

IRVM

Integrated Roadside Vegetation Management

Iowa's Roadside Resource

Black Hawk County



Integrated Roadside Vegetation Management Plan

April 2017

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Executive Program Elements

Goals

The goal of the Black Hawk County IRVM Roadside Manager is to re-establish the IRVM program that was in effect in previous years. It is the intent of the Roadside Vegetation Manager to update procedures and equipment and do a better, more efficient job to monitor roadsides for noxious weeds, brush and all safety concerns from the general public that are addressed in §314.22-Integrated Roadside Vegetation Management and §317-Iowa Weed Law of the Code of Iowa. Roadway corridors' prime purpose is to transport people and goods safely and efficiently.

The primary goal of roadside vegetation is to hold soil in place by reducing erosion. This vegetation must be managed in a way that allows for a safe recovery area for vehicles that leave the roadway, meet minimum sight requirements for vehicles, manage storm water runoff, and control Iowa's noxious weeds. A second goal is to identify the equipment needed for the IRVM department and acquire said equipment. A third goal is to implement the Roadside Management Plan and make necessary changes that best address the needs of Black Hawk County. A long-term goal is to reduce roadside maintenance by the establishment of a strong plant community using Iowa's native vegetation.

Program History

Through employment changes over several years there has been a lack of attention to roadside vegetation requirements and Black Hawk County is in need of an IRVM plan with updated thinking, tools and equipment. The Secondary Road Department has continued to cut brush as time and weather allow. Some brush spraying is done using a tank in a truck with a person spraying brush with a wand. Vegetation along guardrails is sprayed to control plant growth. Roadside mowing occurs two times per year on hard-surface roads with two six foot swaths being mowed. On gravel roads, one six foot swath is mowed up to two times per year. Spot spraying of noxious weeds, guardrails and cut stumps with herbicides also occurs.

During the 2016 budget process the County Engineer proposed to the Board of Supervisors to recommit to a roadside vegetation plan and the need for a Roadside Vegetation Manager. A Roadside Vegetation Manager job description (Appendix A) was created and the job was posted in July 2016. The Roadside Manager began employment in August 2016.

Executive Summary

The primary goal this year is to use current practices and past successes and failures to improve all of the facets of the IRVM plan.

Black Hawk County's main goal is to focus on new information from other counties IRVM plans and to use resources we currently have and begin implementing a plan that addresses the many facets of a comprehensive Roadside Vegetation Management Plan. The IRVM Technical Manual will be referenced and used to steer the work and how the work is done. Along with studying Roadside Management Plans from other counties, it will be necessary to identify the desired vegetation that Black Hawk County has; as well as, identify the noxious weeds and brush that are growing on the roadsides. Conducting a roadside inventory will greatly aid the path that is taken to create an IRVM plan for Black Hawk County.

Black Hawk County Map (Appendix A)

Program Type

The Black Hawk County IRVM Manager is located in the Secondary Roads Department under the supervision of the County Engineer and Roads Superintendent. The Roadside Manager will work in cooperation with the County Engineer to manage and promote native vegetation on county roadsides right-of-way and also to manage and promote native vegetation on public lands.

Jurisdictional Recognition

Management

The part-time Roadside Manager decides the department's day-to-day operations, sets priorities, carries out the business management duties, and performs the needed work. The Roadside Manager is also responsible for managing and maintaining the IRVM budget and serves as the County Weed Commissioner. The Roadside Manager's duties are outlined further in the Black Hawk County Employee Job Description (Appendix D).

Board of Supervisors

The Roadside Manager, acting as the County Weed Commissioner, presents the Board of Supervisors an annual report detailing herbicide use. He will also recommend equipment evaluations, personnel changes, and other pertinent facts to the County Engineer during budget preparation.

Iowa Code and Administrative Rules, State Laws and Regulations

As stated earlier, Black Hawk County's IRVM plan will be directed by laws and regulations cited in the *Code of Iowa*. Examples include, but are not limited to:

1. 314.17 Mowing law-no mowing before July 15 of Right-of-Way
2. 314.19 Reseeding Open Ditches
3. 314.21 Living Roadway Trust Fund
4. 314.22 Integrated Roadside Vegetation Management
5. 317 Iowa Weed Law
6. 318.3 Obstructions in Highway Right-of-Way

Permits (Appendix B and C)

Field Entrance and Driveway Permits (Appendix B) and Excavation within the Right-Of-Way Permits (Appendix C) are obtained at the County Engineer's Office. Individuals complete the appropriate permit which is reviewed by the Road Supervisor with final approval by the Country Engineer. Once approved, the permit is issued to the individual and a copy is filed in the Engineer Department. After work is completed the Roadside Vegetation Manager will inspect to see if the areas in the right-of-way need to be seeded.

Program Organizational Structure and Staffing Needs

The Roadside Manager is currently the sole employee for the IRVM Program. This individual will need to stay current with the latest developments in roadside management practices. To help achieve this, the roadside manager will consult with Roadside Managers in other counties, attend roadside and prairie conferences, and visit with the staff at the Tallgrass Prairie Center at the University of Northern Iowa.

This individual will need to have continuing instruction courses to fulfill the responsibilities as Black Hawk County's Weed Commissioner and to maintain the pesticide applicator's license.

The Roadside Manager will require assistance from Secondary Roads staff with spraying, hydro seeding and some broadcast seeding. This will allow for more work to be done in a timely manner and will be important for safety reasons.

Public Involvement

Education

As Black Hawk County begins developing and implementing an IRVM plan the opportunity to educate and involve the public will be critical to moving the plan forward as well as to the future success of the plan.

Landowners and the general public will need to be educated about the benefits of IRVM. Knowing that this program will provide long-term benefits to the public should help sell the program and lead to the overall success of the program. Different ways to help educate the public will be; providing public presentations, brochures and information to local media and the addition of the IRVM Plan information to the county's webpage.

Steering Committee

Developing a steering committee will be a valuable asset for providing direction for the IRVM program. The committee members will need to have an interest in conservation and/or understanding of IRVM. This committee will help drive the priorities of the IRVM Department. This committee will also be useful in educating the public about the benefits of IRVM. Members on the committee could include: a county supervisor, county conservation board director/member, county engineer, county roadside manager, county extension, and landowner/farmer.

Inventory

Natural Resource Inventory

The last roadside survey completed in Black Hawk County was in 2002. Spraying records have been used as a paper trail since then. With the Roadside Manager and a new IRVM Plan in place, a new inventory should be undertaken to help identify the current state of Black Hawk County roadsides. Items to be included in the inventory are: vegetative cover, native vegetation stands, weed concerns, brush, encroachment, bare areas and areas of erosion. These inventory items will aid in implementing future IRVM plans and help identify native plant communities that would benefit from prescribed burns.

Equipment

Black Hawk County's current equipment is aging and in need of replacement. The Roadside Manager will work with the County Engineer to decide what equipment is needed and will begin prioritizing to ensure funds are available for purchase. An important funding source will be applying for and obtaining grant money through such sources as the Living Roadway Trust Fund (LRTF).

Program Operations

Initial Work Schedule

1. 3 Month – 1 Year Objectives
 - a. Pesticide Applicator License IRVM interim plan
 - b. Identify individuals to be on Black Hawk County IRVM Committee
 - c. Identify most heavily infested areas of noxious weeds to mow or spray
Identify noxious weeds to spray
 - d. IRVM Committee in place and hold first meeting
 - e. Wildland Fire Training Certification
 - f. Identify prairie remnants along hard-surface county roads
 - g. Begin inventory process
 - h. Detailed month-by-month work schedule
 - i. Write more detailed IRVM plan
 - j. Seed R-O-W ditch cleanouts
 - k. Identify and prioritize needed equipment through LRTF grants
 - l. Write and secure funding for 2017 LRTF Grants
2. 1 – 3 Year Objectives
 - a. Write and secure funding for LRTF Grants
 - b. Obtain equipment with LRTF Grants
 - c. Establish designated area for seed and herbicide storage
 - d. Equipment storage building; including seed storage room and herbicide storage
 - e. Continue R-O-W inventory
 - f. Using most recent survey; identify and begin systematic spray program of brush and noxious weeds
 - g. Evaluate IRVM Plan and make changes as necessary

Work Area Types

Black Hawk County IRVM works primarily in rural areas. The most appropriate vegetation will be chosen for given areas. In rural ROW cleanouts, native grass and wildflower seed will be used to establish vegetation Areas adjacent to rural residences will be seeded with cool-season grasses unless other arrangements are made.

Methods

The IRVM Technical Manual will be utilized in the development of the Management Plan as well as, the processes involved in the plan. Items include; equipment, obtaining funding for equipment, day-to-day operations, how to seed different areas of the roadsides, what seed to use, erosion control measures, maintenance of new native seedings, weed control, and using fire as a management tool.

Meeting and developing contacts with roadside managers in other counties is also important. These Roadside Managers have experience that can be used to outline items to address and how to go about implementing the plan. The best way to learn and gather experience will be doing the work and using the manual and advice obtained from other Roadside Managers.

Site Preparation

Appropriate site preparation, as the terrain allows, will increase the success of the planting. Site preparation may include some or all of the following methods: mowing, spraying, disking, and cult packing. An idea we had was to fabricate a rake to pull with a U.T.V that would stimulate groves from a drill. Seeding in the past with a drill seems to be a more effective way to get new grasses to germinate and grow.

Seed Mixes and Rates

Native seed will need to be acquired to be used as a means to control long-term erosion of R-O-W clean-outs. Obtaining TAP seed through the IRVM Program at UNI will be a primary source for native seed. In addition to the native seed, cover crops will be planted to help hold the soil in place until the native plants are established. In the spring and summer, oats and annual rye will be used. In the fall, winter wheat will be used. These cover crops are considered to be nurse or companion crops. The seeding mixes and seeding rates in the IRVM Technical Manual will be used as guidelines. Any seeding rates included with the TAP seed will also be followed.

Seeding Techniques

The seeding method will be dictated by site conditions and slope. The site to be seeded will be inspected prior to any preparation or seeding work. This inspection will help determine what seeding method to use. If gullies, culverts and other obstacles are present, we will need to determine how large the area is and how much seed is needed.

On smaller areas with steep grades, hydro seeding will be used to apply seed, mulch and water in one pass. On larger areas with steep to nominal grades, a two-pass approach with a hydro seeder may be used. The first pass will be the seed, minimal mulch, and sufficient water to cover the area to be seeded. The second pass will be a higher rate of mulch, tackifier, and water. This two-pass approach will allow greater seed-to-soil contact, which should help improve seed germination rates.

On large areas with more level slopes, a drill may be used for the first pass. Drills do a better job of ensuring seed-to-soil contact than hydro seeding. To aid in germination and to help prevent erosion, a second pass will occur using the hydro seeder to apply mulch, tackifier and water.

Erosion and Sediment Control

Erosion control measures and hydro mulch may be needed as evaluated on a site-by-site basis. These could include: rolled erosion control blankets, sediment logs, and filter socks.

Vegetation Establishment Maintenance

To help reduce competition from weeds, the newly planted areas will be mowed to a height of six inches before weeds get too tall. This may need to be done one or two times during the first season, and possibly at a higher height in the second season. Native plants need at least two years before they can begin competing with weeds. When enough fuel is present, prescribed burns may be used to aid the establishment of the native vegetation.

Noxious Weed and Brush Control

Weed control along roadsides will require a multi-pronged approach. The establishment of native vegetation on bare soil will help minimize weeds taking over the disturbed soil. The controlled use of mowing will help prevent weeds from seeding. Using herbicides to carefully spot-treat weeds will be needed to control certain weeds such as Canada Thistle. Fire may also be used as a management tool to suppress weeds and lead to a healthier stand of native vegetation. Fire discourages the growth of invasive and woody plants. Fire

invigorates the growth of native plants since nutrients are recycled.

Brush control along roadsides will also require a multi-pronged approach similar to weed control. A systematic approach will be needed to control brush. Brush needs to be controlled where visibility is reduced at any intersection. Also the control of brush from the fore slope to ditch bottom should be managed countywide. As time and resources allow, additional areas of the ROW can be controlled for brush.

Brush cutting will be done by the Secondary Road crews as time and conditions allow. Hand and mechanical cutting will occur. Stumps will be treated with herbicides to help prevent regrowth. Foliar applications of herbicides to brush will occur along with the control of noxious weeds. A spray unit will be needed to apply herbicides selectively to control noxious weeds and brush.

Material Procurement

All equipment is purchased from a budget approved by the Board of Supervisors. The Roadside Manager will decide what is required to safely and efficiently do daily tasks. Seed and all other IRVM equipment is stored in the west end of the truck storage building. The Roadside Manager will be involved in ordering new equipment with the County Engineer and the final approval by the Board of Supervisors. LRTF funding and other grant sources will be used to help grow the department's equipment inventory.

Program Operations

Early spring spraying for noxious weeds such as Canada Thistle will take place from late May until early August. A herbicide representative from Dow Chemical has suggested we try *Open Sight* which is more cost effective than *Milestone*. We are going to try *Open Sight* with 2 4-D on Wild Parsnip as it is beginning to be common in Black Hawk County.

Seeding will be done on ditch cleanouts with hand broadcast and a truck mounted drill where terrain allows. (For Winter Wheat) cover crop only. Hydro seed and mulch mixture will be done on larger areas. The majority of brush cutting is done in late fall and winter months when schedule permits.

Annual Operations

1. January
 - a. Weed Commissioner Report to the Board of Supervisor for approval
 - b. Sign up for Weed Commissioner Conference (March)
 - c. Review Management plan
 - d. Equipment Maintenance
 - e. Calendar Year End Report
2. February
 - a. Order Herbicide
 - b. Equipment Maintenance
 - c. IRVM Plan reviewed, updated and sent to IDOT
3. March
 - a. Weed Commissioner Appointment due to BOS
 - b. Publish Noxious Weed Process in all County Papers
 - c. Spring seeding (weather permitting)
 - d. Order hydro mulch for spring use
 - e. Pick up seed from Tallgrass Prairie Center
 - f. Interview and hire Roadside Technician
4. April
 - a. Seed all fall and winter projects
 - b. Begin Bare Ground Herbicide applications
5. May
 - a. Finish spring seeding
 - b. Finish bare ground applications
 - c. Start weed and brush rotation
6. June
 - a. Continue weed and brush spray rotation
 - b. Search hard surface for Musk Thistle
 - c. Some seeding when not spraying
 - d. IRVM Plan due June 1
7. July
 - a. LRTF Grant Review
 - b. Ditch Clean Outs Seeding
8. August
 - a. Regional Weed Commissioner meeting
9. September
 - a. Continue weed and brush spray rotation
 - b. Start fall seeding projects
 - c. IRVM Roadside Conference

- d. Assess primary needs for next fiscal budget
- 10. October
 - a. Fall seeding (top priority)
 - b. Continuing Education Applicator License
 - c. Winterize sprayer
 - d. Submit budget needs for next fiscal budget
- 11. November
 - a. Finish fall seeding
 - b. Update chemical inventory
 - c. Winterize all spray rigs
- 12. December
 - a. TAP seed order due to UNI
 - b. Van Diest Chemical Seminar
 - c. Brush Cutting
 - d. Begin Weed Commissioner Report

Inventory and Analysis

	Item	Condition
1	#52 1995 Ford 4WD Pickup	Poor
2	#62 1994 Adco Allis Tractor	Fair
3	#400 1985 Flatbed Trailer	Good
4	#200 1985 Bowie Aero Hydro Mulcher	Fair
5	#201 1985 Bowie Aero Hydro Straw Blower	Fair
6	1990 Truax 6 Point Seed Drill	Fair
7	100 Gallon Pick Up Box Wand Sprayer (Gas)	Good

LRTF Funding History FY1990-FY2017 (Appendix E)

Black Hawk County has been awarded \$37,500 in funding from the LRTF in the past which has been used to purchase a mulcher, tackifier, hydro mulcher, seeder and some miscellaneous technical equipment. Black Hawk County will be seeking funds in the future to updated older equipment as well as obtain a Utility Terrain Vehicle (UTV) which will provide a safer more efficient way to spray weeds in ditches and hard to reach areas.

Statement of Support

The Black Hawk County Board of Supervisors, Black Hawk County Engineer, and the Black Hawk County Integrated Roadside Vegetation Manager come together in cooperation, common goals and shared ideas to manage roadsides in Black Hawk County by and through integrated roadside principals.

We realize that IRVM will be beneficial to our roadside management goals while being economically and environmentally beneficial.


We understand that working in unison toward improving roadside vegetation is the most efficient way to accomplish the goal of improved, safe, and weed free roadsides. These roadsides will also add to the habitat and natural beauty of Black Hawk County.

We hereby agree to manage Black Hawk County roadsides according to the provisions described within this management plan.



Frank Magsamen, Chairman Board of Supervisors


Date


Catherine Nicholas, Black Hawk County Engineer


Date

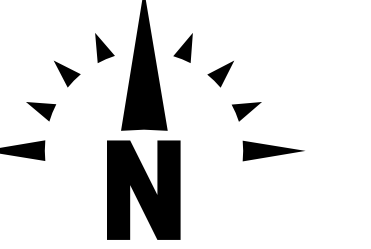

Tony Woods, Roadside Vegetation Manager


Date

HIGHWAY AND TRANSPORTATION MAP
BLACK HAWK COUNTY
IOWA

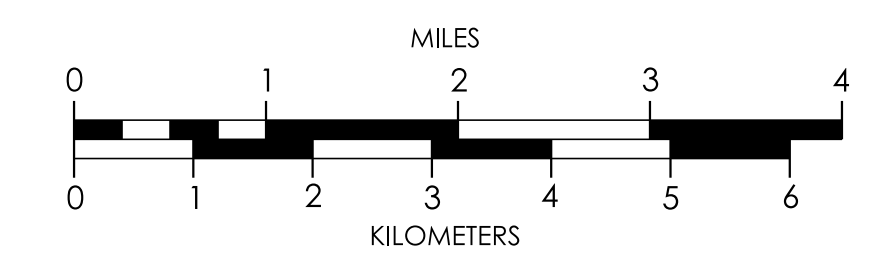


Office of Systems Planning
Phone: (515) 239-1664
www.iowadot.gov/maps



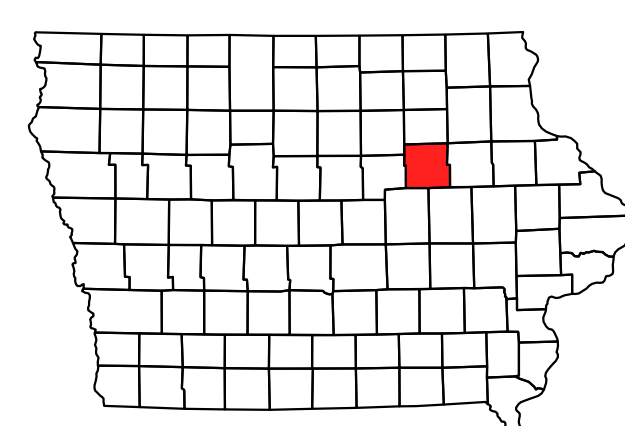
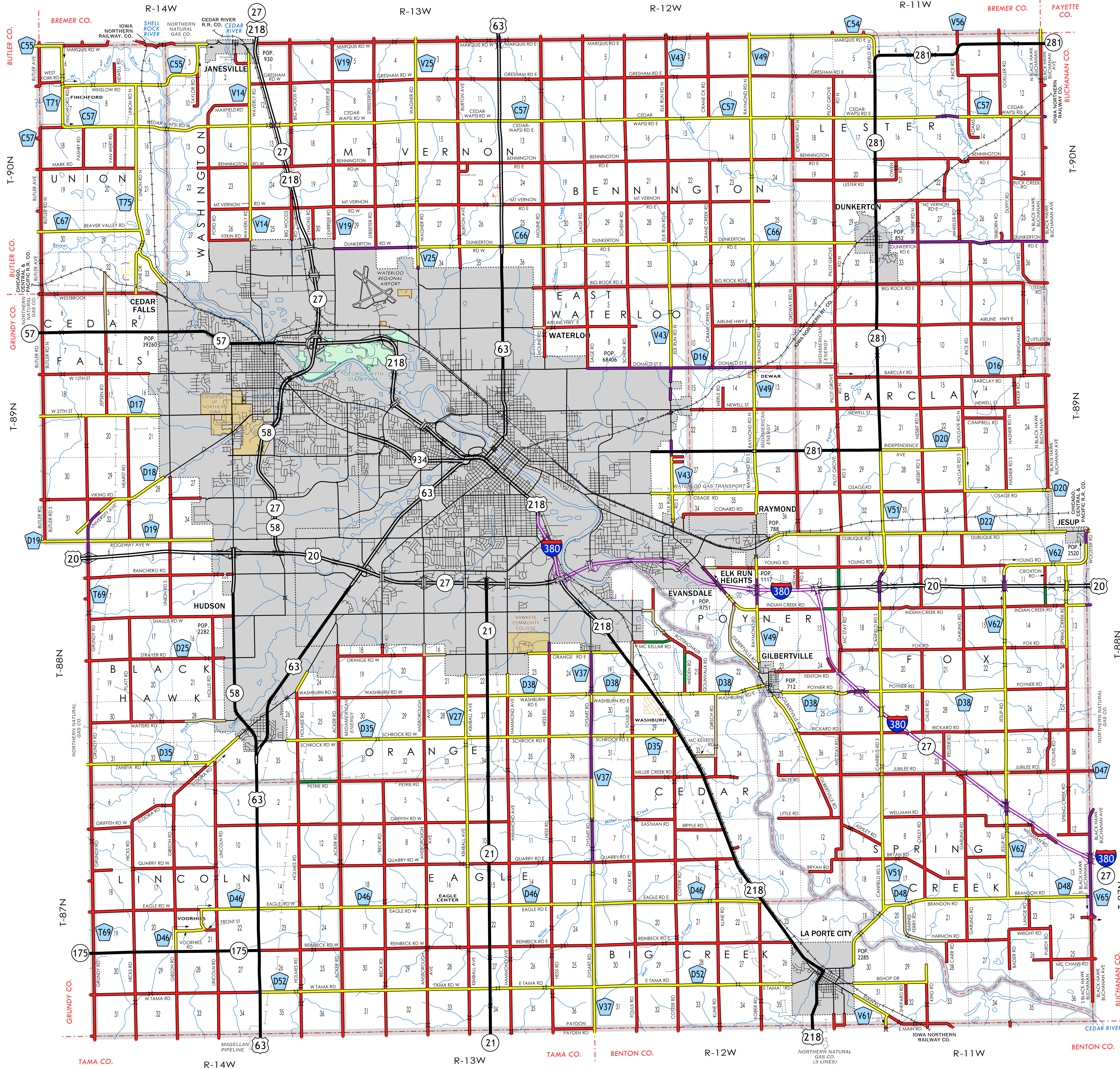
In Cooperation With
United States
Department of Transportation

JANUARY 1, 2016



LEGEND

- INTERSTATE HIGHWAY
- PRIMARY HIGHWAY-DIVIDED
- PRIMARY HIGHWAY
- PORTLAND CEMENT CONCRETE ROAD
- ASPHALT ROAD
- BITUMINOUS ROAD
- GRAVEL ROAD
- EARTHEN ROAD
- INTERSTATE HIGHWAY
- UNITED STATES HIGHWAY
- STATE HIGHWAY
- COUNTY HIGHWAY
- RAILROAD
- PIPELINE
- AIRPORT
- HYDROLOGY
- BRIDGE
- STATE BOUNDARY
- COUNTY BOUNDARY
- CORPORATE BOUNDARY
- TOWNSHIP LINE
- SECTION LINE
- ROAD NAMES
- UNINCORPORATED PLACE
- STATE PARKS
- STATE INSTITUTIONS
- FEDERAL LAND



**PERMIT APPLICATION DRIVEWAY ENTRANCE****Black Hawk County Engineers Office**316 East 5th Street, Room 211 Waterloo, IA 50703

Phone: (319) 833-3008 Fax: (319) 833-3139

Email: Permits@co.black-hawk.ia.us

Permit Number:

Owner/Applicants Name		Address	
Phone Number	Fax Number	City	State Zip
Cell Phone Number		Email Address	

A new address must be obtained from Planning & Zoning (**Permit will not be approved without this address**)
A new or widened residence or field entrance is paid for by the Owner/Applicant

Contractor's Name		Owner <input type="checkbox"/>	Address	
Phone Number	Fax Number	City	State	Zip
Cell Phone Number		Email Address		

Road Name	Section No.	Township (87, 88, 89, 90) N	Range (11, 12, 13, 14) W
Location			

From

Distance from nearest cross road

Cross road name

Width in feet New Residence Entrance	Width in feet New Field Entrance	Width in feet for widening An Old Drive
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Comments

NEW REINFORCED CONCRETE OR CORRUGATED METAL PIPE MUST BE USED UNLESS DRY FILL IS REQUIRED.
ALL DISTURBED SOIL AREAS MUST BE SEEDED PRIOR TO INSPECTION AND ACCEPTANCE OF WORK.
PLEASE MARK CENTER OF DRIVEWAY ENTRANCE WITH STAKE

1. INSURANCE REQUIREMENTS:

- A Certificate of Liability Insurance must be on file with the County Engineer's office before the permit can be approved. Black Hawk County requires General Liability in the amount of \$1,000,000 per occurrence, \$2,000,000 Aggregate, Automobile Liability in the amount of \$1,000,000 and Umbrella Liability in the amount of \$1,000,000.
- The applicant shall provide the County Engineer with proof of said insurance when requested, but, in any event, no later than annually and as long as this agreement exists. Failure of the applicant to maintain insurance shall not relieve said applicant of the indemnification duties hereunder, but may be grounds for termination of this agreement.

2. HOLD HARMLESS: The Applicant shall indemnify and hold harmless Black Hawk County

- its agents and employees, from and against all claims, damages, losses and expenses including attorneys' fees arising out of or resulting from the performance of the work, provided that any such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to the damage to or destruction of tangible property (other than the work itself) including the loss of use resulting therefrom, and is caused in whole or in part by any negligent act or omission of the outside party or its subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder.
- from any damage that may result to said roadway because of the construction, operation or maintenance of said facility and/or connecting facilities and shall reimburse Black Hawk County for any expenditures it may have to make on said highway on account of said construction, operation or maintenance by the applicant, and shall replace and restore any roadway, including surface and sub-surface materials. The applicant shall also hold Black Hawk County harmless from any damages that said County would otherwise be responsible for, that flow directly or indirectly from said project, because of construction, operation, or maintenance of said facility.
- agrees that for all work done in the County road right of ways, easements and county property, it shall be solely responsible for work zone safety and shall hold the County harmless and agree to indemnify the County for all claims that arise from its work in the right-of-way, and further, it agrees that it will adhere to the Manual on Uniform Traffic Control Devices (MUTCD) during the project. The utility owner, or their contractor, is responsible for providing, installing, maintaining, and cleaning warning signs and protective devices; removing warning signs and protective devices when the work is complete; and providing flaggers for the protection of the traveling public and workers on the site.

Acceptance of Conditions

I certify that the statements contained in the application are true and correct and that I will comply with the conditions outlined above.

Applicant Signature _____ Date _____

Office Use Only			
This Permit Expires On	Sight Distance Left	Sight Distance Right	Permit Number
Road Name	Section No.	Township (87, 88, 89, 90) N	Range (11, 12, 13, 14) W
Location is approved as requested Yes <input type="checkbox"/> No <input type="checkbox"/>		Location should be moved to:	
Required Culvert Size	Culvert Length	Side Slope	Top Width
Remarks			

Site Reviewer Signature _____ Date _____

Black Hawk County Engineer _____ Date _____

Inspection and Acceptance of Work _____ Date _____

SECTION ONE – APPLICATION

Any property owner desiring an access to any county road shall make written application on the prescribed form available through the Office of the County Engineer. This permit shall expire one year after date of approval by Black Hawk County, if proposed driveway or entrance construction is not completed within that time.

SECTION TWO – LOCATION AND REVIEW

All field entrances and driveway applications shall be reviewed by the County Engineer or representatives for location, safety, and drainage. Each access shall be located to ensure a minimum sight distance of 550 feet. One access will be allowed for each parcel; unless it is divided by a non-crossable obstruction (streams, RR, etc.)

SECTION THREE – CONSTRUCTION

All field entrances and driveways shall be constructed in a workmanlike manner to acceptable standards with privately owned equipment. See diagrams below. Top width: 18 ft. to 40 ft. Side Slopes: 3:1 – non-paved county roads; 6:1 – paved county roads. Profile slope: 2% - 4% down from shoulder; 10% Maximum grade.

Field entrances and driveways should approach the roadway on an uphill grade. Field entrances and driveways approaching the roadway on a downhill grade shall be shaped to drain surface water before reaching the shoulder line of the roadway. This prevents runoff onto the road and helps with snow removal and maintenance. Maximum grade for a field entrance or driveway shall be 10%.

The Applicant must seed all disturbed areas upon completion of project. The County recommends a diverse seed mixture; for more information please call our office.

SECTION THREE – CONSTRUCTION CONTINUED

Fill for accesses shall be soils only. NO BROKEN CONCRETE, STONES, BRICKS, TILE, WOOD, OR OTHER RUBBLE WILL BE ALLOWED. Driveways to be used as home drives shall be surfaced with 2" of Class A crushed rock.

SECTION FOUR – PIPE

The County Engineer will determine size and length of pipe required at the time of application review. Acceptable pipe materials are new corrugated metal pipe and reinforced concrete pipe which meet the standard specifications of the Iowa DOT. Placement of the pipe is to be at the toe of the back slope. List of available suppliers provided upon request.

SECTION FIVE – COST

Owner assumes all costs associated with the installation or reconstruction of a field entrance or driveway.

SECTION SIX – MAINTENANCE

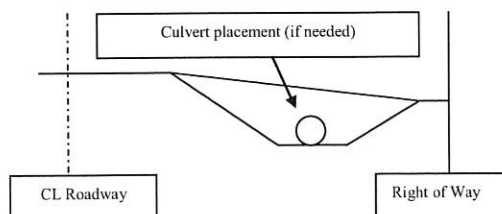
Black Hawk County will only assume maintenance of the drainage structure, upon inspection and acceptance as dated on this permit. Owner assumes maintenance of the surface. County will return surface of entrance or drive to original condition, in the event of pipe maintenance. County will not rock beyond roadway shoulder line.

SECTION SEVEN – SURFACE PAVING

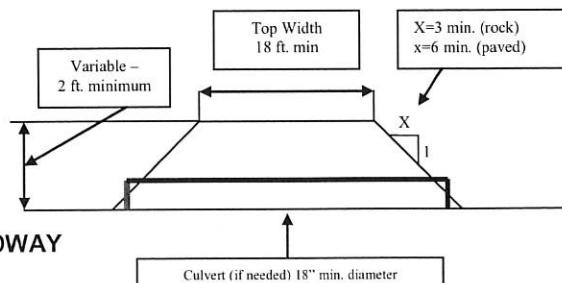
The owner is to call the Engineer's Office for inspection of culvert pipe 2 weeks prior to placing hard surface. The County will not replace or maintain paved surfaces.

COUNTY MAY REMOVE ANY ENTRANCE NOT BUILT TO THESE CONSTRUCTION SPECIFICATIONS

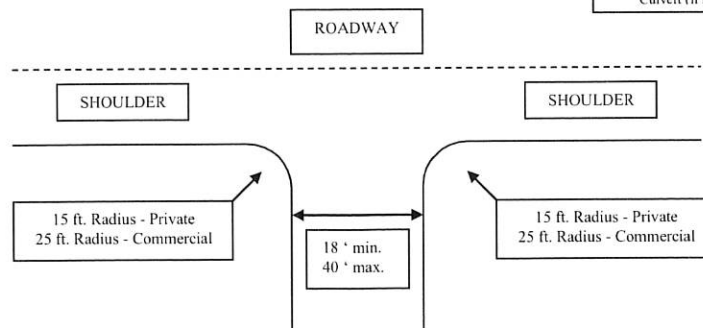
PROFILE PARALLEL TO ROADWAY



PROFILE PERPENDICULAR TO ROADWAY



PLAN VIEW OF ROADWAY



**PERMIT FOR EXCAVATION WITHIN THE RIGHT-OF-WAY**

Black Hawk County Engineers Office
 316 East 5th Street, Room 211
 Waterloo, IA 50703
 Phone: (319) 833-3008
 Fax: (319) 833-3139
 Email: Permits@co.black-hawk.ia.us

Permit Number:

Owner/Applicants Name		Address	
Phone Number	Fax Number	City	State Zip
Cell Phone Number		Email Address	
Contractor's Name		Address	
Phone Number	Fax Number	City	State Zip
Cell Phone Number		Email Address	
Location			

This permit is granted for the removal or the disturbance of soil from the county right of way and is governed by the following:

1. APPLICANT RESPONSIBILITIES:

- Applicant MUST contact **Iowa One Call** for utility locations within the excavation area. A request can be made by calling (800) 292-8989 or on their website at [Iowa One Call - Contractors](http://www.iowaonecall.com) and requires at least a 48 hour notice. **NO EXCAVATION MAY BEGIN UNTIL LOCATIONS HAVE BEEN MARKED.** Keep the "Iowa One Call Work Request Number" for this number is your confirmation that a work request was made.
- The Applicant shall take all reasonable precautions during the construction and operation of the facility to protect and safeguard the lives and property of the traveling public and adjacent property owners. This provision is intended to include any damage to fences, watersheds, tiling, and drainage construction owned by either Black Hawk County or adjoining property owners.
- The Applicants operations and the construction and maintenance of said facilities shall be carried on in such a manner as not to interfere with or interrupt traffic on said county roads.
- The Applicant must seed all disturbed areas upon completion of project. The County recommends a diverse seed mixture; for more information please call our office.
- The ditch to be excavated to a depth approved by the County. The ditch bottom width shall be agreed upon prior to approval of excavation or reconstruction permit.
- Applicant will notify the County Engineer when work is to begin and when the work is completed.
- Applicant agrees to make any corrections to the work upon the County's inspection.

2. INSURANCE REQUIREMENTS:

- A Certificate of Liability Insurance must be on file with the County Engineer's office before the permit can be approved. Black Hawk County requires General Liability in the amount of \$1,000,000 per occurrence, \$2,000,000 Aggregate, Automobile Liability in the amount of \$1,000,000 and Umbrella Liability in the amount of \$1,000,000.
- The applicant shall provide the County Engineer with proof of said insurance when requested, but in any event, no later than annually and as long as this agreement exists. Failure of the applicant to maintain insurance shall not relieve said applicant of the indemnification duties hereunder, but may be grounds for termination of this agreement.

3. HOLD HARMLESS: The Applicant shall indemnify and hold harmless Black Hawk County

- its agents and employees, from and against all claims, damages, losses and expenses including attorneys' fees arising out of or resulting from the performance of the work, provided that any such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to the damage to or destruction of tangible property (other than the work itself) including the loss of use resulting therefrom, and is caused in whole or in part by any negligent act or omission of the outside party or its subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder.
- from any damage that may result to said roadway because of the construction, operation or maintenance of said facility and/or connecting facilities and shall reimburse Black Hawk County for any expenditures it may have to make on said highway on account of said construction, operation or maintenance by the applicant, and shall replace and restore any roadway, including surface and sub-surface materials. The applicant shall also hold Black Hawk County harmless from any damages that said County would otherwise be responsible for, that flow directly or indirectly from said project, because of construction, operation, or maintenance of said facility.
- agrees that for all work done in the county road right of ways, easements and county property, it shall be solely responsible for work zone safety and shall hold the County harmless and agree to indemnify the County for all claims that arise from its work in the right of way, and further, it agrees that it will adhere to the Manual on Uniform Traffic Control Devices (MUTCD) during the project. The utility owner, or their contractor, is responsible for providing, installing, maintaining, and cleaning warning signs and protective devices; removing warning signs and protective devices when the work is complete; and providing flaggers for the protection of the traveling public and workers on the site.

Acceptance of Conditions

I certify that the statements contained in the application are true and correct and that I will comply with the conditions outlined above.

Applicant Signature _____ Date _____

Maintenance Department _____ Date _____

Black Hawk County Engineer _____ Date _____

Comments / Additional Requirements _____

BLACK HAWK COUNTY

JOB DESCRIPTION

LEAD WORKER - ROADSIDES

Position No:

Job Title: Lead Worker - Roadsides

Department: Engineer

Salary Level: 158

FLSA Status: Non-Exempt

BASIC FUNCTIONS AND RESPONSIBILITIES:

Under general supervision, serves as crew leader on roadside vegetation establishment, maintenance and weed and brush control projects; performs equipment operation; and participates in manual labor duties. Operates all equipment relating to roadside vegetation establishment and maintenance; drives heavy trucks and operates all equipment to maintain county roadsides and performs related work as required. Responsible for proper use of chemicals for roadsides and for proper use and storage of seed mixtures.

CHARACTERISTIC DUTIES AND RESPONSIBILITIES

- Must be capable of regular and predictable attendance at a specified location in order to perform assigned tasks.
- Must perform all work of the Equipment Operator III:
 - Operates additional equipment such as seed drill, spray equipment, brush-cutting equipment
 - Assists with directing and assigning work and helps to orient new employees.
- Receives instructions from foreman.
- Plans, coordinates and assigns tasks to crew workers and explains some aspects of work to equipment operators and laborers.
- Drives truck and/or grader with attached snow plow blades and hopper spreader to remove snow/ice and spread sand/salt on road surfaces.
- Hauls and spreads rock.
- Orders supplies for roadside vegetation maintenance and keeps accurate records of treated locations.
- Motivates workers to meet production standards.
- Inspects work upon completion and reports completion to foreman.
- Participates in work of crew members.
- Follows proper safety procedures and takes pro-active measures to avoid potential harm to equipment and personnel.
- Performs routine inspections of equipment to ensure safety and operability.
- Other duties as assigned

SUPERVISION RECEIVED:

- Administrative and functional Supervision is received from Road Superintendent and Road Supervisor.

SUPERVISION EXERCISED:

- Functional supervision is exercised over Laborer/Equipment Operators.

QUALIFICATIONS:

- High school diploma or general education degree (GED) required.
- College level course work in Natural Resources field or at least one (1) year experience in turf management preferred.
- Two (2) years of increasingly responsible operations of bridge or road construction and maintenance activities required.
- Working knowledge of mechanical procedures.
- Considerable knowledge of practices, equipment, materials and terminology of road maintenance and construction work.
- Ability to read and interpret documents such as safety rules, operating and maintenance instructions, and procedure manuals.
- Ability to direct work of subordinates, appraise work performed and suggest improved methods of work.
- Ability to organize a variety of work duties and delegate work effectively to others.
- Must have a valid Iowa Commercial Driver's License (CDL) Class A and be insurable under the County's policies.
- Must occasionally lift and/or move up to 50 pounds.
- Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and the ability to adjust focus.
- Must possess basic computer skills and be able to communicate through email and word processing.

WORK ENVIRONMENT AND PHYSICAL DEMANDS.

The work environment and physical demand characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. Refer to the "Essential and Marginal Function Analysis" statement for a complete description of essential functions and functional requirements

Black Hawk County LRTF Funding History through FY 2017

DOT Project Number	Applicant	Award	FiscalYear Description	Type
90-07-LRTF-101	Black Hawk County	\$ 9,030.00	1991 Special Equipment	County
90-07-LRTF-102	Black Hawk County	\$ 9,324.00	1991 Mulch and tackifier	County
90-07-LRTF-204	Black Hawk County	\$ 8,050.00	1992 Equipment - Hydro Mulcher 800	County
90-00-LRTF-538	Black Hawk Co. Conservation Board	\$ 50.00	1995 Seed	State
90-07-LRTF-801	Black Hawk County Secondary Roads	\$ 2,080.00	2008 Equipment - Ricoh digital camera, Arc-GIS software	County
90-07-LRTF-802	Black Hawk County Secondary Roads	\$ 1,200.00	2008 Equipment - Dell laptop computer	County
90-07-LRTF-004	Black Hawk County Conservation Board	\$ 3,265.68	2010 Equipment - Vicon seeder	County
90-07-LRTF-005	Black Hawk County	\$ 4,500.00	2010 Inventory	County
Total LRTF Funding Awarded FY1990 - FY2017		\$ 37,499.68		