sup>. Iowa's Living Roadway Trust Fund has been a great source for education and outreach activities.

#### VI. INVENTORY AND ANALYSIS

Linn County conducted a cover-type roadside survey in 1991 and an in depth roadside segment inventory in 1992. The funding for both activities was provided by Iowa's Living Roadway Trust Fund. The surveys provided basic information needed to analyze current roadside conditions and to plan for future roadside projects and activities. The 1992 survey was primarily a roadside remnant vegetation inventory. Some information may be found online at <http://www.rrt.ivrcd.org/linn.html> .

Our inventory process is an ongoing activity that now includes aerial photography, GIS mapping, paper records, ground photography and additional site surveys. Additional projects thru partner organizations such as the Indian Creek Watershed Management Authority provide information relative to Integrated Roadside Vegetation Management.

A detailed inventory of equipment used in IRVM activities is referenced in the appendices under the Linn County REAP funding history document. Linn County has currently applied to the Living Roadway Trust Fund for a hydro seeder upgrade for roadside planting purposes. Additional prescribed burning has been mentioned this year for future roadside vegetation management emphasis.

#### VII. PROGRAM OPERATIONS

Our 2015 Department IRVM Annual Program Operations were approved on March 16 at our Roadside Committee Meeting. A listing of the calendar year 2015 program operation items are included in the appendices of this document. Department staff members attend the Annual Roadside Conference, attend pesticide applicator training conducted by the Iowa

Department of Agriculture and Land Stewardship, as well as attend or assist in producing related items that reference our policy and program operations.

Linn County is perhaps unique in that we have both a rural and urban roadside environment. Rural and urban areas are treated the same in regards to program policies and activities. The IRVM legislation requires multiple purposes for roadside vegetation and our local program mirrors related requirements. An example would be that we seed turf grass species immediately in front of homes unless native vegetation is requested by the adjacent property owner. Iowa Code allows unregulated right-of-way mowing within 200 yards of an inhabited residence.

Two special projects of unique interest is our involvement with the Hawkeye Cooperative Weed Management Association and our Native Drill Rental Program Partnership. Both memorandums of understanding are included in the appendices of this document.

## VIII. METHODS

Linn County Secondary Road Department utilizes the IRVM Technical Manual in much of its practices. We also have situations or circumstances where we may differ from standard practices. Linn County looks at the physiology of individual plant species and limits herbicide use to situations where it is not practical to mow or otherwise control. Herbaceous species listed for herbicide control in 2015 are listed in our 2015 Annual Program Operations. Plant material native species utilized on individual roadside planting projects are matched to the soils and hydrology of individual planting sites. Examples of native species used are included in the appendices of this document. Every location designated for native plantings receive a minimum of 30 species for sustainability purposes.

The recently updated Iowa DOT specifications for erosion control Section 2601 are included in the appendices of this document. Quantities and items referenced in the update are utilized by our department. For 2015, the non-competitive stabilizing crop seeding listed in Table 2601.03-1 is being utilized with our native plantings. Linn County Secondary Road Department follows ANSI-A300 Pruning Standards in our tree management activities. We also maintain a 16' X 16' vertical and horizontal clearance throughout our road system. We provide for a minimum two foot ditch or curb throughout our system for slope and drainage. Mowing activities and timing of mowing are spelled out in our annual operations. Straw mulch, hydro mulch, silt fences, silt basins and sediment traps are utilized in the process of erosion and sediment control.

Encroachment agreements and work in the right-of-way permits allow for methods beyond jurisdictional situations. An encroachment agreement is included in the appendices as an example.

IX. MATERIAL PROCUREMENT

A copy of Linn County's purchasing policy is included in the appendices. Linn County utilizes Iowa Source Identified native species seed in all of its native roadway plantings. Plant materials are stored in a shared facility with Linn County Conservation Department. Seed is stored in a climate controlled storage room.

X. RESEARCH OPPORTUNITIES

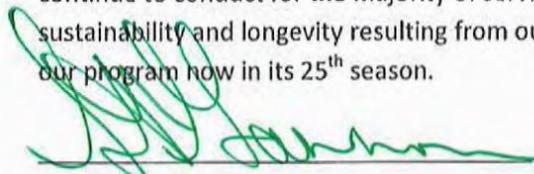
Linn County Secondary Road Department has utilized the Living Roadway Trust Fund to establish several research and demonstration projects. A 35 acre 50 native species demonstration planting seeded in 1991 and 1994 and a 3 acre 30 native species demonstration planting seeded in 1993 illustrate sustainability and a reduction in maintenance costs. A Research Report on Roadside Vegetation Management by Dr. Paul Christiansen and Dr. David Lyon from 1971 to 1973 was conducted here for Linn County and the Iowa Department of Transportation. The native North Washington Street planting, a part of that research, is now in its 44<sup>th</sup> growing season. Between 2003 and 2007, Linn County looked at the effects of various herbaceous native species and their management techniques on blowing and drifting snow along highways. Observations noted from this effort now impact our mowing activities along our roadways. Discussion of these observations will be a part of the Roadside Symposium portion of the Iowa Prairie Conference being held this July at the University of Northern Iowa in Cedar Falls. Research and feasibility studies such as the Cost Analysis Study currently underway need to continue throughout our state for the future of IRVM.

XI. BUDGET

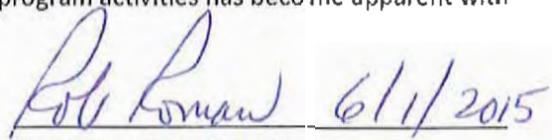
Related Linn County IRVM budget line items are included in the appendices of this document. The IRVM Program in Linn County utilizes Function 71400 in Road Clearing and Function 71100 for Road Maintenance in Secondary Roads.

XII. PROGRAM EVALUATION

Our program is evaluated each year at our November Roadside Committee Meeting. We continue to conduct for the majority of services in-house, rather than contract. The sustainability and longevity resulting from our program activities has become apparent with our program now in its 25<sup>th</sup> season.



Linn County Engineer



Roadside Vegetation Manager

XIII. APPENDICES (attached)



# **BOARD OF SUPERVISORS**

## **County of Linn, Iowa**

<b>SUBJECT:</b> Integrated Roadside Vegetation Management			Directive Number:
Approval Date: 02/12/2003	Effective Date: 02/12/2003	Revision No.:	Policy Section & Number: <b>OP - 014</b>
Reference: Minutes of 02/04/2003 Minutes of 02/12/2003 Minutes of 02/19/2003		Distribution: Department, Intranet, Auditor	

**I. Policy/Purpose**

The purpose of this policy is to provide a long-term approach for the management of vegetation in county-controlled road and highway rights-of-way. The management plan integrates all of Linn County's programs which seek to control erosion, limit sedimentation, promote safer conditions for errant vehicles, maintain sight distance, limit herbicide use, and foster natural settings for wildlife cover and roadside beautification. **All road and highway rights-of-way under the jurisdiction of the County are a part of this Integrated Roadside Vegetation Management Program as defined in Iowa Code Section 317.11. Vegetation within those rights of way is maintained for highway purposes.**

**II. Scope**

This policy outlines the objectives of the Linn County Engineering and Secondary Road Department to manage roadside vegetation. This policy establishes the Roadside Advisory Committee; how it is set up and the activities it performs. The Roadside Vegetation Management Policy provides guidance as to how the regulation of activities will occur.

**III. Objectives**

Using sustainable management practices to establish and maintain a safe, stable, low maintenance roadside for road and highway purposes that is attractive and healthy for the environment.

**IV. Definitions**

1. Traveled Way: Designated driving surface of a road (including the shoulder).
2. Right-of-Way (R.O.W.): Property obtained through deed or permanent easement reserved for construction of and/or maintenance of transportation facilities (typically 66' wide on most county roads).
3. Roadside: Areas within R.O.W. that are outside the Traveled Way.
4. Sedimentation: Soil loss greater than 5 ton per acre per year.
5. Grasses: Plants found in the Gramineae family with narrow leaves, parallel veins, small inconspicuous flowers and jointed stems.

6. Native Vegetation: Plants indigenous to the Midwestern region of the North American continent.
7. Native Herbaceous Plants: Non-woody plants which are native to the North American continent.
8. Noxious Weeds: Prolific plant species identified by Iowa Code as being harmful, detrimental and/or invasive in some way and are thus targeted for control.
9. ANSI: American National Standards Institute.

**V. Procedures and Regulation of Activities**

A roadside advisory committee will be formed to assist in planning of county roadside management efforts. The County Engineer, the County Board of Supervisors, existing members, or the Roadside Manager may nominate members of the committee. The activities of the committee may include providing advice and assistance in the following areas:

1. Research efforts
2. Demonstration projects.
3. Education and orientation efforts for property owners, public officials, and the general public.
4. Reviewing applications for funding assistance.
5. Securing funding for research and demonstrations.
6. Make recommendations to state organizations and the legislature on the need for revising the state weed law and other applicable code sections.
7. Wetland and/or construction mitigation projects.
8. Best management practices.

The committee membership shall consist of the following:

1. Linn County Engineer
2. Linn County Roadside Vegetation Management Specialist
3. Linn County Weed Commissioner
4. One member representing the Linn County Conservation Department
5. One member representing the Natural Resources Conservation Service (NRCS) or the Linn Soil and Water Conservation District (LSWCD)
6. One member appointed from a farm organization
7. One member of the County Board of Supervisors
8. Two or more members as nominated by the committee or Board of Supervisors

The Linn County Engineer, County Weed Commissioner and Roadside Vegetation Management Specialist shall be permanently appointed to the committee. The Board of Supervisors, the County Engineer, or current committee members may nominate other members. Members shall be appointed to a three-year term of service and may be reappointed at the option of the Board. Members of the committee shall serve without compensation. The Linn County Engineer shall serve as the chairperson of the committee. The Linn County Roadside Management Specialist shall serve as the Secretary of the committee.

A. Promoting a diverse self-sustaining plant community in County Road R.O.W.

1. Systematically survey the right-of-way vegetation in units of manageable size. The survey will be updated as manpower and time allow, with a goal of meeting a time schedule that will prevent the information from becoming obsolete.
2. Determine the vegetation management practice best suited to each segment of right-of-way. This must take into account such things as soil type, drainage, potential for snow drifting and road visibility concerns.
3. Encourage the growth of existing native vegetation in the R.O.W. by establishing native herbaceous type plantings such as grasses and forbs whenever practical.

4. Provide for periodic evaluation of management practices.
5. Mowing to maintain visibility at intersections, driveways, curves and other areas of limited sight distance may dictate selection of certain plant types and management methods.
6. Provide a resource to the community by assisting in educating adjacent landowners and the general public.

B. Implementation of Iowa's Noxious Weed Law.

1. Control noxious weeds in the right-of-way utilizing the current state of the art methods and procedures as practical. The type of control utilized on any given site will depend upon which plant species are to be controlled, what the effect will be upon desirable species, and which method provides the most economical long-term control. There may be instances where a short-term control method will be used until a more long-term method can be applied.
  - a) Mechanical Methods
    - Mowing at a height to reduce reproductive capacity of the weeds and give a competitive advantage to the more desirable vegetation.
    - Complete tillage and reseeding.  
Removing smaller weed patches or individual weed plants manually by county crews.
  - b) Chemical Applications
    - Judicious use of chemicals as needed within legal constraints.
    - Chemicals will be utilized according to label constraints, specificity to the target species, and residual effect.
  - c) Biological Control
    - Use of animals, insects, bacteria or virus to control plant growth. Use of biological controls may be limited due to lack of consistently effective methods and cost limitations.
  - d) Husbanding Control
    - Introduction of desirable plant species.
    - Use of mulches.
    - Controlled burning. Especially useful in restoration of existing prairie areas and in the control of woody species. There are several hazards associated with controlled burning and extreme caution must be used. Each site must be individually evaluated before controlled burning method is to be used. Local ordinances require burning permits.
2. Maintain necessary records and submit reports required by the Noxious Weed Law of Iowa, Iowa Code section 317.

C. Tree and Brush Control in County Road R.O.W.

1. Controlling woody vegetation in the right of way is a priority for Linn County. Trees and brush can create obstructions to visibility and drainage and are potential collision hazards in the right of way. Trees and brush will be removed and/or controlled in clear zones and other priority areas identified by staff using the following methods:
  - a) Mechanical Methods
    - Cutting brush and trees manually with county crews as available.

- Utilizing mechanical equipment such as brush mowers to cut down smaller trees and brush patches.
  - Chipping of downed trees, brush, and limbs will be accomplished, as crews are available to do this work. Not all brush will be chipped and removed, some will be allowed to naturally deteriorate or be allowed to remain for wildlife cover.
  - Priority will be given to areas where trees and brush create visual obstructions.
  - ANSI A-300 Standards will be followed.
- d) Chemical Applications
- Judicious use of chemicals as needed within legal constraints.
  - Chemicals will be utilized according to label constraints, specificity to the target species, and residual effect.
- c) Husbanding Control
- Introduction of desirable plant species.
  - Use of mulches.
  - Controlled burning.
2. Trees and brush may remain undisturbed in the R.O.W. under certain conditions:
- a) Proximity to existing private fence or other objects prevents removal without causing damage to private property.
  - b) Located on or behind non-traversable back slopes and banks.
  - c) Located a minimum safe distance behind guardrail.
  - d) Existing greater than 30 feet away from the traveled way.

#### D. Public Information and Dissemination

1. Provide information on the management techniques appropriate for the roadside adjacent to their property. Educational programs may be offered as time and personnel allow.
2. The roadside manager and county engineer will answer any questions or take comments from the general public concerning the methods used to manage the county's roadsides.
3. Provide information on seeding techniques, seed sources, and management practices.
4. Erect signs designating areas as roadside prairie sites so as to make them more easily recognizable by the public.
5. Cooperate whenever possible with programs offered by other governmental organizations.

#### E. Protection of seeds and native herbaceous plants.

1. The harvest of seed heads, forbs, and plants from native plantings on county R.O.W. may be explored as a way to provide materials for the county roadside planting program.
2. Grazing on county R.O.W. will be allowed per the provisions of the Code of Iowa, but only with the written permission of the County Engineer. Haying of areas within R.O.W. is allowed only with written authorization of the County Engineer.
3. Plants hold soil, occupy space, and manipulate sunlight. Injuring parent plants, removing plant materials, and recreational mowing may compromise established vegetation health and growth. These types of activities may be monitored and regulated by the county.

F. Reduction of Erosion and Siltation.

1. Linn County recognizes the damages associated with excessive siltation in county road R.O.W. as a result of water and wind erosion from adjoining lands. Impairment of proper drainage and the increased expense of cleaning and maintaining county road ditches occur due to excessive soil loss from areas disturbed by the following activities:
  - a) Agricultural Operations
  - b) Commercial and Residential Development
  - c) Roadway Construction Activities
2. When a problem is identified, the Linn County Secondary Road Department will may request the assistance of the Linn County Soil Conservationist who will contact the landowner/entity responsible for the siltation and/or erosion damage. The soil conservationist will provide alternatives to the landowner/entity that can be used to prevent further erosion and siltation damage and inform them of potential financial assistance sources. Upland treatments may consist of but are not limited to the following:
  - a) Short or Long Term Seeding Alternatives
  - b) Use of Various Mulches
  - c) Waterway Establishment
  - d) Grade Stabilization Structures
  - e) Silt Fence or Straw Wattles
  - f) Other Conservation Practices Associated with Agricultural and Construction Activities
3. If the landowner/entity responsible for damages within or adjacent to the county road R.O.W. fails to voluntarily address the identified problem a soil loss complaint may be filed against said group. Soil loss complaint procedure shall be in accordance with Chapter 161A of the State Code of Iowa.

G. Establishment of No-Spray Designated Areas

1. Residents and landowners requesting the designation of R.O.W. areas as "no spray" areas must make this request with the County Engineers Office, 1888 County Home Road, Marion, Iowa 52302. A permit may be issued by the County Engineer for the establishment of a no spray area after bringing the requested area up to standards for obstructions and other hazards.
2. No Spray signs are available for purchase at the County Engineers Office. Signs must conform to county standards and are to be mounted at least 4 feet above the ground line and placed within 3 feet of the R.O.W. line. Signs shall be mounted on posts meeting county breakaway support requirements if located within the clear zone.
3. Residents will be responsible for maintenance and installation of the signs, and control of noxious weeds, trees, and brush within designated no spray areas. If residents do not control trees, brush, and noxious weeds within designated no spray areas, the county will send notice to the resident or landowner by certified mail to cut said weeds, trees or brush. If removal is not completed within 7 days of receipt of the letter, the county may cut, spray, or otherwise destroy noxious weeds, trees, or brush according to standard county practice and revoke the permit.

A person shall not excavate, fill, or make a physical change within the right of way of a public road or highway without obtaining a permit from the County Engineer as provided in Code of Iowa, Section 319.14. Work performed under the permit shall be performed in conformity with the specifications prescribed by the County. A physical change includes adding, removing or damaging existing vegetation except for those activities approved through permit or application including residential and commercial development and utility construction and maintenance activities.

No applications for roadside vegetation grants or funding for projects within Linn County rights of way may be undertaken or applied for by civic groups, private organizations, or individuals without the written approval of the County Engineer.

**314.22 INTEGRATED ROADSIDE VEGETATION MANAGEMENT.**

1. *Objectives.* It is declared to be in the general public welfare of Iowa and a highway purpose for the vegetation of Iowa's roadsides to be preserved, planted, and maintained to be safe, visually interesting, ecologically integrated, and useful for many purposes. The state department of transportation shall provide an integrated roadside vegetation management plan and program which shall be designed to accomplish all of the following:

- a. Maintain a safe travel environment.
- b. Serve a variety of public purposes including erosion control, wildlife habitat, climate control, scenic qualities, weed control, utility easements, recreation uses, and sustenance of water quality.
- c. Be based on a systematic assessment of conditions existing in roadsides, preservation of valuable vegetation and habitats in the area, and the adoption of a comprehensive plan and strategies for cost-effective maintenance and vegetation planting.
- d. Emphasize the establishment of adaptable and long-lived vegetation, often native species, matched to the unique environment found in and adjacent to the roadside.
- e. Incorporate integrated management practices for the long-term control of damaging insect populations, weeds, and invader plant species.
- f. Build upon a public education program allowing input from adjacent landowners and the general public.
- g. Accelerate efforts toward increasing and expanding the effectiveness of plantings to reduce wind-induced and water-induced soil erosion and to increase deposition of snow in desired locations.
- h. Incorporate integrated roadside vegetation management with other state agency planning and program activities including the recreation trails program, scenic highways, open space, and tourism development efforts. Agencies should annually report their progress in this area to the general assembly.

2. *Counties may adopt plans.* A county may adopt an integrated roadside vegetation management plan consistent with the integrated roadside vegetation management plan adopted by the department under subsection 1.

3. *Integrated roadside vegetation management technical advisory committee.*

a. The director of the department shall appoint members to an integrated roadside vegetation management technical advisory committee which is created to provide advice on the development and implementation of a statewide integrated roadside vegetation management plan and program and related projects. The department shall report annually in January to the general assembly regarding its activities and those of the committee. Activities of the committee may include, but are not limited to, providing advice and assistance in the following areas:

- (1) Research efforts.
- (2) Demonstration projects.
- (3) Education and orientation efforts for property owners, public officials, and the general public.
- (4) Activities of the integrated roadside vegetation management coordinator for integrated roadside vegetation management.
- (5) Reviewing applications for funding assistance.
- (6) Securing funding for research and demonstrations.

(7) Determining needs for revising the state weed law and other applicable Code sections.

(8) Liaison with the Iowa state association of counties, the Iowa league of cities, and other organizations for integrated roadside vegetation management purposes.

b. The director may appoint any number of persons to the committee but, at a minimum, the committee shall consist of all of the following:

- (1) One member representing the utility industry.
- (2) One member from the Iowa academy of sciences.
- (3) One member representing county government.
- (4) One member representing city government.
- (5) Two members representing the private sector including community interest groups.
- (6) One member representing soil conservation interests.
- (7) One member representing the department of natural resources.

(8) One member representing county conservation boards.

Members of the committee shall serve without compensation, but may be reimbursed for allowable expenses from the living roadway trust fund created under section 314.21. No more than a simple majority of the members of the committee shall be of the same gender as provided in section 69.16A. The director of the department shall appoint the chair of the committee and shall establish a minimum schedule of meetings for the committee.

4. *Integrated roadside vegetation management coordinator.* The integrated roadside vegetation management coordinator shall administer the department's integrated roadside vegetation management plan and program. The department may create the position of integrated roadside vegetation management coordinator within the department or may contract for the services of the coordinator. The duties of the coordinator include, but are not limited to, the following:

- a. Conducting education and awareness programs.
- b. Providing technical advice to the department and the department of natural resources, counties, and cities.
- c. Conducting demonstration projects.
- d. Coordinating inventory and implementation activities.
- e. Providing assistance to local community-based groups for undertaking community entryway projects.
- f. Being a clearinghouse for information from Iowa projects as well as from other states.
- g. Periodically distributing information related to integrated roadside vegetation management.
- h. General coordination of research efforts.
- i. Other duties assigned by the director of transportation.

5. *Education programs.* The department shall develop educational programs and provide educational materials for the general public, landowners, governmental employees, and board members as part of its program for integrated roadside vegetation management. The educational program shall provide all of the following:

- a. The development of public service announcements and television programs about the importance of roadside vegetation in Iowa.
- b. The expansion of existing training sessions and educational curriculum materials for county weed commissioners, government contract sprayers, maintenance staff, and others to include coverage of integrated roadside management topics such as basic plant species identification, vegetation preservation, vegetation inventory techniques, vegetation management and planning

procedures, planting techniques, maintenance, communication, and public relations. County and municipal engineers, public works staffs, planning and zoning representatives, parks and habitat managers, and others should be encouraged to participate.

c. The conducting of statewide and regional conferences and seminars about integrated roadside vegetation management, community entryways, scenic values of land adjoining roadsides, and other topics relating to roadside vegetation.

d. The preparation, display, and distribution of a variety of public relations material, in order to better inform and educate the traveling public on roadside vegetation management activities. The public relations material shall inform motorists of a variety of roadside vegetation issues including all of the following:

(1) Benefits of various types of roadside vegetation.

(2) Long-term results expected from planting and maintenance practices.

(3) Purposes for short-term disturbances in the roadside landscapes.

(4) Interesting aspects of the Iowa landscape and individual landscape regions.

(5) Other aspects relating to wildlife and soil erosion.

e. Preparation and distribution of educational material designed to inform adjoining property owners, farm operators, and others of the importance of roadside vegetation and their responsibilities of proper stewardship of that vegetation resource.

6. *Research and demonstration projects.* The department, as part of its plan to provide integrated roadside vegetation management, shall conduct research and feasibility studies including demonstration projects of different kinds at a variety of locations around the state. The research and feasibility studies may be conducted in, but are not limited to, any of the following areas:

a. Cost effectiveness or comparison of planting, establishing and maintaining alternative or warm-season, native grass and forb roadside vegetation and traditional cool-season nonnative vegetation.

b. Identification of the relationship that roadsides and roadside vegetation have to maintaining water quality, through drainage wells, sediment and pollutant collection and filtration, and other means.

c. Impacts of burning as an alternative vegetation management tool on all categories of roads.

d. Techniques for more quickly establishing erosion control and permanent vegetative cover on recently disturbed ground as well as interplanting native species in existing vegetative cover.

e. Effectiveness of techniques for reduced or selected use of herbicides to control weeds.

f. Identification of cross section and slope steepness design standards which provide for motorist safety as well as for improved establishment, maintenance, and replacement of different types of vegetation.

g. Identification of a uniform inventory and assessment technique which could be used by many counties in establishing integrated roadside management programs.

h. Equipment innovations for seeding and harvesting grasses in difficult terrain settings, roadway ditches, and fore-slopes and back-slopes.

i. Identification of the perceptions of motorists and landowners to various types of roadside vegetation and configuration of plantings.

j. Market or economic feasibility studies for native seed,

forb, and woody plant production and propagation.

k. Impacts of vegetation modifications on increasing or decreasing wildlife populations in rural and urban areas.

l. Effects of vegetation on the number and location of wildlife road-kills in rural and urban areas.

m. Costs to the public for improper off-site resource management adjacent to roadsides.

n. Advantages, disadvantages, and techniques of establishing pedestrian access adjacent to highways and their impacts on vegetation management.

o. Identification of alternative techniques for snow catchment on farmland adjacent to roadsides.

7. *Gateways program.* The department shall develop a gateways program to provide meaningful visual impacts including major new plantings at the important highway entry points to the state and its communities. Substantial and distinctive plantings shall also be designed and installed at these points. Creative and artistic design solutions shall be sought for these improvements. Communications about these projects shall be provided to local groups in order to build community involvement, support, and understanding of their importance. Consideration shall be given to a requirement that gateways projects produce a local match or contribution toward the overall project cost.

8. *Vegetation inventories and strategies.*

a. The department shall coordinate and compile integrated roadside vegetation inventories, classification systems, plans, and implementation strategies for roadsides. Areas of increased program and project emphasis may include, but are not limited to, all of the following:

(1) Additional development and funding of state gateways projects.

(2) Accelerated replacement of dead and unhealthy plants with native and hardy trees and shrubs.

(3) Special interest plantings at selected highly visible locations along primary and interstate highways.

(4) Pilot and demonstration projects.

(5) Additional snow and erosion control plantings.

(6) Welcome center and rest area plantings with native and aesthetically interesting species to create mini-arboretums around the state.

b. The department shall coordinate and compile a reconnaissance of lands to develop an inventory of sites having the potential of being harvested for native grass, forb, and woody plant material seed and growing stock. Highway right-of-ways, parks and recreation areas, converted railroad right-of-ways, state board of regents' property, lands owned by counties, and other types of public property shall be surveyed and documented for seed source potential. Sites volunteered by private organizations may also be included in the inventory. Inventory information shall be made available to state agencies' staffs, county engineers, county conservation board directors, and others.

### Section History: Recent Form

89 Acts, ch 246, §6; 95 Acts, ch 3, §2  
Referred to in § 314.13, 314.21, 317.11

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Previous Section [314.21](#)    Next Section [314.23](#)

**318.3 OBSTRUCTIONS IN HIGHWAY RIGHT-OF-WAY.**

A person shall not place, or cause to be placed, an obstruction within any highway right-of-way. This prohibition includes, but is not limited to, the following actions:

1. The excavation, filling, or making of any physical changes to any part of the highway right-of-way, except as provided under section 318.8.

2. The cultivation or growing of crops within the highway right-of-way.

3. The destruction of plants placed within the highway right-of-way.

4. The placing of fences or ditches within the highway right-of-way.

5. The alteration of ditches, water breaks, or drainage tiles within the highway right-of-way.

6. The placement of trash, litter, debris, waste material, manure, rocks, crops or crop residue, brush, vehicles, machinery, or other items within the highway right-of-way.

7. The placement of billboards, signs, or advertising devices within the highway right-of-way.

8. The placement of any red reflector, or any object or other device which shall cause the effect of a red reflector on the highway right-of-way which is visible to passing motorists.

**Section History: Recent Form**

2006 Acts, ch 1097, §3

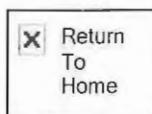
Referred to in § 318.6, 318.8

See also §318.5, 318.10, and 318.11

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Previous Section [318.2](#)    Next Section [318.4](#)

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**314.17 MOWING ON INTERSTATES AND PRIMARY HIGHWAYS.**

On or after January 1, 2003, the department shall not mow roadside vegetation on the rights-of-way or medians on any primary or interstate highway. Mowing shall be permitted as follows:

1. On rights-of-way which include drainage ditch areas.
2. On rights-of-way within three miles of the corporate limits of a city.
3. To promote native species of vegetation or other long-lived and adaptable vegetation.
4. For establishing control of damaging insect populations, noxious weeds, and invader plant species.
5. For visibility and safety reasons.

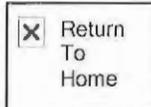
**Section History: Recent Form**

98 Acts, ch 1212, §7

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Previous Section [314.16](#)    Next Section [314.18](#)

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**317.13 PROGRAM OF CONTROL.**

The board of supervisors of each county may each year, upon recommendation of the county weed commissioner by resolution prescribe and order a program of weed control for purposes of complying with all sections of this chapter. The county board of supervisors of each county may also by adopting an integrated roadside vegetation management plan prescribe and order a program of weed control for purposes of complying with all sections of this chapter. The program for weed control ordered or adopted by the county board of supervisors shall provide that spraying for control of weeds shall be limited to those circumstances when it is not practical to mow or otherwise control the weeds.

The program of weed control shall include a program of permits for the burning, mowing, or spraying of roadsides by private individuals. The county board of supervisors shall allow only that burning, mowing, or spraying of roadsides by private individuals that is consistent with the adopted integrated roadside vegetation management plan. This paragraph applies only to those roadside areas of a county which are included in an integrated roadside vegetation management plan.

**Section History: Early Form**

[S13, § 1565-c, -d; C24, 27, 31, 35, § 4821; C39, § 4829.13; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, § 317.13]

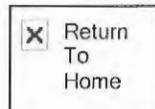
**Section History: Recent Form**

85 Acts, ch 171, §3; 89 Acts, ch 246, §9; 90 Acts, ch 1267, § 36  
Referred to in § 317.14

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Previous Section [317.12](#)   Next Section [317.14](#)

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**317.19 ROAD CLEARING APPROPRIATION.**

The board of supervisors may appropriate moneys to be used for the purposes of cutting, burning, or otherwise controlling weeds or brush within the right-of-way of roads under county jurisdiction in time to prevent reseeding or in a manner consistent with the county's roadside vegetation management plan, if the county has adopted such a plan. The moneys appropriated shall not be spent on spraying for control of weeds except in those circumstances when it is not practical to mow or otherwise control the weeds.

The board of supervisors may purchase or hire necessary equipment or contract with the adjoining landowner to carry out this section.

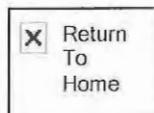
**Section History: Recent Form**

83 Acts, ch 123, § 123, 209; 84 Acts, ch 1219, § 20; 85 Acts, ch 171, §6; 89 Acts, ch 246, §11; 98 Acts, ch 1075, §15

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Previous Section [317.18](#)    Next Section [317.20](#)

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HIGHWAY AND TRANSPORTATION MAP  
**LINN COUNTY**  
 IOWA



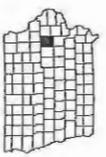
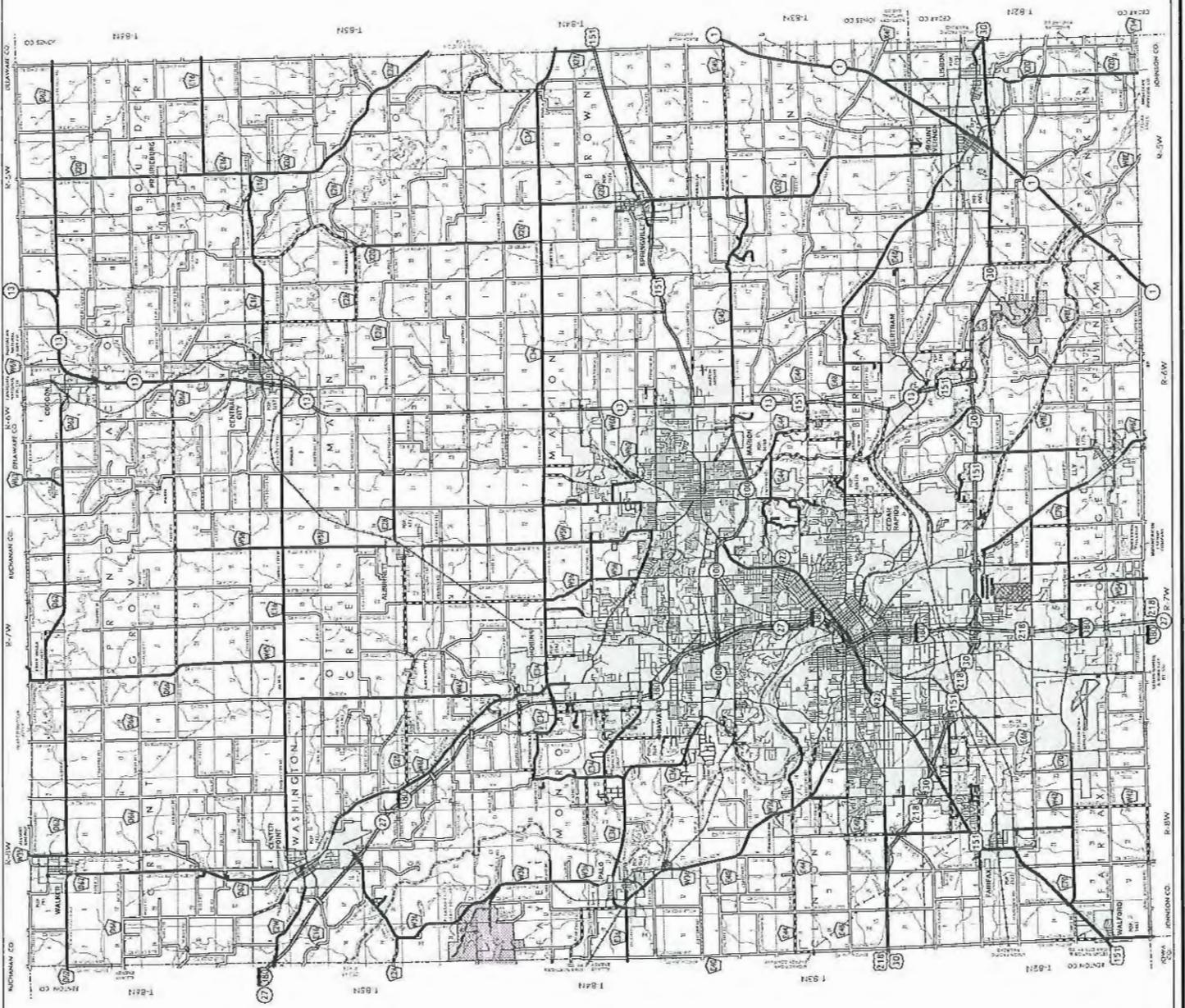
Prepared by  
**Iowa Department  
 of Transportation**

OFFICE OF SYSTEMS PLANNING  
 Phone: (319) 281-2700  
 WWW.IOWADOT.GOV/MSPS  
 In Cooperation With  
**United States**  
 Department of Transportation



**LEGEND**

- INTERSTATE HIGHWAY
- STATE HIGHWAY
- COUNTY ROAD
- UNIMPROVED HIGHWAY
- HIGHWAY UNDER CONSTRUCTION
- AIRPORT
- RAILROAD
- CANAL
- RIVER
- CREEK
- LAKE
- TOWN
- CITY
- VILLAGE
- UNINCORPORATED PLACE
- STATE PARK
- STATE INSTITUTION
- FEDERAL LAND



ROADSIDE COMMITTEE MEETING

Monday March 16, 2015

Engineering Building Conference Room

1888 County Home Road, Marion

MINUTES

Attendance: Steve Gannon, Ben Merta, Dustin Hinrichs, Greg Johnston, Craig Aldrich, Rob Roman

The meeting was called to order by Steve Gannon at 2:30 PM.

Motion to approve January 19 meeting minutes by Merta, second by Aldrich, all aye.

Our tentative registration number for Wednesday's workshop will be about 200 people. People have still been contacting Linn County Extension as of today.

The wording of Iowa Code 318.5 was discussed at the AFIRM Winter Meeting. Costs to the public for mitigating Iowa Code 318.3 prohibited items go beyond removal only.

Iowa DOT has provided a seven page IRVM Plan Outline for Counties and Cities related to Iowa Code 314.22. An updated local plan that addresses the outline will be required to be considered for Living Roadway Trust Fund dollars as mentioned in Iowa Code 314.21.

Living Roadway Trust Fund proposals for 2015 are due June 1<sup>st</sup>. Funding was provided for our Right-of-Way Workshop and auger skid loader attachments in 2014.

Linn County Conservation Department will host the 2015 Iowa Association of County Conservation Boards Fall Conference in September. The park tour portion of the program could provide an opportunity for Integrated Roadside Vegetation Management discussion.

Our department IRVM annual program operations for calendar year 2015 were discussed. A program operations explanation is a requirement for the IRVM Plan for Counties and Cities outlined by Iowa DOT. Motion by Hinrichs, second by Merta to approve our calendar year 2015 IRVM Operations, all aye.

The 2015 RAGBRAI route and overnight stops have been posted. The route will travel through Linn County will include E-36, E-34 and X-20. There will be another opportunity to partner with the Iowa Chapter of the Soil and Water Conservation Society regarding a Conservation Tent along the route.

Our next meeting is tentatively scheduled for the third Monday in May at 2:30 PM.

Respectfully submitted,

Rob Roman / Secretary



## 2015 DEPARTMENT IRVM ANNUAL PROGRAM OPERATIONS

Linn County IRVM Plan Revision

Iowa Code 314.22

Iowa Code 318

Iowa Code 317

Iowa Code 314.17 / oral and written communication, signing

Shoulder Mowing Hard Surfaced Roads / three times in a growing season with completion dates of mid-June, mid-August, and mid-October

Shoulder Mowing Rock Surfaced Roads / two times in a growing season with completion dates of mid-July and mid-September

1<sup>st</sup> Growing Season Plant Establishment Mowing / mid-July to end of August

2<sup>nd</sup> Growing Season Plant Establishment Mowing / mid-June to end of August

Prescribed Burning

Soil Amendments / Topsoil Replacement

Erosion Control / Sediment Control

Spot Spraying Woody Plants / foliar – August, September; cut stump - 12 months

Spot Spray Herbaceous Plants / non-selective; selective: *Cirsium arvense*, *Cirsium vulgare*, *Carduus nutans*, *Dipsacus* spp., *Euphorbia esula*, *Polygonum cuspidatum*, *Phragmites australis*, *Lythrum salicaria*

Misc. Trees and Shrubs / 16' X 16' clear zone, 10' clear zone, ANSI A-300 Pruning Standards

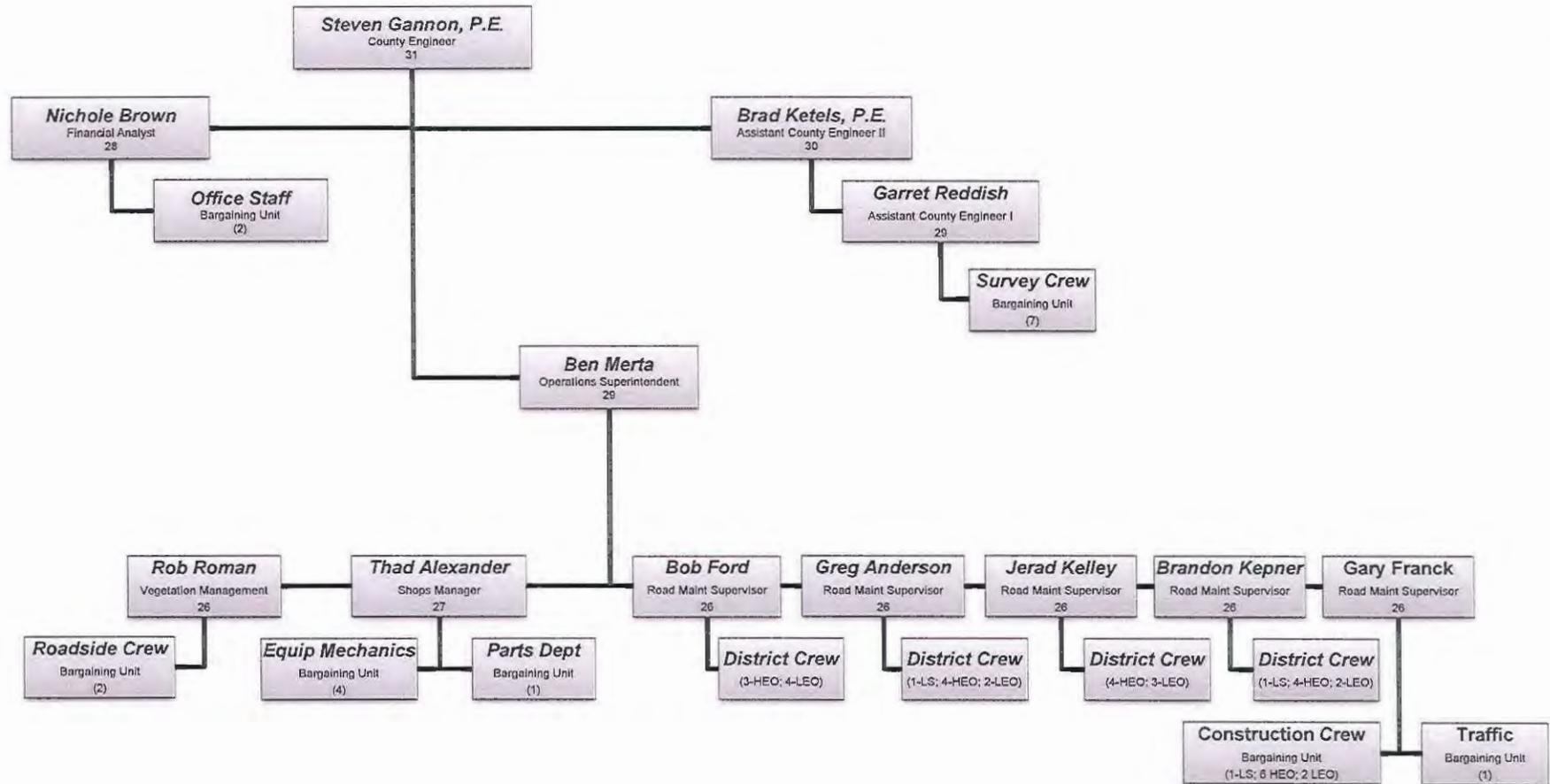
Indian Creek Watershed Partnerships / Priorities

Living Roadway Trust Fund Program Utilization

Iowa Living Roadways Project Program Utilization

Transportation Alternatives Program Funding Utilization

Linn SWCD Buffer Partnership



# Linn County Secondary Road Department

Prepared By: Linn County Secondary Road Dept., 1888 County Home Rd, Marion, IA 52302, (319)892-6400  
Return To: Linn County Auditor, 935 2<sup>nd</sup> Street SE, Cedar Rapids, IA 52404, (319)892-5300

**SHARED ROAD MAINTENANCE AND WINTER SNOW & ICE CONTROL AGREEMENT  
CITY OF ALBURNETT AND  
LINN COUNTY SECONDARY ROAD DEPARTMENT**

WHEREAS, for the benefit of the traveling public and the mutual benefit of the City of Alburnett, Iowa and Linn County, Iowa, and

WHEREAS, to effectively deal with common street and road maintenance problems which occur on shared portions and are considered to be of a normal and routine nature, to enhance consistency of related traffic control measures and to provide a more cost effective maintenance program, and

WHEREAS, to effectively deal with the common problem of snow removal and ice control on road surfaces and to promote the safer flow of traffic;

NOW THEREFORE, the City of Alburnett, Iowa (City) and Linn County, Iowa (County) herewith enter into agreement for maintenance and upkeep of roads and for winter snow and ice control on those roads as listed and shown on attached Exhibits and under the provisions hereinafter stated.

The City shall provide normal and routine maintenance on County portions of roads indicated. The County shall provide normal and routine maintenance on City portions of roads indicated. For the purpose of this agreement normal and routine maintenance shall include the following work items as needed: minor ditch cleaning, granular surface grading, shoulder repair, mowing, brush-cutting, tree-trimming, minor surface repairs such as crack sealing or pothole repair, debris removal, pavement markings, sweeping, sign repairs, illegal dumping clean up and dead animal disposal. Each party shall control their maintenance operations as required by their respective policies and employees are to be covered by their own employer's insurance. It is the intent of this agreement that both parties shall act responsibly and promptly, taking into account its own rules and tempering its response according to type and severity of the maintenance issues that arise.

Normal and routine maintenance does not include the following work items: paving, sign replacement, seal coating, rock surfacing, patching and grading. These work items are to be completed by project agreement negotiated separately.

Rock surface roads shall have 1,000 tons of class A crushed stone surfacing meeting Iowa DOT specifications applied with this agreement and at 5 year intervals during the life of this agreement. This may be owner jurisdiction or by paying actual cost to jurisdiction in charge. Trees shall be removed from the clear zone, 10' from the edge of the road and trees shall be trimmed to minimum of 16' vertical and 16' horizontal from the centerline of the road by owner jurisdiction on shared roads.

The County and City as deemed necessary shall provide snow and ice control on the other's portion of the routes as listed and as shown on the attached. Each party shall control their operations as directed by their individual winter maintenance policies. It is the intent of this agreement that both parties shall act responsibly and promptly, taking into account their policy and the type, severity, and duration of the storm.

Requests for additional winter snow and ice control on roads within the incorporated area may be considered by the County, and the County shall be reimbursed from the City for the reasonable cost of this service. The requested additional work may be performed after the County has completed its regularly scheduled work outside of the incorporated area. The routes listed in this agreement may be reviewed periodically by the County and City.

Requests for additional winter snow and ice control on roads within the unincorporated area may be considered by the City, and the City shall be reimbursed from the County for the reasonable cost of this service. The requested additional work may be performed after the City has completed its regularly scheduled work inside the incorporated area. The routes listed in this agreement may be reviewed periodically by the County and City.

The City and County agree to save and indemnify and keep harmless, each other against all liabilities, judgments, costs, and expenses which may in any way come against the County or City or which in any way result from carelessness or neglect of either party or its agents, employees, or workmen in any respect whatsoever.

The City and County agree to indemnify and hold each other, their employees and agents, wholly harmless from any damages, claims, demands, or suits by any person or persons arising out of any acts or omissions by the City or County, its agents, servants or employees in the course of any work done in connection with any of the matters set forth in this agreement.

This agreement shall supercede any previous shared road maintenance and snow & ice control agreements and be in effect from the date of approval by the City Council and the Linn County Board of Supervisors and shall remain in effect until 30 days following either party providing a written notice for termination.



# LINN COUNTY SECONDARY ROAD DEPARTMENT PERMIT TO PERFORM WORK WITHIN COUNTY RIGHT-OF-WAY

**Permit Fee \$50.00 - Non Refundable**

A person shall not place, or cause to be placed, an obstruction within any highway right-of-way. In accordance with Chapter 318 of the Code of Iowa "No billboard or advertising sign or device except a sign or device authorized by law or approved by the highway authority, shall be placed or erected upon a highway right-of-way." "A fence which constitutes an immediate and dangerous hazard shall, without notice or liability in damages, be removed by the highway authority...", and further "A person shall not excavate, fill or make any physical change within the right-of-way without obtaining a permit from the applicable highway authority."

Permission is hereby requested to perform the following work within the County right-of-way:

Reason for request:

Site address or road name:

near or at (identified landmark):

Section

Township

Range

Time Frame

Temporary

Permanent

Requested By

Signature \_\_\_\_\_

Mailing Address

Telephone

E-mail

Date

**For Office Use Only**

Reviewed By \_\_\_\_\_

Date \_\_\_\_\_

Approved By \_\_\_\_\_

Date \_\_\_\_\_

Receipt #

Check #

**\*Attach aerial view and mark where work will be completed.\***

Employee Initials



LINN COUNTY SECONDARY ROAD DEPARTMENT  
UTILITY PERMIT

Applicant - Utility Owner \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_

Approval is hereby requested for the use of the right-of-way of Linn County Secondary Road

Road Name \_\_\_\_\_

Need information from nearest intersection, City, etc.. for better location.

**Detailed plat of location must be attached.**

Intersecting road name, City, etc.. \_\_\_\_\_ Distance(ft) \_\_\_\_\_ Direction \_\_\_\_\_

If available: Longitude \_\_\_\_\_ Latitude \_\_\_\_\_ starting point of project

Installation of \_\_\_\_\_ Transmission of \_\_\_\_\_

Detailed description of installation

Size \_\_\_\_\_ Depth \_\_\_\_\_

Company Name \_\_\_\_\_ Signature \_\_\_\_\_

Print Name \_\_\_\_\_ Title \_\_\_\_\_

Telephone \_\_\_\_\_ E-mail \_\_\_\_\_

Permission is hereby granted for the above installation in accordance with current Linn County Ordinance and Code of Iowa and by Resolution of the Linn County Board of Supervisors dated August 11, 1993 for the regulations, specifications and/or conditions set forth therein.

County Engineer \_\_\_\_\_ Date . \_\_\_\_\_

Permit # \_\_\_\_\_ Date \_\_\_\_\_

**LINN COUNTY ENGINEERS OFFICE  
1888 COUNTY HOME ROAD, MARION, IOWA 52302  
892-6400**

**WORK WITHIN RIGHT-OF-WAY PERMIT  
FOR PRIVATE VEGETATION CONTROL IN RIGHT-OF-WAY**

The purpose of this permit is to allow the adjacent landowner or tenant to establish an area within county right-of-way in which they control trees, shrubs and noxious weeds. This permit sets terms of the designation of No Spray/No Mow areas, including the responsibilities of the permittee to control vegetation.

ROAD NAME \_\_\_\_\_

SECTION \_\_\_\_\_ TOWNSHIP \_\_\_\_\_ RANGE \_\_\_\_\_

NAME OF APPLICANT \_\_\_\_\_

MAILING ADDRESS \_\_\_\_\_

SITE ADDRESS (if different) \_\_\_\_\_

TELEPHONE NUMBER \_\_\_\_\_ E-MAIL \_\_\_\_\_

**IN SIGNING THIS AGREEMENT, THE APPLICANT AGREES TO ABIDE BY ALL  
CONDITIONS OF THE PERMIT CONTAINED HEREIN AS DEFINED WITHIN THE  
LINN COUNTY INTEGRATED ROADSIDE MANAGEMENT POLICY.**

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Applicant

Permit Fee: \$50.00  
(includes 2 No Spray/No Mow signs)

\_\_\_\_\_  
Linn County Engineer

**CONDITIONS OF PERMIT**

- 1) Additional No Spray/No Mow signs may be purchased at the County Engineers Office for \$15.00/each. Signs must conform to county standards. Signs are to be mounted at least 4 feet above the ground line and placed within 3 feet of the right of way line. Signs shall be mounted on steel or composite posts meeting county breakaway support requirements.
  
- 2) Linn County periodically mows the road surface shoulders along roadways. Linn County also mows new plantings to emphasize the establishment of the permanent, perennial seeding. Residents will be responsible for maintenance and installation of No Spray/No Mow signs, and control of noxious weeds, trees, and shrubs within designated No Spray/No Mow areas. If residents do not control trees, shrubs and noxious weeds within designated No Spray/No Mow areas, the county will send notice to the tenant or landowner by regular mail to cut, spray, or otherwise control said weeds, trees and shrubs. If control is not completed within 10 days of mailing the letter, the county may cut, spray, or otherwise control the noxious weeds, trees and shrubs according to county practice, revoke the permit and invoice the permittee for the cost.



# LINN COUNTY SECONDARY ROAD DEPARTMENT ENCROACHMENT AGREEMENT

Project \_\_\_\_\_ Road Name \_\_\_\_\_ Sec \_\_\_\_\_ Twp \_\_\_\_\_ Rge \_\_\_\_\_

This Encroachment Agreement by and between \_\_\_\_\_  
of (Site Address or Parcel GPN) \_\_\_\_\_  
party of the first part and Linn County, Iowa, the second part is for the following purpose:

\_\_\_\_\_

The area of the encroachment is described as follows:

\_\_\_\_\_

It is hereby agreed that:

\_\_\_\_\_

This agreement shall terminate upon:

\_\_\_\_\_

Property Owner  
Signature \_\_\_\_\_

Date \_\_\_\_\_

Mailing Address  
\_\_\_\_\_

County Engineer  
Signature \_\_\_\_\_

Date \_\_\_\_\_

County  
Representative \_\_\_\_\_



# **BOARD OF SUPERVISORS**

## **County of Linn, Iowa**

<b>SUBJECT:</b> <b>Purchasing Policy</b>			<b>Directive Number:</b>
<b>Approval Date:</b> 02/03/2010	<b>Effective Date:</b> 02/03/2010	<b>Revision No.:</b> 3	<b>Policy Section &amp; Number:</b> <b>OP-002</b>
<b>Reference:</b> Rev #3 – 02/03/2010 Rev #2 – 05/19/2004 Rev #1 – BOS Minutes 01/30/2002 Directive # 2001-02 - BOS Minutes 08-14-01			<b>Distribution:</b> Elected Officials and Department Heads, Intranet

### **I. POLICY**

It is the policy of Linn County to purchase appropriate supplies, equipment and services for the County at the best value, and in a timely manner, while maintaining fairness to vendors and abiding by applicable laws. County policies and procedures have been instituted to foster achievement of this goal.

### **II. SCOPE**

The policy is applicable to all purchases made and all lease agreements entered into by County departments unless otherwise specified. This policy does not apply to personnel costs, professional services, utilities, human services, educational and travel expenses, or capital projects.

### **III. OBJECTIVES**

- A) To implement centralized purchasing procedures that standardize the purchasing process.
- B) To make appropriate purchases in regard to product, price, quantity, quality and delivery.
- C) To provide interested suppliers the opportunity to sell their products or services to the County while ensuring that all vendors are afforded fair and equal treatment.
- D) To conduct purchasing activities in accordance with County, State and Federal Laws.

- E) To promote cooperative purchasing among County departments, as well as among other governmental agencies.
- F) To establish standards for similar goods or services obtained throughout the County.
- G) To maintain accountability through effective accounting, budgeting and purchasing controls.
- H) To use countywide contracts when available.

#### **IV. DEFINITIONS**

- A) Department  
A department with a budget appropriated by the Board of Supervisors.
- B) Quotation  
A request by a purchaser to a vendor to furnish goods or services at a stated price, for a specific time period, with terms and conditions agreed to by the purchaser and the vendor tendering a quote.
- C) Request for Quote (RFQ)  
Written or verbal request for a quotation from a vendor.
- D) Request for Proposal (RFP)  
Formal written request for a proposal from a vendor.
- E) Notice of Rejection  
Letter notifying vendor of contract non-award.
- F) Notice of Acceptance  
Letter notifying vendor of contract award.
- G) General Services Administration (GSA) Pricing  
A GSA Federal Supply Schedule is a listing of national scope federal contracts awarded by the US General Services Administration, Federal Supply Service.
- H) Purchase Order (PO)  
A document recording the description, quantity and related information for goods and services to be purchased. This document is used to indicate authorization to purchase goods and services.
- I) State of Iowa Bid Pricing  
State contracts based on a competitive bid process.

- J) Sole or Single Source Purchase  
The act of soliciting a quote from only one vendor.
- K) Proprietary  
A product or service that a vendor has exclusive rights to sell or service.

**V. PROCEDURE**

- A) When available, departments are to utilize existing contracts or programs (example: office supply, print, time and material, and computer). Purchase value conditions apply with respect to authorizations required.
- B) When available, State of Iowa or Iowa Department of Transportation (IDOT) bid pricing may be used as a sole quote, without competitive bidding, if desired. Departments utilizing IDOT pricing, which have budgets that include pre-approval for specific items, may purchase the pre-approved items without additional authorization. Invoices submitted for purchases made as described in this paragraph must reference a specific IDOT contract.
- C) GSA or other approved purchasing consortium pricing may be used as a quote in an RFP or RFQ. Additional quotes should be obtained.
- D) To ensure the integrity of the process and to help maintain segregation of duties, the same person shall not order, receive and approve payment for procured items.
- E) Based on dollar value of procured goods, the following procedures should be used:
  - 1. Total of all items purchased is less than \$5,000
    - a. Authorizations required: Department
    - b. Departments shall order from existing County, joint, or State contracts when possible.
    - c. Departments may contact the Purchasing Division for pricing information on any item, specialized purchase or for general procurement direction.
    - d. Departments may not split orders to circumvent authority level. Authority level should be based on entire purchase.
    - e. All efforts should be made to procure items or services utilizing the County's procurement card program.

2. Total of all items purchased is more than \$5,000
  - a. Authorizations required: Department, Purchasing Director, Budget Director and elected official or autonomous board.
  - b. Department provides the Purchasing Division with a written request for procurement.
  - c. Purchasing Division, if necessary, will solicit RFQ or RFP based on specifications.
  - d. The department, with the assistance of the Purchasing Director, will determine the vendor award.
  - e. Purchasing Director will create and sign a purchase order to indicate that proper purchasing procedures have been followed.
  - f. Department will authorize purchase.
  - g. Budget Director will sign the PO to indicate that funding is available and appropriate account number is referenced.
  - h. Appropriate Elected Board or Official or Autonomous Board will authorize purchase.
  - i. Purchasing Director will issue a PO and rejection letters.
  - j. Receiving department (or Purchasing Director if product not delivered directly) should compare item(s) purchased to invoice and purchase order to insure accurate quantities. Discrepancies between POs and invoices will be resolved with the assistance of the Purchasing Director. After verification, invoice should be submitted for payment. Every effort should be made in submitting invoices at the Department level. Otherwise, the invoice, PO and claim form are sent to the Auditor's office for payment.
  - k. Purchases applicable to this policy that are presented to the Auditor's Office for payment and have no PO, or an incorrect PO, will be forwarded to the Purchasing Director. Claims will not be processed until the matter is resolved. The Auditor's Office will notify the Department when a claim is forwarded to the Purchasing Director.

## **VI. BLANKET PURCHASE ORDERS**

Original Blanket Purchase Orders must be approved by the Purchasing Director and the Board of Supervisors. Once approved, the Blanket Purchase Order will be placed on file with the Auditors Office. Invoices must contain the BPO number when submitted for payment. No other authorization is required.

## **VII. TIME AND MATERIAL CONTRACTS**

Departments shall utilize time and material contracts for service work related to projects and when the estimated total cost of the project or repair, which includes the cost of labor, material, equipment and supplies, is less than \$5,000. Alternately, a Department may solicit quotations when the estimated total cost of the project or repair is less than \$5,000, however, in this case a bid must be solicited from a business which has a time in material contract in place. Authorization for projects and repairs shall follow the procedures set forth in Section V of this policy. Purchases for proprietary equipment and repairs less than \$5,000 to proprietary equipment are not subject to the provisions of this paragraph. The Purchasing Department shall maintain a list of time and material contracts.

## **VIII. ANNUAL MAINTENANCE AGREEMENTS**

Annual maintenance agreements relating to existing equipment or software do not require a Purchase Order and do not need to be reviewed by the Purchasing Division.

## **IX. COMPUTER AND SOFTWARE PURCHASES**

All requests for computer and related software purchases will be directed through the Linn County Information Technology Department. The IT Director will utilize existing Co-Operative, County, State and Federal pricing to secure and standardize computer and related software systems. Authorization levels will still apply, with the addition of the IT Director's signature.

## **X. VEHICLE PURCHASES**

Departments requesting passenger vehicles through the budgeting process will have the approved funds placed under the Board of Supervisors. Departments will then submit a request to the Purchasing Division for the vehicle. The Purchasing Director will procure requested vehicle using available sources. Exemptions to the budget adjustment include heavy equipment type vehicles, public safety vehicles, budgets where the funding source is a grant or directed by code. However, the procurement of such vehicles must still be coordinated by the Purchasing Director.

**XI. LEASES**

All leases that require commitment by the County to provide future funds must be processed through the Purchasing Division and be approved by the Board of Supervisors.

**XII. SOLE OR SINGLE SOURCE PURCHASING**

A department requesting a sole source or a proprietary purchase over \$5,000 shall provide written justification as to why competitive bidding is not appropriate. (Section 73.2(1)(a), Code of Iowa, 2009).

**XIII. LOCALLY OWNED BUSINESS**

It shall be the policy of Linn County that no preference will be given to any vendors based strictly on location.

**XIV. UNIONS/NON-UNION BUSINESS**

It shall be the policy of Linn County that no preference in vendor selection will be given on the basis of the union or non-union affiliation of the vendor.

**XV. PURCHASES FOR CONTINUOUS OPERATIONS**

Purchases for goods or services in excess of \$5,000 may be made without respect to the procedures set forth in Section V.E.2 when the lack of said good or service could adversely impact the continued operation of a Department or could present a hazard to health, safety or property of employees and/or the public. Written justification must be included with the invoice for said purchase(s).

**XVI. EMERGENCY PROCUREMENT**

In the event Linn County, or a portion thereof, is included in a disaster proclamation issued by the Governor or in a Presidential Disaster Declaration, emergency procurement authority will immediately take effect without additional action by the Board of Supervisors. The Board of Supervisors may also initiate, by an affirmative vote of at least three members, emergency procurement authority when a circumstance arises that may require an immediate response to avoid an actual or potential threat to health, safety or property. This provision is intended to provide Linn County with immediate access to goods and services vital to continued operations. To that end, this emergency procurement provision authorizes the emergency procurement amount listed below. For the purposes of this provision, procurement includes leasing of equipment or real estate.

Director of Policy and Administration:	\$100,000 per purchase
Purchasing Director:	\$100,000 per purchase
Budget Director:	\$200,000 per purchase
Finance Director:	\$200,000 per purchase
Three (3) Members of the Board of Supervisors:	Over \$200,000

Emergency procurement authority may be utilized only for purchases related to the disaster named in a Governor's proclamation or Presidential Disaster Declaration or to the circumstance acknowledged by vote of the Board of Supervisors. All other purchases shall be made in compliance with the remaining provisions of the procurement policy. Purchases made using emergency procurement authority shall be presented to the Board of Supervisors for ratification.

Emergency procurement authority will terminate upon action of the Board of Supervisors.

Notwithstanding this provision, the purchaser shall otherwise follow County, State and Federal laws pertaining to purchasing to the extent possible.

## **XVII. REFERENCES**

### Section 23A.3 of the Iowa State Code

"A city, county, area education agency, or school district shall adopt a policy for purchasing goods or services from private enterprise which requires consideration of purchasing these goods or services from a locally owned business located within the city, county, area education agency, or school district which offers these goods or services if the cost and other considerations are relatively equal. Nothing in this section shall be construed to prevent or prohibit the giving of a preference to businesses owned or operated by minorities or females as may be provided in any other provision of law."

**Classification:                   Vegetation Management Specialist**

**Department:**                   Engineering Department  
**Immediate Supervisor:**     Road Maintenance Superintendent  
**FLSA:**                          Exempt                    Non-exempt

**BRIEF DESCRIPTION OF THE JOB:** Works with plant material in the road system, taking it out and putting it in. Recommends materials and equipment to do the job, works with pricing and vendors. Interacts with the public to get job completed.

**ESSENTIAL FUNCTIONS:**

This information is intended to be descriptive of the key responsibilities of the position. The following examples do not identify all duties performed by any single incumbent

	Percentage of Time	Strength Code
1) Develops and coordinates control and enhancement of roadsides by working with the "Adopt A Roadway" program, working with the County weed commissioner, soliciting quotations, promoting education, and writing and submitting proposals for grant money.	30%	M
2) Assists in development of overall roadside maintenance plan by inputting in the yearly budget, recommending improvements in equipment and materials, working with advisory committee, and developing mowing and spraying policy.	10%	M
3) Coordinates erosion control planting plans on proposed projects by developing erosion control plans, seeding maintenance re-grade and shouldering projects, and fixing contracted erosion control projects.	10%	M
4) Provides information and acts as liaison for County's program by meeting with the Roadside Advisory Committee six times per year, assisting I.D.O.T. on state Highway projects.	10%	M
5) Maintains certification for self and staff with related training by attending pesticide applicator training, herbicide training, ANSI A-3000 arborist training, annual roadside conference, IRVM training.	10%	M
6) Implements plans and directs and participates in production by planting, seeding, cutting, rimming, spraying, burning, mowing, supervising, specifying, and inspecting.	30%	M
<b>Strength Column:</b> <i>S - Sedentary   L - Light   M - Medium   H - Heavy   VH - Very Heavy</i>		

**PHYSICAL DEMANDS**

*Overall Strength Demands:*

\_\_\_\_\_ Sedentary    \_\_\_\_\_ Light      X   Medium    \_\_\_\_\_ Heavy    \_\_\_\_\_ Very Heavy

*Codes: for each physical demand code listed on Page 1:*

*C = Continuously    F = Frequently    O = Occasionally    R = Rarely    N= Never*

A. Standing	F	G. Reaching	O	L. Crawling	R	Q. Vision	C
B. Sitting	F	H. Handling	O	M. Bending	O	R. Hearing	F
C. Walking	F	I. Fine Dexterity	O	N. Twisting	O	S. Talking	F
D. Lifting	O	J. Kneeling	O	O. Climbing	O	T. Foot Controls	F
E. Carrying	O	K. Crouching	O	P. Balancing	R	U. Other (state)	
F. Pushing/Pulling	O						

*This is a description of the way this job is currently performed; it does not address the potential for accommodation.*

<b>PHYSICAL</b>	<b>DESCRIPTION</b>
Standing	Directing employees, participating in activities
Sitting	Paperwork, phone calls, vehicle or equipment operation
Walking	Participating in work activities, monitoring
Lifting	Supplies or tools
Carrying	Supplies or tools
Pushing/Pulling	Equipment levers
Reaching	For supplies
Handling	Materials
Fine Dexterity	Maneuvering aerial lift
Kneeling	Equipment repair
Crouching	Equipment maintenance
Crawling	Equipment repair
Bending	Office work
Twisting	Field work
Climbing	On and Off equipment

**Job Title: Vegetation Management Specialist**

<b>PHYSICAL</b>	<b>DESCRIPTION</b>
Balancing	Equipment operation
Vision	Identify problems, reading
Hearing	Communication
Talking	Communication with public
Foot controls	Equipment operation

**Machines, Tools, Equipment and Work Aids:**

Injector Sprayers (computer console), conventional sprayers, aerial lifts, tractors, mowers, seeders, mulchers, chain saws, chippers, stump grinders, tree spades, shop tools, pagers, telephones, fax machines, two-way radio, computer software (GPS)

**Environmental Factors:**

Exposure to and frequency:

D = Daily      S = Seasonal      W=Several Times Per Week      M=Several Times Per Month

<b>ENVIRONMENTAL FACTORS</b>					
Dirt and Dust		W	Extreme Temperatures	W	Noise and Vibration      W
Fumes and Odors		W	Wetness/Humidity	W	Darkness or Poor Lighting      S

<b>HEALTH AND SAFETY</b>					
Mechanical Hazards		W	Chemical Hazards	M	Electrical Hazards
Fire Hazards		S	Explosives		Communicable Diseases
Physical Danger or Abuse			Other (specify)		

<b>PRIMARY WORK LOCATION</b>					
Office Environment		X	Warehouse		Shop
Vehicle			Outdoors		Other: Roadside      X

**Protective Equipment Required:**

Hard hats, hearing protection, safety glasses, rubber gloves, boots

**Non-physical Demands:**

Frequency Codes:      F = Frequently      O = Occasionally      R = Rarely

Time Pressures	F	Emergency Situations	R
Frequent Change of Tasks	F	Irregular Schedule/Overtime	O
Performing Multiple Tasks Simultaneously	F	Working Closely with Others As Part of a Team	O
Tedious or Exacting Work	F	Noisy/Distracting Environment	O



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**ROADSIDE VEGETATION MANAGEMENT AIDE**  
**Class No. 60-31**

**Grade 18 Schedule BGA1**  
**Revised March 2009**

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### **SUMMARY OF CLASSIFICATION**

Performs duties in the field and in the office related to roadside vegetation management. Applies knowledge and skills, under the direction of the Roadside Vegetation Management Specialist, related to the field of roadside vegetation, road safety, and of highway construction and maintenance. Responsible to assist in the maintenance of roadside inventory, weed control, brush and tree trimming and planting, and the general use of chemicals, seed mixtures, plants and plantings. Work is performed under the direction of the Roadside Vegetation Management Specialist and under the general direction of the County Engineer and/or Department management staff.

### **ESSENTIAL FUNCTIONS**

MAINTAINS vegetation inventories; PREPARES chemicals and equipment for the spraying of noxious weeds; OPERATES equipment for the mowing of roadsides, brush clearing and clearing and grubbing and ASSISTS in the planning and planting of roadside vegetation materials.

ASSISTS Roadside Vegetation Management Specialist in related highway maintenance and construction projects.

OPERATES truck equipped with spray rigs and tractors equipped with mowing devices.

ASSISTS in supervising seasonal (temporary) and subordinate employees.

PERFORMS all other related duties as assigned.

### **NECESSARY REQUIREMENTS**

#### **Knowledge, Abilities and Skills**

Working knowledge of modern methods and techniques in vegetation establishment and control, including roadway mowing, pesticide and herbicide application, seeding, planting, and general maintenance; ability to understand and follow oral and written instructions; ability to perform routine and/or specialized maintenance on roadside related equipment; good physical condition.

#### **Minimum Training and Experience**

High school diploma or equivalent required; college level course work in the Natural Resources field or one (1) or more years experience in general highway maintenance activities preferred; or any equivalent combination of training and experience which provides the required knowledge, skills and abilities.

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Roadside Vegetation Management Aide  
Class No. 60-31

Grade 18 Schedule BGA1  
Revised March 2009

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**Special Requirements**

Possess a valid state of Iowa Class A Commercial Drivers License (CDL) with air brake and tank endorsements. Or possession of Class A CDL and the ability to pass air brake and tank endorsements within 21 days of transfer or hire into the position. Must possess valid State of Iowa Commercial Pesticide Applicator's License with Category 6 certification required or the ability to pass same within twenty-one (21) days of transfer or hire. Must pass a County physical examination which includes a drug test after offer of employment, with random testing as determined by the County. Regular work attendance required.



Human Resources Department  
Linn County, Iowa

Lisa Powell - Human Resources Director  
Lisa Dawson – Human Resources Assistant  
Diane Losch – Human Resources Assistant  
Amy Vermie – Human Resources Coordinator  
Denise Vander Sanden – Human Resources Clerical Specialist

Jean Oxley Public Service Center  
935 Second Street Southwest  
Cedar Rapids, Iowa 52404-2100

February 17, 2015

**TEMPORARY ROADWAY MAINTENANCE WORKER**  
**LINN COUNTY SECONDARY ROADS DEPARTMENT**  
**(March 2 – June 12; June 15 – September 4)**  
**Individuals may work one or both time periods**

**\*\*Positions will work out of various county Road Department shops\*\***

**Temporary positions** to operate a variety of equipment, such as tractors, mowers and small trucks; operates chain saws, pruners, brush chippers and other types of hand tools; assists in right-of-way planting and seed harvesting; assists in placement and/or repair of road signs and other traffic service type facilities; directs traffic during road maintenance activities; assists crews on bridge and/or culvert projects; performs other related work as required by supervisors.

**QUALIFICATIONS:** High school diploma or proof of GED or graduation prior to employment required; possession of a valid State of Iowa Driver's License required; knowledge and ability in the operation of tools and equipment and the ability to learn operation of technical equipment; ability to perform manual labor; ability to work outside under all types of weather conditions; ability to recognize and follow safety rules; ability to follow oral and written instructions; must pass a County physical examination which includes a drug test after offer of employment.

**SHIFT:** 7:00 a.m. – 3:30 p.m. Monday - Friday  
Before June 1st  
  
6:00 a.m. – 4:30 p.m. Monday – Thursday  
From June 1<sup>st</sup> to September 4

**(May vary depending on weather and seasonal activities)**

**SALARY:** \$13.00/hour

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**DEADLINE:** Thursday, February 26, 2015

**APPLY AT:** [www.linncounty.org](http://www.linncounty.org) (Job Opportunities)

[www.linncounty.org](http://www.linncounty.org)

phone 319.892.5120 • fax 319.892.5129 • email [resumes@linncounty.org](mailto:resumes@linncounty.org)

LINN COUNTY IS AN EQUAL OPPORTUNITY EMPLOYER M/F



# NATIVE DRILL RENTAL PROGRAM PARTNERSHIP

## MEMORANDUM OF UNDERSTANDING

among the

LINN COUNTY BOARD OF SUPERVISORS

LINN COUNTY SECONDARY ROAD DEPARTMENT

LINN COUNTY SOIL CONSERVATION DEPARTMENT

LINN SOIL AND WATER CONSERVATION DISTRICT

IOWA DEPARTMENT OF TRANSPORTION

IOWA LIVING ROADWAY TRUST FUND

**THIS MEMORANDUM OF UNDERSTANDING (MOU)** is hereby entered into among the above parties. Other parties may be added as interest and necessity demand.

### **A. PURPOSE:**

The purpose for creating the Native Drill Rental Program Partnership (NDRPP) is to allow individuals, groups, or organizations access to equipment used primarily to seed native prairie grasses and forbs. The intent is to create a program that will benefit county roadsides and rights of way by making a native grass and forb no-till drill available for seeding critical areas either adjacent or draining to county road rights of way. It will include the development of a rental program that will allow for the appropriate use of the drill by, evaluating drill rental applications, development of an ongoing equipment maintenance program., and insuring a mutually agreed upon delivery and return method. It allows the Linn County Secondary Road Department to transfer management of the drill, originally purchased through monies provided by the Iowa Living Roadway Trust Fund to the Linn Soil and Water Conservation District for use as deemed appropriate.

The signatories would like to come together in a formal manner to recognize the environmental advantages of a program that provides both direct and indirect benefits to county road rights of way while providing resource protection and wildlife habitat for areas located outside road rights of way. Title to the equipment shall rest with the Linn County Engineers Office.

### **B. STATEMENT OF MUTUAL BENEFIT AND INTERESTS:**

This Agreement will:

Provide a mechanism to allow the use of the Native No-Till drill by private individuals, groups, and organizations for the purposes of benefitting county roadsides and rights of way.

Allow differing organizational entities the ability to work together through a program that addresses mutually agreed upon environmental goals or mission statements.

Promote education of public and private land managers, landowners, and the general public regarding the benefits of native prairie establishment.

Improve the biological diversity of plant communities adjacent to or that drain to county road rights of way.

**C. AREA COVERED:**

The area covered by this agreement includes all of Linn County.

**D. LINN COUNTY SECONDARY ROAD DEPARTMENT SHALL:**

1. The Linn County Secondary Road Department shall utilize their maintenance shop currently located on at 1944 County Home Road for storage of the native drill when it is not in use.
2. Shall inspect the unit after return and provide general maintenance and repair to the native drill as needed.

**E. LINN COUNTY SOIL AND WATER CONSERVATION DISTRICT SHALL:**

1. The Linn Soil and Water Conservation District shall determine with assistance from the Linn County Soil Conservation Department if native drill rental requests meet mutually agreed upon environmental goals prior to approving rental agreements.
2. Develop and maintain a rental agreement that serves the interests of all parties involved in the MOA and also provides an extension of liability protection to all parties involved in this MOA.
3. Reimburse the Linn County Secondary Road Department for major repairs and parts associated with an on-going and active native drill rental program.
4. Coordinate with partnering organizations included but not limited to the Linn County Secondary Roads Department and Linn County Soil Conservation Department, the scheduling, collection of fees, and coordination for the pick up and return of the native drill to and from the areas to be seeded.

**F. IT IS MUTUALLY AGREED AND UNDERSTOOD BY ALL PARTIES THAT:**

1. This instrument in no way restricts the parties from participating in similar activities with other public or private agencies, organizations, and individuals.
2. This MOU is neither a fiscal nor a funds obligation document. Any endeavor involving reimbursement, collection of funds, or transfer of anything of value between the parties will be outlined in separate agreements made in writing.
3. Changes within the scope of this instrument shall be made by the issuance of the bilaterally executed written modification signed by all parties to this MOU.

4. This instrument is executed as of the last date signed by a signatory of the agreement.

5. Termination: With 30 days written notice, any party may terminate this instrument in whole or part at any time.

**G. ENDORSEMENT AND SUPPORT:**

The supporters of this agreement agree that working together in a cooperative, coordinated approach will result in the protection and enhancement of roadsides and county road rights of way through the establishment of native prairie areas that are either adjacent or drain to them. The parties supporting this agreement understand that this is a nonbinding statement of consensus and intent that recognizes, if applicable, the respective authorities and policies of federal, state, county, local governments, and non-governmental private sector interests. Furthermore it is recognized that while each cooperator has primary responsibility to its own governing body and falls under its jurisdiction, the Linn Soil and Water Conservation District, Linn County Secondary Road Department, and Linn County Soil Conservation Department will serve as the primary entities responsible for the long term coordination of the Native Drill Rental Program Partnership (NDRPP).

April 6, 2010  
Date

[Signature]  
Authorized Representative

Linn SWCD  
Organization Represented

April 6, 2010  
Date

[Signature]  
Authorized Representative

Linn County Soil Conservation  
Organization Represented

Date

[Signature]  
Authorized Representative

Linn County BOS  
Organization Represented

8-26-11  
Date

[Signature]  
Authorized Representative

LINN COUNTY SECONDARY ROAD  
Organization Represented

9-12-11  
Date

[Signature]  
Authorized Representative

Iowa Living Roadway Trust  
Organization Represented  
IA DOT

Date

Authorized Representative

Organization Represented

# **Hawkeye Cooperative Weed Management Area (CWMA)**

## **MEMORANDUM OF UNDERSTANDING**

among the

**IOWA DEPARTMENT OF NATURAL RESOURCES, LAKE MACBRIDE STATE PARK**

**U.S. ARMY CORPS OF ENGINEERS, CORALVILLE LAKE PROJECT**

**USDA NATURAL RESOURCES CONSERVATION SERVICE**

**JOHNSON COUNTY SECONDARY ROAD DEPARTMENT**

**JOHNSON COUNTY CONSERVATION BOARD**

**LINN COUNTY CONSERVATION BOARD**

**LOUISA COUNTY CONSERVATION BOARD**

**IOWA VALLEY RC&D**

**THIS MEMORANDUM OF UNDERSTANDING (MOU)** is hereby entered into among the above parties. Other parties may be added as interest and necessity demand.

### **A. PURPOSE:**

The purpose for forming this Cooperative Weed Management Area (CWMA) is to address invasive plants on public and private lands within the area of the Hawkeye CWMA. It will include the development of an integrated Invasive Species Management Plan to coordinate priorities and actions for preventing, eradicating, containing, and controlling non-native invasive plants and noxious weeds. It establishes a steering committee for the Hawkeye CWMA comprised of a chairperson and vice chair selected by the participants of the CWMA and representatives of each of the cooperators signing the agreement. Additional partners are expected to be added to this management area.

The signatories would like to come together in a formal manner and cooperate on public relations, education, and training in the CWMA, as well as for control and other resource protection that might be agreed upon. The purpose would be to foster sound and desirable means of exotic and invasive species control and to render assistance to one another under the overall umbrella of the Agreement and in accordance with scheduled meetings and resulting operating plans. It would also provide a communication forum to keep all parties informed of exotic and invasive species control activities. The Federal Agencies involved have been directed by Sec. 15 (3) of the Federal Noxious Weed Act and the Watershed Restoration and Enhancement Agreement Authority of FY 1999 and beyond, Section 323 (a) to complete and implement cooperative agreements with State agencies.

**B. STATEMENT OF MUTUAL BENEFIT AND INTERESTS:**

This Agreement will:

Provide a more efficient way of handling, controlling and communicating about the noxious weed problem in the geographic area covered by this agreement.

Pool the knowledge and resources that will help achieve better control of weeds while improving working relationships with the partners and members of the public served by each.

Promote education of public and private land managers, landowners, and the general public regarding invasive weeds.

Continue support and implementation of biological methods of control that will benefit all partners and public in the agreement area.

Identify opportunities for further development and cooperative management projects.

**C. AREA COVERED:**

The area covered by this agreement includes all of Benton, Linn, Iowa, Johnson, Washington, Louisa, and Muscatine counties in Iowa including the U.S. Army Corps of Engineers Coralville Lake projects.

**D. IOWA VALLEY RESOURCE CONSERVATION AND DEVELOPMENT SHALL:**

1. Iowa Valley Resource Conservation and Development, a non-profit USDA affiliate serving east-central Iowa, shall utilize their organization to facilitate the sharing of resources from federal, state, local, and private sectors to implement invasive weed management goals and objectives for the Hawkeye Cooperative Weed Management Area.
2. Assist in establishing and supporting a board consisting of parties to this MOU, as well as other concerned citizens and organizations to coordinate invasive weed management activities within the Hawkeye Cooperative Weed Management Area.
3. Provide administrative support.
4. Provide grant management services should grant funds be received.

**E. IT IS MUTUALLY AGREED AND UNDERSTOOD BY ALL PARTIES THAT:**

1. Pursuant to Section 22, Title 41, United States Code, no member of, or Delegate to, Congress shall be admitted to any share or part of this instrument, or any benefits that may arise there from.

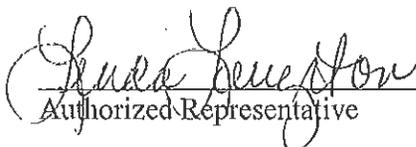
2. This instrument in no way restricts the parties from participating in similar activities with other public or private agencies, organizations, and individuals.
3. This MOU is neither a fiscal nor a funds obligation document. Any endeavor involving reimbursement, contribution of funds, or transfer of anything of value between the parties to this instrument will be handled in accordance with applicable laws, regulations, and procedures including those for government procurement and printing. Such endeavors will be outlined in separate agreements that shall be made in writing by representatives of the parties and shall be independently authorized by appropriate noncompetitive award to the cooperator of any contract or other agreement. Any contract of agreement for training or the services must fully comply with all applicable requirements for competition.
4. Changes within the scope of this instrument shall be made by the issuance of the bilaterally executed written modification signed by all parties to this MOU.
5. This instrument is executed as of the last date signed by a signatory of the agreement.
6. Termination: With 30 days written notice, any party may terminate this instrument in whole or part at any time.

**F. ENDORSEMENT AND SUPPORT:**

The supporters of this agreement agree that working together in a cooperative, coordinated approach will result in the preservation and enhancement of the natural, economic, and social resources in this area. The parties supporting this agreement understand that this is a nonbinding statement of consensus and intent that recognizes the respective authorities and policies of federal, state, county, local governments, and non-governmental private sector interests. Participants agree to the following:

1. A steering committee be established consisting of a representative from each signing party to implement and monitor the activities under this agreement. The steering committee shall select a chair and vice chair.
2. The committee shall meet annually and as needed.
3. It is recognized that each cooperator has primary responsibility to its own governing body and falls under its jurisdiction. It is agreed to provide resources to each other as legal authorities and financial and personnel resources may permit, as identified and agreed to in the annual operating plan.

6/3/09  
Date

  
Authorized Representative

Organization Represented

## Workshop Presenters

### Mike Heller *Iowa Department of Transportation*

Mike Heller is an Agronomist for the Iowa DOT and a Certified Professional in Erosion and Sediment Control. His primary work consists of developing plans and specifications for linear transportation construction projects. Mike has been a team member of the Iowa DOT for ten years, helping develop and instruct the department's Erosion and Sediment Control Certification Program. He is currently developing criteria to introduce roadway designers to the principles and practices of erosion control design, and continues to develop performance related specifications for the department.



### Matt Brewer *Iowa Department of Natural Resources*

Matt Brewer is an Urban Forester with the Iowa DNR. With the Department since 2003, he is now in a recently-created position working primarily in the eastern half of the state. Matt's focus is on assisting municipal staff and other community leaders in caring for their tree resources over the long term, which includes gathering tree inventory data, developing plans for managing the urban forest, and dealing with Emerald Ash Borer and other invasive threats. Matt is based in Iowa City.



### Mark Vitosh *Iowa Department of Natural Resources*

Mark Vitosh has been a forester since 1988. He is a District Forester with the Iowa DNR Forestry Bureau. He assists private landowners in managing their forest resources in Johnson, Linn, Iowa, Benton, Poweshiek, and Muscatine counties.

### Dr. Jesse Randall *Iowa State University Extension and Outreach*

Jesse Randall is an Associate Professor and Extension Forestry Specialist in the Department of Natural Resource Ecology and Management at Iowa State University. At ISU, Jesse conducts educational programs aimed at improving the management of Iowa's forest resource. He provides technical assistance to both urban and rural landowners throughout the Midwest and conducts hands-on tree selection, planting, and pruning workshops, Master Woodland Manager Courses, forest stewardship field days, and maple syrup production demonstrations.



### Jennifer Hopwood *The Xerces Society for Invertebrate Conservation*

Jennifer Hopwood is a Senior Pollinator Conservation Specialist with The Xerces Society. She is based in Nebraska, and provides resources and training for beneficial insect habitat management, creation, and restoration to land managers across the Great Plains and Midwest. Jennifer's graduate research focused on the potential value of roadsides to bees. She has experience in invertebrate field and laboratory research, identification, education, and outreach. Jennifer is also a co-author of the book *Farming with Native Beneficial Insects*, a guide to conservation biological control and habitat restoration for beneficial insects.



### Terry VanDeWalle *Stantec Consulting Services*

Terry VanDeWalle is a Senior Biologist with Stantec and has over 25 years of experience specializing in animal and natural areas surveys, herpetology, threatened and endangered species surveys, Endangered Species Act Section 7 and Section 10 consultation, wetland delineation and permitting, wetland mitigation design and monitoring, and coordination of environmental impact statements and assessments under the National Environmental Policy Act. Terry specializes in herpetology and is responsible for managing Stantec's Independence, Iowa office; designing and managing natural resource studies for clients in the energy, transportation, governmental and private sectors.



## Rights-of-Way Workshop: Adding Value and Resilience to the Resource

March 18, 2015

Kirkwood Community College

Ballantyne Auditorium

6301 Kirkwood Blvd. SW Cedar Rapids, IA



Download a map of the Kirkwood Campus at  
<http://bit.ly/kccampus>

Thanks to our Program Sponsor:



## resilience

noun | re-sil-i-ence | \ri-'zil-yən(t)s\

1. the act of rebounding.
2. an ability to recover from or adjust easily to misfortune or change.

A 1971 native prairie restoration demonstration within Linn County road right-of-way is better today than the day it was installed. In December of last year, several Cedar Rapids and Linn County locations beneath ITC Midwest electric transmission lines were seeded by the company with native prairie species. These native plantings have added and will add value and resilience to their respective corridors. Two of our presentations this year will discuss resiliency in the animal world. The success and longevity of these value added activities is not by accident, but has been and will be the result of a plan and program that involve a variety of stakeholders.

This year's workshop here in Linn County is our sixth in six years. Our Planning Committee has grown larger as has the attendee list and audience for this program. Everyone that has supported this workshop thru the years has helped to build the foundation to make this program possible. We would like to thank the supporters, presenters, and you the audience for your efforts and commitments as they relate to our rights-of-way.

This year's program is made possible by actions of the Linn County Board of Supervisors and by funding from Iowa's Living Roadway Trust Fund. Much time and effort goes into both the preparation and delivery of quality presentations. This year we are bringing back a couple of speakers from previous workshops, and we'll have several new topics; new resources to help you be successful in your activities. To paraphrase a sentence from a Michigan Department of Natural Resources webpage on Commissions, Boards and Committees; the foundation of the success will be based on a well-trained and professional work force that values effective working relationships with other agencies, and the many diverse public persons and entities who have an interest in the resource.

There is **NO CHARGE** for this public program. We hope you take a bit of time to visit with the consultants, non-profits, and agencies that have exhibits on the second floor. We sincerely hope that you will find the information presented, the training, useful in your plans and programs; adding both value and resilience. Lunch is provided, so please register before 4:30 PM on Wednesday March 11th at ISU Extension and Outreach Linn County, 319-377-9839 or e-mail [benesh1@iastate.edu](mailto:benesh1@iastate.edu).



*Rob Roman*

Rob Roman  
Linn County Secondary Road Department

*John Harthoorn*

John Harthoorn  
ITC Midwest



## Rights-of-Way Workshop:

Adding Value and Resilience to the Resource

March 18, 2015 • Kirkwood Community College

Ballantyne Auditorium • 6301 Kirkwood Blvd. SW • Cedar Rapids, IA

### 8:00-8:30am Registration & Exhibits

Iowa Hall Rooms A to D and Atrium

8:30am Ballantyne Auditorium opens

### 8:40am Welcome and Introduction

Rob Roman Linn County Secondary Road Department

8:45-9:30am

### Updates to Iowa DOT Seeding and Mulching Specifications

Mike Heller Iowa Department of Transportation

9:30-10:00am

### Iowa DNR Public Tree Inventory Results

Matt Brewer Iowa Department of Natural Resources

10:00-10:15am Break

10:15-10:45am

### Invasive Plant Identification

Mark Vitosh Iowa Department of Natural Resources

10:45-11:45am

### Chemical Control of Unwanted Shrub and Tree Vegetation

Dr. Jesse Randall Iowa State University Extension & Outreach

11:45am-12:45pm Lunch and view exhibits

Lunch provided at no charge, thanks to our sponsor

12:45-1:45pm

### Managing Roadside, Utility and Parkway Corridors for Pollinators

Jennifer Hopwood The Xerces Society for Invertebrate Conservation

1:45-2:00pm Break

2:00-2:45pm

### Updates on Iowa Highway 100 Turtle Mitigation and the Listing of the Northern Long-eared Bat

Terry VanDeWalle Stantec Consulting Services

2:45pm Closing Comments

John Harthoorn ITC Midwest

## Linn County REAP funding History 1990-2015.xlsx

Year	County/ Statewide	Applicant	LRTF award	REAP portion of LRTF award	Description
2001	Linn	Alburnett	\$ 1,000.00	\$ 480.00	Gateway planting
1997	Linn	Cedar Rapids	\$ 8,669.29	\$ 4,161.26	Seed and mulch
1998	Linn	Cedar Rapids	\$ 2,033.50	\$ 955.75	Retention basin demonstration
1999	Linn	Cedar Rapids	\$ 40,073.57	\$ 17,231.64	Planting - Wright Brothers Blvd.
2000	Linn	Cedar Rapids	\$ 2,786.00	\$ 1,393.00	Cedar Rapids demonstration plantings
1996	Linn	Cedar Rapids Garden Club	\$ 811.03	\$ 389.29	Native plants - I-380 rest area
2006	Linn	City of Marion	\$ 17,650.00	\$ 7,236.50	Gateway and park planting
2008	Linn	College Community School District	\$ 6,431.00	\$ 2,958.26	Outdoor classroom
1991	Linn	DOT District Office - Cedar Rapids	\$ 3,891.00	\$ 2,762.61	Native planting
2007	Linn	Iowa Valley RC&D	\$ 4,500.00	\$ 2,295.00	Inventory - Digitize current
1990	Linn	Linn County	\$ 217.00	\$ 121.52	Equipment - Distance meter
1990	Linn	Linn County	\$ 1,031.76	\$ 577.79	Equipment - Burn
1990	Linn	Linn County	\$ 8,405.00	\$ 4,706.80	Truax Flex 88 drill
1991	Linn	Linn County	\$ 2,578.00	\$ 1,830.38	Native grass seed
1991	Linn	Linn County	\$ 4,500.00	\$ 3,195.00	Inventory
1991	Linn	Linn County	\$ 23,695.00	\$ 16,823.45	Seeding demonstration
1992	Linn	Linn County	\$ 246.00	\$ 135.30	Equipment - Drip torches
1992	Linn	Linn County	\$ 2,109.00	\$ 1,159.95	Seed
1993	Linn	Linn County	\$ 1,000.00	\$ 460.00	Seed
1993	Linn	Linn County	\$ 1,595.00	\$ 733.70	Equipment - No-till drill attachments
1993	Linn	Linn County	\$ 1,788.00	\$ 822.48	Equipment - Sprayer
1993	Linn	Linn County	\$ 2,050.00	\$ 943.00	Equipment - Cultipacker
1993	Linn	Linn County	\$ 2,685.81	\$ 1,235.47	Plantings - Hwy. 30
1993	Linn	Linn County	\$ 4,500.00	\$ 2,070.00	Inventory
1994	Linn	Linn County	\$ 1,458.92	\$ 598.16	Plantings - Hwy. 30 shop
1994	Linn	Linn County	\$ 4,613.00	\$ 1,891.33	Native seed
1995	Linn	Linn County	\$ 1,000.00	\$ 410.00	Native plantings

### Linn County REAP funding History 1990-2015.xlsx

1995	Linn	Linn County	\$ 3,480.00	\$ 1,426.80	Native plantings
1995	Linn	Linn County	\$ 7,000.00	\$ 2,870.00	Native planting
1996	Linn	Linn County	\$ 3,500.00	\$ 1,680.00	Shop plantings
1996	Linn	Linn County	\$ 3,840.00	\$ 1,843.20	Native grass plantings
1996	Linn	Linn County	\$ 9,000.00	\$ 4,320.00	Equipment - Flail vac seed stripper
1999	Linn	Linn County	\$ 13,000.00	\$ 5,590.00	Equipment - Hydro seeder
2000	Linn	Linn County	\$ 1,500.00	\$ 750.00	Seed storage
2000	Linn	Linn County	\$ 2,150.00	\$ 1,075.00	Hydromulch
2001	Linn	Linn County	\$ 4,000.00	\$ 1,920.00	Live plants and seed
2001	Linn	Linn County	\$ 7,500.00	\$ 3,600.00	Native seed
2002	Linn	Linn County	\$ 2,875.00	\$ 1,150.00	Equipment - Mulcher
2004	Linn	Linn County	\$ 500.00	\$ 230.00	Inventory - partial
2004	Linn	Linn County	\$ 1,593.00	\$ 732.78	Equipment - Vicon broadcast seeder
2004	Linn	Linn County Conservation Department	\$ 16,075.00	\$ 7,394.50	Educational gateway planting
2005	Linn	Linn County Secondary Road Department	\$ 1,600.00	\$ 864.00	Demonstration plantings
2005	Linn	Linn County Secondary Road Department	\$ 7,500.00	\$ 4,050.00	Equipment - Kuhn Knight 8118 compost spreader
2006	Linn	Linn County Secondary Road Department	\$ 1,204.00	\$ 493.64	Planting - Mt. Vernon Road
2006	Linn	Linn County Secondary Road Department	\$ 1,882.00	\$ 771.62	Plantings - Living snowfence
2006	Linn	Linn County Secondary Road Department	\$ 3,427.00	\$ 1,405.07	Native seedlings - Five ROW sites
2008	Linn	Linn County Secondary Road Department	\$ 1,483.00	\$ 682.18	Shrubs
2008	Linn	Linn County Secondary Road Department	\$ 3,400.00	\$ 1,564.00	Equipment - Hay trailer
2008	Linn	Linn County Secondary Road Department	\$ 6,400.00	\$ 2,944.00	Compost for erosion control
2009	Linn	Linn County Secondary Road Department	\$ 763.45	\$ 503.88	Native planting
2009	Linn	Linn County Secondary Road Department	\$ 1,504.00	\$ 992.64	Shrubs - Living snowfence
2009	Linn	Linn County Secondary Road Department	\$ 2,402.00	\$ 1,585.32	Educational materials
2009	Linn	Linn County Secondary Road Department	\$ 2,952.90	\$ 1,948.91	Equipment - Seed storage
2009	Linn	Linn County Secondary Road Department	\$ 4,552.00	\$ 3,004.32	Equipment - Sprayer
2009	Linn	Linn County Secondary Road Department	\$ 10,000.00	\$ 6,600.00	Equipment - Seed drill
2010	Linn	Linn County Secondary Road Department	\$ 1,921.00	\$ 1,094.97	Educational materials
2010	Linn	Linn County Secondary Road Department	\$ 2,000.00	\$ 1,140.00	Seed
2010	Linn	Linn County Secondary Road Department	\$ 2,831.00	\$ 1,613.67	Equipment - GPS and digital camera
2010	Linn	Linn County Secondary Road Department	\$ 5,000.00	\$ 2,850.00	Equipment - Disc harrow
2010	Linn	Linn County Secondary Road Department	\$ 10,000.00	\$ 5,700.00	Equipment - Brush chipper
2011	Linn	Linn County Secondary Road Department	\$ 2,438.50	\$ 1,170.48	50% Conservation Corps crew cost - one week

### Linn County REAP funding History 1990-2015.xlsx

2011	Linn	Linn County Secondary Road Department	\$ 3,400.00	\$ 1,632.00	Equipment - Fire
2011	Linn	Linn County Secondary Road Department	\$ 19,000.00	\$ 9,120.00	Equipment - Boom mower
2012	Linn	Linn County Secondary Road Department	\$ 4,490.50	\$ 1,975.82	Bus tour and visual aids
2012	Linn	Linn County Secondary Road Department	\$ 10,000.00	\$ 4,400.00	IRVM equipment storage facility
2013	Linn	Linn County Secondary Road Department	\$ 1,482.12	\$ 652.13	Equipment - Fire
2013	Linn	Linn County Secondary Road Department	\$ 1,500.00	\$ 660.00	IRVM educational field days
2013	Linn	Linn County Secondary Road Department	\$ 7,500.00	\$ 3,300.00	Equipment - Bale processor with right-side discharge
2014	Linn	Linn County Secondary Road Department	\$ 3,000.00	\$ 1,620.00	2014 Rights-of-Way Workshop
2015	Linn	Linn County Secondary Road Department	\$ 1,810.97	\$ 977.92	Equipment - Skid loader mount auger
2015	Linn	Linn County Secondary Road Department	\$ 4,258.70	\$ 2,299.70	2015 Rights-of-Way Workshop
2007	Linn	Linn County Secondary Road Dep't.	\$ 644.50	\$ 328.70	Weed-free forage and mulch certification
2007	Linn	Linn County Secondary Road Dep't.	\$ 1,440.00	\$ 734.40	Living snowfence shrub plantings
2007	Linn	Linn County Secondary Road Dep't.	\$ 2,000.00	\$ 1,020.00	Tree and shrub plantings along Mt. Vernon Rd.
2013	Statewide	Linn County Secondary Roads	\$ 4,500.00	\$ 1,980.00	Dr. Paul Christiansen slide digitization
2006	Linn	Linn County Trails Association	\$ 2,460.00	\$ 1,008.60	Plantings - Cedar River Trail
1997	Linn	Linn-Mar Middle School	\$ 1,123.39	\$ 539.23	Plantings
1998	Linn	Linn-Mar Middle School	\$ 1,014.50	\$ 476.82	Seed
2012	Linn	Taylor Elementary School	\$ 3,000.00	\$ 1,320.00	Outdoor classroom
1990	Statewide	Trees Forever	\$ 5,000.00	\$ 2,800.00	Handbook
1990	Statewide	Trees Forever	\$ 12,000.00	\$ 6,720.00	Field days
1991	Statewide	Trees Forever	\$ 4,928.00	\$ 3,498.88	Reprint - Oak Tree posters
1993	Statewide	Trees Forever	\$ 9,516.00	\$ 4,377.36	Gateway seminars
1994	Statewide	Trees Forever	\$ 2,792.00	\$ 1,144.72	Bur Oak poster showing acorn and seedling emergence
1995	Statewide	Trees Forever	\$ 10,000.00	\$ 4,100.00	Gateway seminars
1995	Statewide	Trees Forever	\$ 10,000.00	\$ 4,100.00	Professional networking day
1995	Statewide	Trees Forever	\$ 20,000.00	\$ 8,200.00	Cost analysis study
1995	Statewide	Trees Forever	\$ 50,000.00	\$ 20,500.00	Community assistance
1995	Statewide	Trees Forever	\$ 65,000.00	\$ 26,650.00	LRTF-ISTEA projects matching grant
1996	Statewide	Trees Forever	\$ 260.00	\$ 124.80	Posters; workshop
1996	Statewide	Trees Forever	\$ 4,630.50	\$ 2,222.64	Tree project handbook
1996	Statewide	Trees Forever	\$ 5,000.00	\$ 2,400.00	Field days & seminars
1996	Statewide	Trees Forever	\$ 5,236.00	\$ 2,513.28	Oak tree posters
1996	Statewide	Trees Forever	\$ 25,000.00	\$ 12,000.00	Community assistance

## Linn County REAP funding History 1990-2015.xlsx

1997	Statewide	Trees Forever	\$ 50,000.00	\$ 24,000.00	Community assistance
1998	Statewide	Trees Forever	\$ 10,000.00	\$ 4,700.00	Gateway seminars
1998	Statewide	Trees Forever	\$ 25,000.00	\$ 11,750.00	Community assistance - first half of year
1998	Statewide	Trees Forever	\$ 25,000.00	\$ 11,750.00	Community assistance - second half of year
1998	Statewide	Trees Forever	\$ 100,000.00	\$ 47,000.00	Match for ISTEAFunds
1999	Statewide	Trees Forever	\$ 10,000.00	\$ 4,300.00	Field days
1999	Statewide	Trees Forever	\$ 25,000.00	\$ 10,750.00	Community assistance - second half of year
1999	Statewide	Trees Forever	\$ 25,000.00	\$ 10,750.00	Community assistance - first half of year
1999	Statewide	Trees Forever	\$ 100,000.00	\$ 43,000.00	Match for ISTEAFunds
2000	Statewide	Trees Forever	\$ 50,000.00	\$ 25,000.00	Community assistance
2000	Statewide	Trees Forever	\$ 50,000.00	\$ 25,000.00	Match for T-21 enhancement funds
2001	Statewide	Trees Forever	\$ 15,000.00	\$ 7,200.00	Stewards of the Beautiful Land program
2001	Statewide	Trees Forever	\$ 25,000.00	\$ 12,000.00	Match for T-21 enhancement funds
2001	Statewide	Trees Forever	\$ 25,000.00	\$ 12,000.00	Community assistance
2002	Statewide	Trees Forever	\$ 39,000.00	\$ 15,600.00	Stewards of the Beautiful Land program
2002	Statewide	Trees Forever	\$ 50,000.00	\$ 20,000.00	Match for T-21 enhancement funds
2002	Statewide	Trees Forever	\$ 50,000.00	\$ 20,000.00	Statewide community assistance
2003	Statewide	Trees Forever	\$ 13,000.00	\$ -	Stewards of the Beautiful Land program
2003	Statewide	Trees Forever	\$ 50,000.00	\$ -	Community assistance
2003	Statewide	Trees Forever	\$ 50,000.00	\$ -	Match for T-21 enhancement funds
2004	Statewide	Trees Forever	\$ 76,000.00	\$ 34,960.00	Stewards of the Beautiful Land program/Community assistance
2004	Statewide	Trees Forever	\$ 95,000.00	\$ 43,700.00	Match for T-21 enhancement funds
2005	Statewide	Trees Forever	\$ 45,000.00	\$ 24,300.00	Match for T-21 enhancement funds
2005	Statewide	Trees Forever	\$ 50,000.00	\$ 27,000.00	Match for T-21 enhancement funds
2005	Statewide	Trees Forever	\$ 89,000.00	\$ 48,060.00	Community assistance/Stewards of the Beautiful Land program
2006	Statewide	Trees Forever	\$ 18,000.00	\$ 7,380.00	Stewards of the Beautiful Land program
2006	Statewide	Trees Forever	\$ 50,000.00	\$ 20,500.00	Community assistance
2006	Statewide	Trees Forever	\$ 60,000.00	\$ 24,600.00	Match for T-21 enhancement funds
2007	Statewide	Trees Forever	\$ 13,000.00	\$ 6,630.00	Stewards of the Beautiful Land program
2007	Statewide	Trees Forever	\$ 50,000.00	\$ 25,500.00	Community assistance
2007	Statewide	Trees Forever	\$ 50,000.00	\$ 25,500.00	Match for SAFETLU enhancement funds
2008	Statewide	Trees Forever	\$ 28,400.00	\$ 13,064.00	Stewards of the Beautiful Land program
2008	Statewide	Trees Forever	\$ 50,000.00	\$ 23,000.00	Match for SAFETLU enhancement funds
2008	Statewide	Trees Forever	\$ 75,000.00	\$ 34,500.00	Community assistance
2009	Statewide	Trees Forever	\$ 28,400.00	\$ 18,744.00	Stewards of the Beautiful Land program
2009	Statewide	Trees Forever	\$ 50,000.00	\$ 33,000.00	Match for SAFETLU enhancement funds
2009	Statewide	Trees Forever	\$ 80,000.00	\$ 52,800.00	Community assistance
2010	Statewide	Trees Forever	\$ 28,600.00	\$ 16,302.00	Stewards of the Beautiful Land
2010	Statewide	Trees Forever	\$ 65,000.00	\$ 37,050.00	Match for SAFETLU enhancement funds
2010	Statewide	Trees Forever	\$ 90,500.00	\$ 51,585.00	Community assistance
2011	Statewide	Trees Forever	\$ 28,600.00	\$ 13,728.00	Stewards of the Beautiful Land

### Linn County REAP funding History 1990-2015.xlsx

2011	Statewide	Trees Forever	\$ 70,000.00	\$ 33,600.00	Match for SAFETLU enhancement funds
2011	Statewide	Trees Forever	\$ 74,200.00	\$ 35,616.00	Community assistance
2012	Statewide	Trees Forever	\$ 43,000.00	\$ 18,920.00	Stewards of the Beautiful Land
2012	Statewide	Trees Forever	\$ 75,000.00	\$ 33,000.00	Match for federal Transportation Enhancement funds
2012	Statewide	Trees Forever	\$ 85,000.00	\$ 37,400.00	Community assistance
2013	Statewide	Trees Forever	\$ 43,000.00	\$ 18,920.00	Stewards of the Beautiful Land
2013	Statewide	Trees Forever	\$ 75,000.00	\$ 33,000.00	Match for federal Transportation Enhancement funds
2013	Statewide	Trees Forever	\$ 85,000.00	\$ 37,400.00	Community assistance
2014	Statewide	Trees Forever	\$ 41,621.95	\$ 22,475.85	Stewards of the Beautiful Land
2014	Statewide	Trees Forever	\$ 75,000.00	\$ 40,500.00	Match for federal Transportation Alternative Program funds
2014	Statewide	Trees Forever	\$ 84,949.12	\$ 45,872.52	Community assistance
2015	Statewide	Trees Forever	\$ 82,010.34	\$ 44,285.58	Community assistance
2015	Statewide	Trees Forever	\$ 90,000.00	\$ 48,600.00	Match for federal Transportation Alternative Program funds
2015	Statewide	Trees Forever	\$ 42,524.99	\$ 22,963.49	Stewards of the Beautiful Land
2004	Linn	Viola Gibson Elementary School, Cedar Rapids	\$ 1,358.00	\$ 624.68	Outdoor classroom/stormwater retention planting
1991	Statewide	Dr. Bernstein, Mount Mercy College	\$ 2,609.00	\$ 1,852.39	Research - Non-game nesting
1992	Statewide	Dr. Bernstein, Mount Mercy College	\$ 2,600.00	\$ 1,430.00	Research - Non-game nesting
1992	Statewide	Dr. Christiansen, Cornell College	\$ 1,050.00	\$ 577.50	Prairie species book
1992	Statewide	Dr. Christiansen, Cornell College	\$ 6,000.00	\$ 3,300.00	Prairie species book
1995	Statewide	Dr. Christiansen, Cornell College	\$ 550.00	\$ 225.50	Equipment - Ecotypic variation research
1995	Statewide	Dr. Christiansen, Cornell College	\$ 6,000.00	\$ 2,460.00	Book sketches
1995	Statewide	Dr. Christiansen, Cornell College	\$ 8,786.25	\$ 3,602.36	Research - Ecotypic variation
1996	Statewide	Dr. Christiansen, Cornell College	\$ 4,711.25	\$ 2,261.40	Research - Ecotypic variation
Total LRTF Awards Since 1990			\$ 3,510,049.81	\$ 1,664,125.89	Total REAP portion of LRTF Awards Since 1990

**Roman, Rob**

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**Subject:**

FW: News Release: Iowa mowing laws designed to protect roadside habitats

**FOR IMMEDIATE RELEASE**

May 21, 2015



**For more information, contact:**

Rob Roman

Roadside Vegetation Manager

Linn County Secondary Road Department

(319) 892-6424

[rob.roman@linncounty.org](mailto:rob.roman@linncounty.org)

## **Iowa mowing laws designed to protect roadside habitats**

*Mowing roadside ditches is restricted until July 15*

**LINN COUNTY, IA – May 21, 2015** – The Linn County Secondary Road Department reminds county residents to protect roadside habitat for nesting game birds and song birds this spring and early summer.

According to Iowa Code 314.17, mowing roadside ditches is restricted until July 15 to protect young pheasants and other ground-nesting birds until they are ready to fledge. The law, which applies to county secondary roads as well as state primary and interstate highways, also protects habitat for pollinators and other beneficial insects, including crop-pest predators.

Exceptions for visibility and weed control are built into the law, but non-essential mowing – including cutting for hay – is prohibited.

Iowa Code 314.17 states: Mowing roadside vegetation on the rights-of-way or medians on any primary highway, interstate highway, or secondary road prior to July 15 is prohibited, except as follows:

- Within 200 yards of an inhabited dwelling
- On right-of-way within one mile of the corporate limits of a city
- To promote native species of vegetation or other long-lived and adaptable vegetation
- To establish control of damaging insect populations, noxious weeds and invasive plant species
- For visibility and safety reasons
- Within rest areas, weigh stations and wayside parks
- Within 50 feet of a drainage tile or tile intake
- For access to mailbox or for other accessibility purposes
- On right-of-way adjacent agricultural demonstration or research plots

Iowa's roadsides provide a valuable refuge for wildlife. The mowing law serves as a reminder to only mow shoulders during the critical nesting season and leave the rest of the roadside for the birds.

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Joi Alexander  
Linn County Communications Director  
319-892-5118  
[www.linncounty.org](http://www.linncounty.org)

45 Acre Native Grass and Forb Mix

SPECIES	QUANTITY POUNDS (p.l.s.)
Andropogon gerardii Big Bluestem	60
Bouteloua curtipendula Sideoats Grama	90
Elymus canadensis Canada Wildrye (debearded)	75
Panicum virgatum Switchgrass	21
Schizachyrium scoparium Little Bluestem	90
Sorghastrum nutans Indiangrass	75
Sporobolus asper Tall Dropseed	60
Asclepias incarnata Rose Milkweed	6
Asclepias tuberosa Butterfly Milkweed	3
Astragalus canadensis Canadian Milk Vetch	12
Baptisia alba White Wild Indigo	6
Chamaecrista fasciculata Partridge Pea	33
Dalea candida White Prairie Clover	6
Dalea purpurea Purple Prairieclover	12
Desmanthus illinoensis Illinois Bundleflower	6
Desmodium canadense Showy Tick Trefoil	6
Echinacea pallida Pale Coneflower	24
Eryngium yuccifolium Rattlesnake Master	6
Heliopsis helianthoides Ox-eye False Sunflower	6

SPECIES	QUANTITY POUNDS (p.l.s.)
Lespedeza capitata Roundheaded Bushclover	6
Liatris pycnostachya Prairie Blazing Star	6
Monarda fistulosa Wild Bergamot	6
Oligoneuron rigidum Stiff Goldenrod	6
Penstemon digitalis Foxglove Beardtongue	6
Ratibida pinnata Yellow Coneflower	12
Rudbeckia hirta Blackeyed Susan	12
Silphium laciniatum Compass Plant	12
Symphytrichum laeve Smooth Blue Aster	6
Symphyotrichum novae-angliae New England Aster	6
Symphyotrichum oolentangiense Sky Blue Aster	6
Tradescantia ohiensis Ohio Spiderwort	6
Verbena stricta Hoary Vervain	6
Vernonia fasciculata Common Ironweed	3
Zizia aurea Golden Alexanders	12

## 2015 Diversity Mix, 120 Acres

## Linn County

Group I – Grasses and grass-like plants		Bags	lb/ bag	Seeds/ft <sup>2</sup>	Habitat
_____	Big bluestem <i>Andropogon gerardii</i>	12	20	7.35	Mesic
_____	Sideoats grama <i>Bouteloua curtipendula</i>	12	22.5	4.96	Dry
_____*	Prairie sedge <i>Carex bicknellii</i>	12	1.5	0.94	Mesic
_____*	Field oval sedge <i>Carex molesta</i>	12	1.25	1.15	Mesic to Dry
_____	Canada wildrye <i>Elymus canadensis</i>	12	20	3.82	Mesic to Dry
_____	Switchgrass <i>Panicum virgatum</i>	12	7.5	3.86	Mesic
_____	Little bluestem <i>Schizachyrium scoparium</i>	12	25	13.77	Dry to Mesic
_____	Indiangrass <i>Sorghastrum nutans</i>	12	17.5	7.71	Mesic to Dry
_____	Rough dropseed <i>Sporobolus asper</i>	12	5	5.51	Dry
Total grass seeds per square foot				49.07	

These sedges are in the forb bags.

**24 Black bags, Red Tie** (12 bags containing forb/sedge species packaged in clear bags, 12 bags containing forb/sedge species packaged in white bags; 372 small forb/sedge bags total)

Group II – Forbs		Bags	Oz/ bag	Seeds/ft <sup>2</sup>	
_____	Lead plant <i>Amorpha canescens</i>	12	10	0.37	
_____	Butterfly milkweed <i>Asclepias tuberosa</i>	12	36	0.36	
_____	Canada milkvetch <i>Astragalus canadensis</i>	12	23	0.90	
_____	White wild indigo <i>Baptisia lucea</i>	12	30	0.12	
_____	Partridge pea <i>Chamaecrista fasciculata</i>	12	240	1.49	
_____	Purple prairie clover <i>Dalea purpurea</i>	12	50	1.72	
_____	Showy tick trefoil <i>Desmodium canadense</i>	12	40	0.51	
_____	Pale purple coneflower <i>Echinacea pallida</i>	12	50	0.60	
_____	Rattlesnake master <i>Eryngium yuccifolium</i>	12	20	0.34	
_____	Ox-eye sunflower <i>Heliopsis helianthoides</i>	12	45	0.65	
_____	Roundheaded bushclover <i>Lespedeza capitata</i>	12	25	0.46	
_____	Rough blazingstar <i>Liatris aspera</i>	12	25	0.92	
_____	Prairie Blazingstar <i>Liatris pycnostachya</i>	12	86	2.17	
_____	Wild bergamot <i>Monarda fistulosa</i>	12	36	5.79	
_____	Stiff goldenrod <i>Oligoneuron rigidum</i>	12	20	1.88	
_____	Foxglove penstemon <i>Penstemon digitalis</i>	12	10	2.98	(small seed)
_____	Large-flowered penstemon <i>Penstemon grandiflorus</i>	12	10	0.32	
_____	Grey-beaded coneflower <i>Ratibida pinnata</i>	12	41	2.82	
_____	Black-eyed Susan <i>Rudbeckia hirta</i>	12	36	7.60	
_____	Compass plant <i>Silphium laciniatum</i>	12	60	0.09	
_____	New England aster <i>Symphotrichum novae-angliae</i>	12	10	1.52	
_____	Ohio spiderwort <i>Tradescantia ohioensis</i>	12	30	0.55	
_____	Hoary vervain <i>Verbena stricta</i>	12	15	0.96	
_____	Golden Alexanders <i>Zizia aurea</i>	12	16	0.40	
Total forb seeds per square foot				35.52	

Wet species		Bags	lb/ bag	Seeds/ft <sup>2</sup>	
_____	Fox sedge <i>Carex vulpinoidea</i>	12	2	7.35	(small seed)
_____	Green bulrush <i>Scirpus atrovirens</i>	12	1	9.55	(small seed)
			oz/ bag		
_____	Swamp milkweed <i>Asclepias incarnata</i>	12	60	0.66	
_____	Sneezeweed <i>Helenium autumnale</i>	12	6	1.79	(small seed)
_____	Mountain mint <i>Pycnanthemum virginianum</i>	12	7.5	3.79	(small seed)
Total wet species seeds per square foot				23.14	

**Note:** We were able to increase seed quantities per acre this year. Both the Diversity and the Cleanout mix have a higher than usual seeds/sq. ft rate. Please take this into consideration when calculating your seeding rates! The last 5 species will grow best in a wetter habitat, a location with more soil moisture such as the ditch bottom. The 5 species labeled as having small seeds won't grow if they get buried. One way to plant them would be to mix the seed in a bucket of sand and scatter it by hand on the soil surface towards the bottom of the ditch.

## Section 2601. Erosion Control

### 2601.01 DESCRIPTION.

Perform the following erosion control measures on areas within and adjacent to the right-of-way according to the contract documents and this specification:

- Seeding and fertilizing,
- Stabilizing crop seeding and fertilizing,
- Overseeding and fertilizing,
- Mulching,
- Composting,
- Sodding,
- Special ditch control,
- Turf reinforcement mat,
- Slope protection,
- Outlet or channel scour protection (transition mat), and
- Mowing.

### 2601.02 MATERIALS.

- A. Furnish materials meeting the requirements of Section 4169.
- B. Apply materials at no less than the minimum rate specified in the contract documents. Apply seed for native grass, wildflower, and wetland grass seeding on a PLS basis, as computed by the Engineer.
- C. Additional compensation will not be allowed for materials in excess of that specified, unless directed by the Engineer.
- D. If, after application of fertilizer, it is determined by test that the fertilizer fails to comply with minimum requirements, furnish and apply additional fertilizer to comply with minimum requirements as defined in Article 4169.03.
- E. Perform work in a manner that provides the Engineer the opportunity to verify the quantity of material furnished and the rate of application. Divide project area into small natural areas that are to be constructed as identifiable units. Furnish a tally of the quantities of each material as it is used on each area. This may include the quantities below:
  - Weights (mass) from approved scales of truck loads of bulk materials,
  - Other scaled weights (mass),
  - Counts of containers, bags, or bales, or estimates of partially used packages of materials, as approved by the Engineer.
- F. Provide the Engineer with the opportunity to verify quality and quantities in a manner that will allow continuous operation with minimum delays.
- G. When handling inoculants and sticking agents, follow safety precautions as specified on the product label.

### 2601.03 PLACEMENT OF EROSION CONTROL.

- A. **Equipment.**

Use equipment meeting the requirements of Section 2001 and the following, except that other equipment which produces similar results will be considered for approval. Use methods and procedures consistent with equipment manufacturers' recommendations; however, do not operate ground driven equipment at speeds greater than 10 mph (15 km/h).

  1. **Disk.**

When preparing a seedbed on ground having heavy vegetation, use a disk having cutaway blades. Provide for the addition of weight (mass) to obtain proper cutting depth.
  2. **Slope Harrow.**

Use a rolling weight (mass) attached by heavy chain to a tractor. Use a chain of suitable length, with picks attached and a means of rotating the picks as the rolling weight (mass) is pulled in a direction parallel to the movement of the tractor.
  3. **Field Tiller.**

Use equipment designed for preparation of the seedbed to the degree specified.
  4. **Rotary Tiller.**

Use equipment with rotary type blades designed for preparation of seedbed to the degree specified.
  5. **Spike Tooth Harrow.**

Use equipment designed to:

- Provide adjustment of the spike teeth to level the ground, or
- Be used as specified by the Engineer.

**6. Compaction Equipment.**

**a. Cultipacker.**

- 1) Use a pull type cultipacker with individual rollers or wheels. Cultipackers having sprocket type spacers between the wheels may be used. Ensure the cultipacker produces a corrugated surface on area being compacted.
- 2) Use a cultipacker that operates separate from other operations. Attachment of cultipacker to the seeder or disk will not be permitted, except when the combined cultipacker seeder is manufactured to operate as a unit. Provide for the addition of weight (mass).

**b. Compaction Rollers.**

Apply [Article 2001.05, A.](#)

**c. Hand Tamping Equipment.**

Use base plate type hand tamping equipment adapted to the performance of the work. Obtain the Engineer's approval.

**d. Expanded Mesh Roller.**

Use open grid type equipment or the cultipacker type equipment modified by covering with expanded metal mesh.

**7. Hydraulic Seeder and Mulcher.**

- a. Use hydraulic seeding equipment with a pump rated at no less than 100 gallons (350 L) per minute. Inoculant, seed, and fertilizer may be applied in a single operation, unless stated otherwise in the contract documents. Apply hydraulic mulch as a separate operation. Ensure the equipment has suitable working pressure and a nozzle adapted to the type of work.
- b. Ensure supply tanks have a means of mechanical agitation. Calibrate the tanks and provide a calibration stick or other approved device to indicate the volume used or remaining in the tank.

**8. Gravity Seeders.**

**a. Ensure gravity seeders:**

- Provide agitation of the seed,
- Have an adjustable gate opening, and
- Uniformly distribute seed on the prepared seedbed.

**b. Use a seed hopper equipped with baffle plates spaced no more than 2 feet (0.6 m) apart. Ensure baffle plates extend from the agitator shaft to within approximately 2 inches (50 mm) of the top of the seed hopper.**

**c. Wind guards will be required to facilitate seeding when moderate wind conditions exist and when required by the Engineer. Place wind guards in front or in back (or both) of the seed outlet and extend to near the ground line.**

**d. This seeder may be used for the application of fertilizer.**

**9. Endgate Cyclone Seeders.**

Ensure endgate cyclone seeders are:

- Suitably mounted,
- Provide movement by mechanical means, and
- Drop through an adjustable flow regulator onto a rotating, power driven, horizontal disk or fan.

**10. Hand Cyclone Seeders.**

Use a seeder that drops seed through an adjustable flow regulator onto a rotating, hand driven, horizontal disk or fan.

**11. Native Grass Seed Drill.**

Use a drill that:

- Is free of soil and seed when it arrives on the project,
- Accurately meters and uniformly mixes various seed types throughout drilling operation,
- Provides separate seed boxes to apply both small seeds and a large box with an aggressive picker wheel for continual mixing and applying fluffy bearded seed,
- Has disc furrow openers and packer assembly wheels that compact soil directly over drill rows,
- Contains a no till attachment manufactured by same manufacturer as the drill, and
- Has dimensions to ensure it maintains uniform soil contact over seeded area without bridging.

**12. Pneumatic Seeder.**

Use a pneumatic (air blower) system with enough power and hose to reach 300 feet (100 m).

**13. Aerial Equipment.**

When aerial application of seed and fertilizer is specified, use aerial equipment capable of providing a uniform distribution of seed and fertilizer on the specified area.

**14. Straw Mulching Machine.**

Use a type that will uniformly apply mulch material over the desired area without excessive pulverization. Engineer may consider excessive pulverization as the general absence of straw longer than 6 inches (150 mm) after distribution.

**15. Mulch Anchoring Equipment.**

- a. Use mulch anchoring equipment designed to anchor straw or hay mulch into soil by means of dull blades or disks. Use blades or disks that:
  - Are flat,
  - Have a nominal minimum diameter of 20 inches (500 mm), and
  - Are spaced at approximately 8 inch (200 mm) intervals.
- b. The blades may have cutaway edges. Pull mulch anchoring equipment using mechanical means. Use equipment that weighs approximately 1,000 pounds (has a mass of approximately 450 kg). When directed by the Engineer, increase the weight (mass) of the equipment by the addition of ballast.

**16. Mechanical Trencher.**

Use a machine designed for the specific purpose of constructing a trench for placement of check slots to depth specified.

**17. Mowers.**

Use rotary, flail, disk, or sickle type mowers that do not bunch or windrow mowed material.

**B. Seeding and Fertilizing.**

1. On various portions of the right-of-way, except the traveled portion of the roadbed:
  - Prepare the seedbed,
  - Furnish, sow, and cover the seed, and
  - Compact the seedbed.
2. Seed other areas as may be indicated in the contract documents or directed by the Engineer. The limits of areas to be seeded will be clearly marked before seedbed is prepared.
3. Do not disturb areas having a satisfactory growth of desirable grasses or legumes.
4. Sow seed only at times of the year when temperature, moisture, and climatic conditions will promote germination and plant growth. Normal seed application dates are according to Article 2601.03, C for each seed type. Perform seeding according to the following procedures:
  - a. **Seedbed Preparation.**
    - 1) Ensure area to be seeded is relatively smooth. Fill washes and gullies to conform to desired cross section. When such fills exceed 6 inches (150 mm), compact the material with a tractor wheel or other suitable field equipment. Coordinate preparation of ditches designated for special ditch control with the seedbed preparation.
    - 2) Thoroughly work areas accessible to field machinery to a depth of no less than 3 inches (75 mm). Use mechanical rotary tillage equipment to prepare the seedbed on earth shoulders, urban or raised medians, rest areas, and islands. Hand prepare areas inaccessible to field machinery to a depth of not less than 2 inches (50 mm). Ensure entire width of shoulder and areas around headwalls, wingwalls, flumes, and other structures are prepared in the manner specified.
    - 3) Where enough vegetative growth exists to sufficiently interfere with proper seedbed preparation, mow vegetative growth before seeding, at no additional cost to the Contracting Authority.
    - 4) Use crawler type or dual wheeled tractors to prepare seedbeds. Operate equipment in a manner to minimize displacement of soil and disturbance of the design cross section.
    - 5) Prior to rolling with cultipacker, harrow ridging in excess of 4 inches (100 mm) caused by operation of tillage equipment. Prior to permanent seeding, roll the area with no less than one pass of the cultipacker.
    - 6) Remove ruts that develop during the sequence of operations before subsequent operations are performed.
    - 7) After completing seedbed preparation, pick up and remove debris according to Article 1104.08, including 3 inch (75 mm) diameter or larger stones, logs, stumps, cable, or other objectionable material that may interfere with seeding operation.
  - b. **Application of Fertilizer.**
    - 1) Spread fertilizer over the areas at the rate designated in Article 2601.03, C for each seed type, unless specified otherwise in the contract documents.
    - 2) Spread with a mechanical spreader which will secure a uniform application rate. Do not use truck mounted spreading equipment for bulk fertilizer. On areas accessible to field machinery, spread after the preliminary preparation of seedbed, but prior to sowing of seed. Disk in fertilizer and roll the area prior to application of permanent seed. If the roller cannot be operated satisfactorily, Engineer may

permit substituting a harrow for the roller. Areas inaccessible to field machinery, spread fertilizer after preparation of seedbed and thoroughly rake into the soil.

3) If using a hydraulic seeder, apply fertilizer in combination with seeding as specified in Article 2601.03, B, 4, d, 2. When the contract documents require two applications of fertilizer, perform second application during next permanent seeding period following initial seeding and fertilizer application.

**c. Preparation of Seed.**

1) Except when a hydraulic seeder is used, thoroughly mix all seed specified for the contract prior to placing seed in seed hopper. Seed mixing shall meet requirements of Materials I.M. 469.02 of this specification. Permanent rural, permanent urban, urban stabilizing, Native Grass, Wetland Grass, and Wildflower seeding mixtures shall be mixed off-site by a seed conditioner approved by the Iowa Crop Improvement Association or other state's Crop Improvement Association.

2) Inoculate legumes with a standard culture at the rate as specified by manufacturer of inoculant, according to Article 4169.04. Use a type of inoculant specified for each legume seed and approved by the Engineer.

3) Do not allow inoculated seed to be exposed to direct sunlight for more than 30 minutes. Prior to use, reinoculate seed that is not sown within 8 hours after inoculation. Preinoculated seed with manufacturer's recommended protective coating may be used in lieu of seed with Contractor applied inoculant.

4) When gravity or cyclone seeder is used for application of seed, inoculate legume seed according to manufacturer's recommended procedures before mixing with other grass seeds for sowing. If hydraulic seeder is used, inoculant, in quantities specified above, may be applied directly into supply tank with seed, water, and other material. Furnish and apply inoculant.

5) Treat seed with a commercial sticking agent. Apply prior to application of inoculant, or as a mixture when the sticking agent is compatible with other materials, except with hydraulic equipment. A sticking agent optional if a liquid formulation of inoculant is used.

6) Use mechanical mixing equipment to apply sticking agent and inoculant on seed quantities over 50 pounds (25 kg) per batch.

**d. Application of Seed.**

**1) Sowing, Covering, and Compaction**

a) On areas accessible to field machinery, seed may be sown with:

- A gravity, cyclone, or hydraulic seeder,
- A native grass seed drill, or
- As specified in the contract documents.

b) On areas inaccessible to field machinery, use of hand cyclone seeders may be used.

c) Sowing of seed shall be performed as a split rate application (no less than two passes).

d) Covering, compaction, rolling, dragging, or raking of seedbed will not be required provided the friable condition exists. For spring seeding (following fall seedbed preparation) after April 1, Contractor shall roll or harrow when, in the opinion of the Engineer, a friable condition does not exist. Cover stabilizing crop seeding and fertilizing with a light disking or other tillage equipment such as a rigid harrow, spring tooth harrow, or field cultivator.

e) Follow sowing of grasses and legumes with at least one complete rolling with cultipacker. Roll shoulders immediately to prevent loss of seed due to air currents caused by passing traffic. For stabilizing crop seeding and fertilizing, follow tillage by rolling area with a cultipacker. If cultipacker cannot be operated satisfactorily, Engineer may permit harrow to be substituted for cultipacker.

f) Where compaction equipment will not operate satisfactorily, lightly drag or rake in seeded area by hand. Roll seedbed with a cultipacker before and after seeding.

**2) Seeding and Fertilizing with Hydraulic Seeder.**

a) A hydraulic seeder may be used when seedbed has been prepared according to Article 2601.03, B, 4, a. When a hydraulic seeder is used, apply seed or fertilizer, or both, at the rates specified in approximately 400 gallons (4000 L) of water slurry per acre (hectare).

b) Apply mixture within 1 hour after fertilizer and seed are placed in hydraulic seeder. Use continuous agitation. Seed remaining in the fertilizer solution for more than 1 hour will be unacceptable. Additional seed at the specified rate will be required.

**3) Pneumatic Seeding.**

Includes furnishing and applying compost to a depth of 1 inch (25 mm) on designated disturbed areas. Apply compost using a pneumatic (air blower) system with sufficient hose to reach 300 feet (100 m). Driving on soil to apply compost will not be allowed. Incorporate fertilizer into full depth of compost material. Prepare seedbed according to Article 2601.03, C, 4, a, 1. Apply seed within top 1/4 inch (6 mm) of compost material.

**C. Types of Seeding.**

**1. Stabilizing Crop Seeding and Fertilizing (Rural).**

**a. Preparation and Application.**

- 1) Prepare seedbed according to Article 2601.03, B, 4, a.
- 2) Prepare seed according to Article 2601.03, B, 4, c.
- 3) Apply seed according to Article 2601.03, B, 4, d.

- 4) For stockpile stabilization seeding, seedbed preparation will not be required for areas not accessible to field equipment.
- b. **Seed Mixture.**  
Unless otherwise specified in the contract documents, use rates and schedule shown in Table 2601.03-1.

**Table 2601.03-1: Rural Stabilizing Crop Seeding Rates and Schedule**

March 1 through October 31	
Oat	50 lbs. per acre (56 kg/ha)
Grain rye	50 lbs. per acre (56 kg/ha)
Canada wildrye ( <i>Elymus canadensis</i> )	5 lbs PLS. per acre (6 kg/ha)
November 1 through February 28 (or 29)	
Oat	62 lbs. per acre (69 kg/ha)
Grain rye	62 lbs. per acre (69 kg/ha)
Canada wildrye ( <i>Elymus canadensis</i> )	7 lbs. PLS. per acre (8 kg/ha)
For stabilizing crop only, Canada wildrye ( <i>Elymus canadensis</i> ) seed will not be required to be certified as Source Identified Class (Yellow Tag) Source G0-Iowa.	
Canada wildrye ( <i>Elymus canadensis</i> ) seed shall be debarbed or equal to facilitate application of seed.	

- c. **Fertilizing.**
- 1) Apply to seeded areas at the rate of 250 pounds per acre (280 kg/ha) of 13-13-13 (or equivalent) unless specified otherwise in the contract documents.
  - 2) Apply provisions of Article 2601.03, B, 4, b.
- d. **Application Dates.**  
Refer to Table 2601.03-1 for normal seed application dates.
2. **Stabilizing Crop Seeding and Fertilizing (Urban).**
- a. **Preparation and Application.**
- 1) Use a rotary tiller for preparation of seedbed according to Article 2601.03, B, 4, a. Prior to application of seed, ensure seedbed is firm, smooth, and free of material 1.5 inches (40 mm) in diameter or greater including clods, rocks, and other debris. Roll seedbed before and after application of seed. For rolling, use either open grid type equipment or cultipacker type equipment modified by covering with expanded metal mesh.
  - 2) Prepare seed according to Article 2601.03, B, 4, c.
  - 3) Apply seed according to Article 2601.03, B, 4, d.
  - 4) Prepare, roll, seed, and fertilize areas inaccessible to field equipment by hand or using hand operated equipment, including lawn type, hand cyclone, or gravity equipment.
- b. **Seed Mixture.**  
Unless specified otherwise in the contract documents, use seeding rates shown in Table 2601.03-2 for urban areas.

**Table 2601.03-2: Urban Stabilizing Crop Seeding Rates**

Bluegrass, Kentucky	122 lbs. per acre (137 kg/ha)
Ryegrass, Perennial (fineleaf variety)	35 lbs. per acre (39 kg/ha)
Fescue, Creeping Red	18 lbs. per acre (20 kg/ha)

- c. **Fertilizing.**
- 1) Apply prior to preparing seedbed.
  - 2) Apply to seeded areas at the rate of 300 pounds per acre (336 kg/ha) of 6-24-24 (or equivalent) unless specified otherwise in the contract documents.
  - 3) Apply provisions of Article 2601.03, B, 4, b.
- d. **Application Dates.**  
Normal seed application dates are March 1 through May 31, and August 10 through September 30.
3. **Rural Seeding.**
- a. **Preparation and Application.**
- 1) Prepare seedbed according to Article 2601.03, B, 4, a.
  - 2) Prepare seed according to Article 2601.03, B, 4, c.
  - 3) Apply seed according to Article 2601.03, B, 4, d.
- b. **Seed Mixture.**  
Use seeding rates in Table 2601.03-3 for permanent seeding of rural areas, unless otherwise specified in the contract documents:

**Table 2601.03-3: Permanent Seed Rates, Rural Areas**

Fescue, Tall (Fawn)	100 lbs. per acre (112 kg/ha)
Ryegrass, Perennial (Linn)	75 lbs. per acre (84 kg/ha)
Bluegrass, Kentucky	20 lbs. per acre (22 kg/ha)

c. **Fertilizing.**

- 1) Spread over the areas at the rate designated. Unless otherwise specified in the contract documents, use a rate of 300 pounds per acre (336 kg/ha) of 6-24-24 (or equivalent).
- 2) Apply provisions of Article 2601.03, B, 4, b.

d. **Application Dates.**

Normal permanent seed application dates are March 1 through May 31, and August 10 through September 30.

4. **Urban Seeding.**

a. **Preparation and Application.**

- 1) Use rotary tiller for preparation of seedbed according to Article 2601.03, B, 4, a. Prior to application of seed, ensure seedbed is firm, smooth, and free of material 1.5 inches (40 mm) in diameter or greater including clods, rocks, and other debris. Roll seedbed before and after application of seed. For rolling, use either open grid type equipment or cultipacker type equipment modified by covering with expanded metal mesh.
- 2) Prepare seed according to Article 2601.03, B, 4, c.
- 3) Apply seed according to Article 2601.03, B, 4, d.
- 4) Prepare, roll, seed, and fertilize areas inaccessible to field equipment by hand or using hand operated equipment, including lawn type, hand cyclone, or gravity equipment. Obtain Engineer's approval for such equipment.

b. **Seed Mixture.**

Use seeding rates in Table 2601.03-4 for permanent seeding of urban areas, including areas previously maintained as a lawn.

Table 2601.03-4: Permanent Seed Rates, Urban Areas

Bluegrass, Kentucky	122 lbs. per acre (137 kg/ha)
Ryegrass, Perennial (fineleaf variety)	35 lbs. per acre (39 kg/ha)
Fescue, Creeping Red	18 lbs. per acre (20 kg/ha)

c. **Fertilizing.**

- 1) Apply prior to preparing the seedbed.
- 2) Spread over the areas at a rate of 300 pounds per acre (336 kg/ha) of 6-24-24 (or equivalent).
- 3) Apply the provisions of Article 2601.03, B, 4, b.

d. **Application Dates.**

Normal permanent seed application dates are March 1 through May 31, and August 10 through September 30.

5. **Native Grass Seeding.**

a. **Preparation and Application.**

- 1) In areas without existing stabilized crop seeding residue, prepare seedbed according to Article 2601.03, B, 4, a. Seed areas accessible to field equipment with native grass seed drill, gravity, or broadcast equipment. Cultipack as specified in Article 2601.03, B, 4, d. Broadcast seed other areas and follow with a light dragging or hand raking.
- 2) In areas with existing stabilized crop residue, apply seed with a native grass seed drill with a no till attachment. Seedbed preparation and cultipacking will not be required. Seedbed preparation is required for areas with rills and gullies.
- 3) Prepare seed according to Article 2601.03, B, 4, c.
- 4) Calibrate native grass seed drill to specified seeding rate for the project prior to operation at the project.
- 5) Plant seed at a maximum 1/8 inch (3 mm) depth. Do not perform seeding when wet soil conditions would cause seed to be placed deeper than specified.
- 6) Fill seed boxes loosely without packing seed to allow agitator wheels to run freely and seed flows freely through drill.
- 7) Set no-till coulters to penetrate between 1/4 and 1/2 inch (6 and 13 mm) below soil surface.
- 8) Operate drill so the drive wheel maintains ground contact. Perform two passes with drill, with second pass being offset from first pass.
- 9) Operate tractor between 3 and 5 mph (5 and 8 kmph) to prevent drill from bouncing.
- 10) Remove seed remaining in drill at the end of each day. At the completion of seeding, remove remaining seed from drill by vacuum or other means. Hand broadcast remaining seed on project.

b. **Seed Mixture.**

Use seeding rates in Table 2601.03-5 for areas designated for native grass seeding, unless specified otherwise in the contract documents.

Table 2601.03-5: Native Grass Seed Rates

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Species (Scientific Name)	Application Rate (PLS)
Furnish seed certified as Source Identified Class (Yellow Tag) Source G0-Iowa. Oats are excluded from this requirement.	
*Big bluestem ( <i>Andropogon gerardii</i> )	6 lbs. per acre (7 kg/ha)
*Canada wildrye ( <i>Elymus canadensis</i> )	2 lbs. per acre (2.2 kg/ha)
*Indiangrass ( <i>Sorghastrum nutans</i> )	6 lbs. per acre (7 kg/ha)
*Little bluestem ( <i>Schizachyrium scoparium</i> )	6 lbs. per acre (7 kg/ha)
Blackeyed susan ( <i>Rudbeckia hirta</i> )	4 oz. per acre (280 g/ha)
Blue vervain ( <i>Verbena hastata</i> )	1/2 oz. per acre (35 g/ha)
Gray-headed coneflower ( <i>Ratibida pinnata</i> )	3 oz. per acre (210 g/ha)
Ironweed ( <i>Vernonia fasciculata</i> )	3 oz. per acre (210 g/ha)
New England aster ( <i>Symphotrichum novae-angliae</i> )	2 oz. per acre (140 g/ha)
Pale purple coneflower ( <i>Echinacea pallida</i> )	6 oz. per acre (420 g/ha)
Partridge pea ( <i>Chamaecrista fasciculata</i> )	4 lbs. per acre (4.5 kg/ha)
Side-oats grama ( <i>Bouteloua curtipendula</i> )	4 lbs. per acre (4.5 kg/ha)
Switchgrass ( <i>Panicum virgatum</i> )	1 lbs. per acre (1.1 kg/ha)
Oats ( <i>Avena sativa</i> )	32 lbs. per acre (36 kg/ha)
*Note: Canada wildrye, Big bluestem, Indiangrass, and Little bluestem shall be debarbed or equal to facilitate the application.	

c. **Fertilizing.**

Not required unless specified otherwise in the contract documents.

d. **Application Dates.**

Normal seed application dates are April 1 through May 31 and November 1 until ground conditions are unsuitable for seeding due to moisture or frost.

6. **Wetland Seeding.**

a. **Preparation and Application.**

- 1) In areas without existing stabilized crop seeding residue, prepare seedbed according to Article 2601.03, B, 4, a. Seed areas accessible to field equipment with a native grass seed drill, gravity, or broadcast equipment. Cultipack as specified in Article 2601.03, B, 4, d. Broadcast seed other areas and follow with a light dragging or hand raking.
- 2) In areas with existing stabilized crop residue, apply seed with a native grass seed drill with a no till attachment. Seedbed preparation and cultipacking will not be required. Seedbed preparation is required for areas with rills and gullies.
- 3) Prepare seed according to Article 2601.03, B, 4, c.

b. **Seed Mixture.**

Use the seeding rates in Table 2601.03-6 for areas designated for wetland grass seeding, unless specified otherwise in the contract documents.

Table 2601.03-6: Wetland Grass Seed Rates

Common Name	Scientific Name	PLS (per ac)	PLS (per ha)
Blue vervain	<i>Verbena hastata</i>	1 oz.	70 g
Boneset	<i>Eupatorium perfoliatum</i>	1 oz.	70 g
Nodding bur marigold	<i>Bidens cernua</i>	8 oz.	560 g
Swamp milkweed	<i>Asclepias incarnata</i>	1 lb.	1.1 kg
Sneezeweed	<i>Helenium autumnale</i>	2 oz.	140 g
Water plantain	<i>Alisma plantago-aquatica</i>	4 oz.	280 g
Arrowhead	<i>Sagittaria latifolia</i>	4 oz.	280 g
New England aster	<i>Symphotrichum novae-angliae</i>	2 oz.	140 g
Big Bluestem	<i>Andropogon gerardii</i>	1 lb.	1.1 kg
Switchgrass	<i>Panicum virgatum</i>	8 oz.	560 g
Prairie cordgrass	<i>Spartina pectinata</i>	1 lb.	1.1 kg
Virginia wild-rye	<i>Elymus virginicus</i>	5 lbs.	5.6 kg

Bluejoint grass	Calamagrostis	1 oz.	70 g
Rice cutgrass	Leersia oryzoides	4 oz.	280 g
Dark Green bulrush	Scirpus atrovirens	1 oz.	70 g
Fox sedge	Carex vulpinoidea	4 oz.	280 g
Softstem bulrush	Schoenoplectus tabernaemontani	8 oz.	560 g
Spike rush	Eleocharis palustris	4 oz.	280 g
Porcupine sedge	Carex hystericina	8 oz.	560 g
Broom sedge	Carex scoparia	2 oz.	140 g
Tussock sedge	Carex stricta	2 oz.	140 g

- c. **Fertilizing.**  
Not required unless specified otherwise in the contract documents.
  - d. **Application Dates.**  
Normal seed application dates are April 1 through June 30.
7. **Wildflower Seeding.**
- a. **Preparation and Application.**
    - 1) Uniformly apply seed to areas with the seedbed prepared as in Article 2601.03, B, 4, a.
    - 2) Seed areas accessible to field equipment using a native grass seed drill at an approximate depth of 1/8 inch (3 mm), or using gravity or broadcast equipment. Cultipack as specified in Article 2601.03, B, 4, d. Broadcast seed other areas and follow with a light dragging or hand raking.
    - 3) In areas with existing stabilized crop seeding residue, apply seed with a native grass seed drill with a no till attachment. Seedbed preparation and cultipacking will not be required.
  - b. **Seed Mixture.**  
As specified in the contract documents.
  - c. **Fertilizing.**  
Not required unless specified otherwise in the contract documents.
  - d. **Application Dates.**  
Normal seed application dates are April 15 through June 30.
8. **Special Seed.**
- a. **Preparation and Application.**
    - 1) Apply at the rate specified in the contract documents or as directed by the Engineer as a separate operation either immediately before or immediately after sowing the regular grass mixture.
    - 2) No additional work other than sowing of the seed will be required unless specified otherwise in the contract documents.
    - 3) On limited areas, this seed may be applied by hand cyclone seeders.
  - b. **Seed Mixture.**
    - 1) As specified in the contract documents.
    - 2) When not shown in the contract documents but directed by the Engineer, a special seed or seed mixture may be required in addition to the regular seed mixture.
  - c. **Fertilizing.**  
As specified in the contract documents.
  - d. **Application Dates.**  
As specified in the contract documents.
- D. **Overseeding and Fertilizing.**
- 1. Seedbed preparation will not be required, provided overseeding is applied when ground is friable from frost action after February 1 and before April 1 or as directed by the Engineer.
  - 2. When, in the opinion of the Engineer, a friable soil condition does not exist, roll with a cultipacker or harrow.
  - 3. Areas with rills or gullies require seedbed preparation according to Article 2601.03, B, 4, a.
  - 4. Apply fertilizer according to Article 2601.03, B, 4, b.
  - 5. Prepare seed according to Article 2601.03, B, 4, c.
  - 6. Apply seed according to Article 2601.03, B, 4, d unless specified otherwise in the contract documents.
  - 7. Overseeding will not be allowed on more than 1 inch (25 mm) of snow cover.
- E. **Mulching.**  
Mulch seeding areas unless otherwise designated otherwise in the contract documents. For disturbed areas that are

mulched only, scarify area to a 3 inch (75 mm) depth prior to mulching.

**1. Time of Mulching.**

Apply to areas requiring mulch as soon as seed is sown and final rolling completed.

**2. Application of Mulch.**

**a. Straw Mulch.**

- 1) Distribute evenly and uniformly and anchor it into the soil. Use an application rate for reasonably dry material of approximately 1.5 tons per acre (3.5 Mg/ha) of dry cereal straw, native grass straw, or other approved material, depending on the type of material furnished.
- 2) In all accessible mulched areas, anchor mulch into the soil using mulch anchoring equipment with a minimum of two passes. Operate equipment along the contour. Use crawler type or dual wheel tractors for mulching operation. Operate equipment in a manner to minimize displacement of soil and disturbance of the design cross section.

**b. Hydraulic Mulches.**

- 1) Apply at no less than 3000 pounds per acre (3.5 Mg/ha) using standard hydraulic mulching equipment, unless specified otherwise in the contract documents.
- 2) If using with hydraulic seeding, apply as a separate operation.

**F. Composting.**

Compost may be used as a top dress application or as an incorporated soil amendment.

1. Top dress applications may be used for urban seeding or on soils that are highly erosive or sloped soils to prevent surface or rill erosion and to provide organic material and nutrients needed for vegetative establishment. Ensure areas top dressed with compost have little or no drainage onto them.
2. In highly erosive soils or sloped embankments with drainage onto the area, incorporate compost by mixing it into the top soil a minimum of 2 inches (50 mm) to prevent the compost from washing off the slope.

**G. Sodding.**

1. Refer to the contract documents for areas to be sodded. Engineer may designate other areas for sodding.
2. Prior to shaping the sodbed, Engineer will define upon the ground the limits of areas to be sodded, and indicate the center lines of waterways. Cover the designated areas with live sod meeting requirements of Article 4169.06.
3. Closely place and properly fit sod against structures and adjacent sod according to the following provisions:
  - a. **Preparation of Sodbed.**
    - 1) Shape and prepare surfaces to be sodded. Ensure areas are firm and even surfaces. Ensure they are free of material 1.5 inches (40 mm) in diameter or greater including clods, rocks, and other debris. Ensure ditch channels, slopes, and flumes to be sodded have a typical cross section as shown in the contract documents.
    - 2) Construct ditch channel to secure a relatively level, flat bottom ditch cross section with a minimum depth of 6 inches (150 mm), measured from the finished sodbed ground line at the edge of the ditch. Scarifying prior to shaping may be necessary to assure the minimum depth. A minimum sod ditch overall width of 7.5 feet (2.2 m) (sloping sides) will be required.
    - 3) Use a soil compaction roller complying with Article 2601.03, A, for compaction and reshaping of ditches. Limit layers of fill materials to no more than 8 inches (200 mm) in depth.
    - 4) After the surface of the layer has been smoothed and before material for the next layer is deposited upon it, compact the layer:
      - With no less than one pass of a soil compaction roller per inch (25 mm) of loose thickness of the layer, and
      - Until the roller is supported entirely on its tamping feet.
    - 5) The roller will be considered entirely supported on its tamping feet when the tamping feet penetrate no more than 3 inches (75 mm) into an 8 inch (200 mm) layer being compacted. A single section roller may be necessary for this operation in some locations.
    - 6) Extend the compacted area approximately 6 inches to 12 inches (150 mm to 300 mm) beyond the width of the ditch.
    - 7) After compaction, shape the ditch.
  - b. **Fertilizer for Sod.**
    - 1) Two applications are required (initial and prior to final acceptance). After sodbed preparation and prior to placing sod, fertilize the area to be sodded and the adjacent disturbed area at a rate of 10 pounds per 1000 square feet (5 kg per 100 m<sup>2</sup>). Use a commercial fertilizer specified for the project.
    - 2) Place the final application of fertilizer at a rate of 10 pounds per 1000 square feet (5 kg per 100 m<sup>2</sup>) within 5 calendar days of the end of the 30 calendar day watering period and prior to final acceptance of the project. Place the final application when the grass is dry and with a dry form of fertilizer.
    - 3) For both of the above applications, if the type of fertilizer is not specified, apply 13-13-13 (or equivalent).

*FY 2015*

## *County Budget Balance by Account*

*As Of: 6/3/2015*

<i>Function</i>	<i>71400</i>	<i>Road Clearing</i>
<i>Account</i>		
71400-1003	Salary Barg Unit	
71400-1004	Salary Part Time	
71400-1005	Salary Mngt & Conf	
71400-1023	Longv Barg Unit	
71400-1043	Overtime Barg Unit	
71400-1044	Overtime Part Time	
71400-110	FICA - County Contribution	
71400-111	IPERS - County Contribution	
71400-1131	Health Insurance	
71400-1132	Life Insurance	
71400-1133	Dental Insurance	
71400-113B	LT Disability	
	Salary/Benefits	Total
71400-202	Chemicals & Gases-Herbicides	
71400-260	Stationery & Forms/Supp	
71400-290	Minor Equipment & Hand Tools	
71400-413	Employee Mil & Exp (NON EDUC)	
71400-422	Educ & Trng (Reg, Milg, Subs)	
71400-443	Oper & Const Eq/Rep & Mtce	
71400-487	Contract Labor	

*Wednesday, May 27, 2015*

71400-631 Construction & Maintenance Equ

71400-703 Salary/Adm

71400-796 Direct Serv Chg Backs

Operations	Total
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71400-9770 Sec Roads Chg Back

Charge Back	Total
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Road Clearing	Total
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*Function*                      71100      *Road Maintenance*

*Account*

71100-202	Chemical/gases/herbicides
71100-203	Fertilizer & Seed
71100-210	Asphalt & Asphalt Products
71100-211	Concrete & Clay Products
71100-212	Cover Aggregate & Sand
71100-213	Steel, Iron & Related Metals
71100-215	Wood & Lumber Products
71100-216	Plastic Products
71100-423F	Drainage Expenditures
71100-487	Contract Labor
	----- Operations -----
71100-9770	Charge Backs
	----- Internal Credits -----

**Road Maintenance**