

# Shelby County IRVM Plan

## 2015 Update

### **Preface**

The following is an updated plan for the Shelby County Roadside Management Department. The plan includes history, structure, and technical elements.

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### **2) Contributors to the plan:**

Shelby County Roadside Manager, Bryce Schaben

Shelby County Engineer, Dan Ahart

Shelby County Roadside Management Advisory Committee: County Supervisor Steve Kenkel, and local farmers - seed growers Roger Schwery and Bill Buman

Day to day decisions is made by the roadside manager and county engineer with input from the secondary roads foremen. Budgeting, grant writing and equipment needs are decided between the engineer and roadside manager.

### **3) Summery**

Shelby County has 950 miles of roads consisting of paved, rock and earth surfaces. This equates into thousands of acres of roadside ditches and areas that need managed for trees and brush, noxious weeds, and invasive species. Contractors and county crews doing roadwork projects also destroy hundreds of acres of vegetation each year that needs reseeded. The Shelby County Roadside Management Office is in charge of all aspects of vegetation management including spraying roadsides for trees, noxious weeds and invasive plants, and reseeding all construction projects.

### **4) Goals**

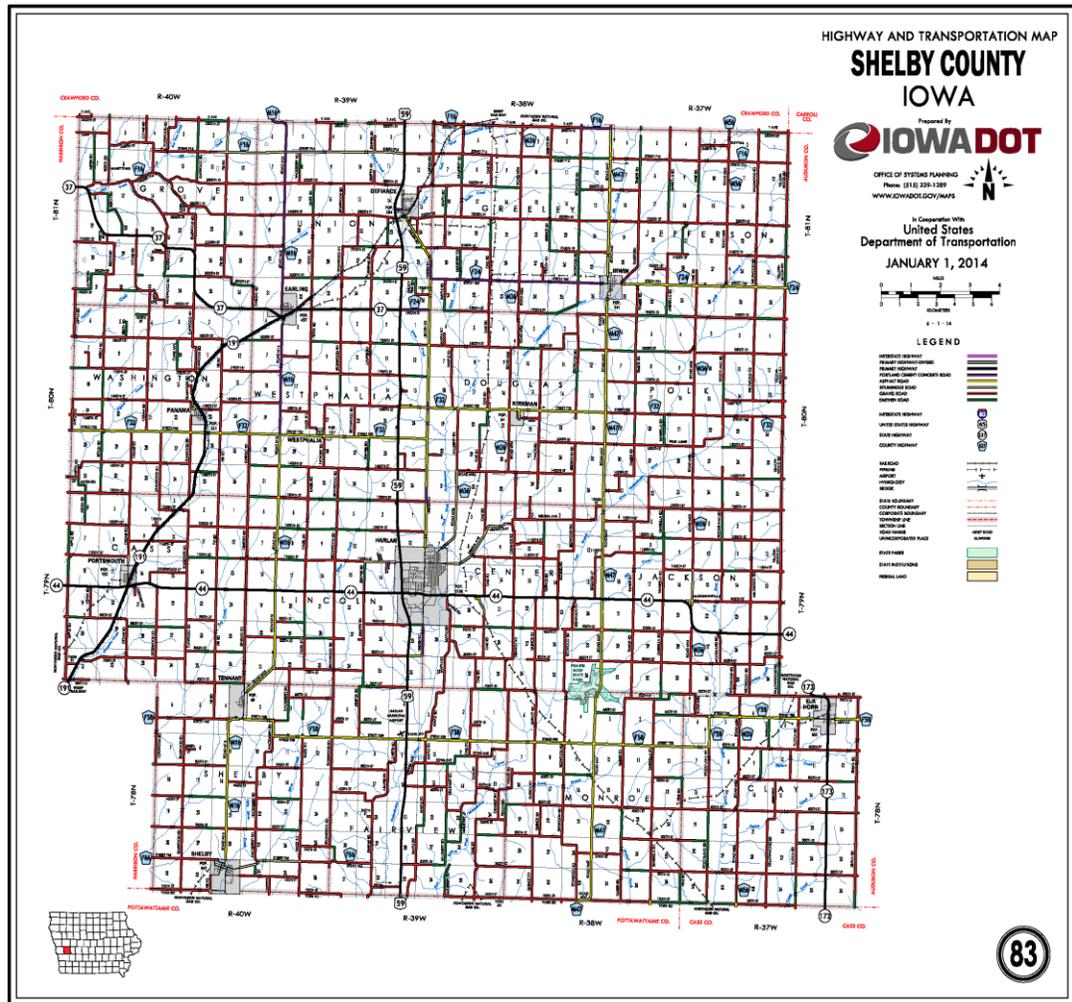
The goal for Shelby County IRVM is to control erosion and control the spread of trees, brush, noxious and invasive species while providing beauty to the roadsides and increasing habitat for wildlife along the way. Most of the time this is all achieved by planting and maintaining native vegetation.

### **5) History**

Shelby County Roadside Management was established in 1995 after finding the county needed a more efficient way of controlling noxious weeds in the right-of-ways. There was also a savings projected in the revegetation projects the county had been previously contracting for.

Initially, the entire seeding, spraying program, and Weed Commissioner activities for the county was accomplished for the same dollar amount as the spraying alone the previous year! The Supervisors were sold! Since then more duties such as mowing, some snow removal and brush cutting have been added to the duties of the IRVM program.

### **6) Map of Shelby County – see appendix for a larger scale map.**



## 6) Jurisdictional Recognition and Approval

Management: The Shelby County Roadside Manager is in charge of the Shelby County IRVM program. The day to day duties of the Roadside Manager are set by the Roadside Manager with input from the County Engineer. The Board of Supervisors set budgets with inputs from the Engineer and Roadside Manager and oversee that all of the counties citizens are happy with the production from the various departments. Rules and Regulations that must be followed by the Roadside Manager:

- Iowa Code 314.22 Integrated Roadside Vegetation Management
- Pesticide Applicator License # PO 05579 000 for Shelby County Roadside Management
- Iowa Noxious Weed Law

- Iowa code 314.17 Mowing Law
- Local Laws: Shelby County has Ordinances relating to Roadsides that can be viewed at:  
(URL's to these laws can be found in the Appendices)

## **7) Inventory and Analysis**

An initial plant inventory of Shelby County Roadsides was taken in 1995. The records are stored in the Roadside Managers Office. These records have not been looked at since they were collected. They have however been put on a CD from a floppy disk. We also have a hard copy.

Shelby County Roadside uses paper records for spraying and seed records. We have started using the new computer entry for the TAP seed reports. We often use the counties Beacon GPS site for Arial maps, pictures and landowner information.

## **8) Program Structure**

Flow chart: Shelby County Board of Supervisors -> County Engineer-> Roadside Manager -> full time help when assigned and all seasonal help.

The Shelby County Roadside Department employs a full time Roadside Manager and a 3/4 time Roadside Technician. We also employ a 6 month Spray Technicians and a Summer Intern. Our staffing needs are adequate at this time with the current budget level. There are no future plans to hire additional help.

Shelby County IRVM started a Roadside Management Advisory Committee last fall winter and will meet again this winter. The committee is comprised of a Supervisor, the Engineer, the Roadside Manager, and 2 county landowners with knowledge of plants and agronomy.

## **9) Annual Operations**

The Shelby County Roadside Management Office performs the following duties:

Seeding of road projects and other county projects as needed. Projects include ditch cleanings, culvert and bridge replacements, and road regrades.

Install silt fence and erosion blankets on new construction projects as needed.

Spraying of all county owned areas including roadsides, lawns, and some conservation areas. We spray for brush control, noxious weeds and invasive plant control.

Organize crews for brush cutting and brush mowing. Crew members include maintainer, truck, and excavator operators cutting mainly in the winter months.

Mowing of highway shoulders and other roadside areas for sight distance safety and weed / brush control.

Native species seed harvesting.

Conduct prescribed burns on county roadsides and other county areas.

Fill in as needed with snow removal.

Grant writing and record keeping.

Purchase seed, chemicals and mulch.

Perform daily and scheduled maintenance on equipment and make repairs as needed.

Timing of Duties:

Spring time is started with burning of roadsides, drilling and hydroseeding seed, scouting for weeds.

Summer is drilling and hydroseeding as conditions allow, spraying for brush and noxious weeds, and mowing including new seeding sites and road shoulders.

Fall is drilling and hydroseeding seed as time permitted, finishing up mowing, harvesting native species, and hooking up the brush mower and mowing brush. Also winterizing equipment and getting ready for winter.

Winter we organize brush cutting operations and cut brush and danger trees with a crew of secondary roads workers. We also keep the brush mower going when conditions allow. I also fill in as needed with snow removal. This is the time of year we also do heavier equipment maintenance such as replacing seed drill scrapers, etc.

## **10) Methods**

All of our seeding methods are outlined in the IRVM Technical Manual found at:

<http://www.uni.edu/~irvm/techmanual/IRVM-Technical-Manual.pdf>.

We do not vary from this manual very often.

We will drill every chance when can, but if it is too steep or wet, we will hydroseed. Drilling is faster, cheaper, and offers better chance of establishment because of the increased seed to soil contact.

Seed selection is based on the site. Most of the time ditch cleanings and new construction are seeded to natives from the TAP seed. If it is wet and will always be wet we will use cool season grasses. From time to time we have to reseed lawns that are torn up due to construction and ditch cleaning activities.

We do not mulch in most situations unless it is a highly sensitive area, steep area, or lawn. We will use erosion blankets on sensitive areas also from time to time.

All other methods are online by detail in the IRVM Technical Manual.

## **11) Material Procurement**

The Shelby County Supervisors ask that we buy all materials local as often as possible.

Our cool season seed and cover crops are purchased at a local farm store. In exchange for us buying seed, they are more than happy to let us as much water as we wish from their 3 inch water line for filling our hydroseeder.

Any native seed needed is purchased from a couple of local seed growers, Custom Seed Service and Bill Buman.

Erosion mat, hydromulch, and tackifier are purchased and delivered from ASP in Omaha. We have limited storage for pallets of mulch so ASP will deliver 6 pallets at a time for us.

Our chemicals are mostly purchased at Van Diest, which has a warehouse 1 block from our shop.

The TAP seed and all other seed is stored in our seed room, which is climate controlled and mouse proof. Chemicals are stored at a minimum and in a shed that houses our spray truck. Most chemicals are dry forms.

## **12) Equipment**

2003 Ford F-350 pickup

1999 Ford F-350 spray truck with 500 gallon tank

1995 Ford F-350 pickup

2011 30 ft. Gooseneck Trailer

2006 Kincaid 1500 gallon Hydroseeder

2012 Truax U series drill and an 2006 8 - foot Truax drill

2001 New Holland TN55 tractor

1999 Silt fence plow

2014 6 foot disk

2000 Trillion Cultipacker

2013 Cub Cadet UTV with sprayer and seeder attachments

2008 Agco RT100 tractor with Diamond 25 foot boom mower

2012 Vermeer Disk Mower

Older 3 point boom sprayer

2000 3 point bush hog mower

**LRTF Grants Received:**

<b>Applicant</b>	<b>Award</b>	<b>Fiscal Year Description</b>
Shelby County	\$ 15,385.05	1996 Seed
Shelby County	\$ 4,500.00	1996 Inventory
Shelby County	\$ 4,500.00	1997 Inventory
Shelby County	\$ 8,280.00	1998 Equipment - Hydro mulcher
Shelby County	\$ 10,000.00	1999 Equipment - Truax drill
Shelby County	\$ 5,325.00	2000 Seed
Shelby County	\$ 3,116.00	2001 Seed
Shelby County Roadside Management	\$ 9,200.00	2006 Equipment - Hydro seeder
Shelby County Roadside Management	\$ 7,500.00	2007 Equipment - Brush chipper
Shelby County	\$ 4,420.00	2008 Equipment - McCormick silt fence plow
Shelby County Roadside Management	\$ 8,800.00	2009 Equipment - Seeder
Shelby County Roadside Management	\$ 3,976.00	2010 Equipment - GPS
Shelby County	\$ 319.00	2011 Equipment - Digital camera
Shelby County Roadside Management	\$ 8,000.00	2013 Equipment - UTV
Shelby County IRVM	\$ 10,000.00	2014 Equipment - Mower
Shelby County IRVM	\$ 3,040.00	2015 Equipment - Disk
LRTF Awards to Shelby County through FY 2015	\$ 106,361.05	

**Signatures:**

\_\_\_\_\_  
Shelby County Engineer

\_\_\_\_\_  
Date

\_\_\_\_\_  
Shelby County Roadside Manager

\_\_\_\_\_  
Date

**12) Appendices**

- Iowa Code 314.22 Integrated Roadside Vegetation Management <http://coolice.legis.iowa.gov/Cool-ICE/default.asp?category=billinfo&service=iowaCode&ga=83&input=314#314.22>
- Pesticide Applicator License # PO 05579 000 for Shelby County Roadside Management
- Iowa Noxious Weed Law  
<http://coolice.legis.iowa.gov/Cool-ICE/default.asp?category=billinfo&service=iowaCode&ga=83&input=317>
- Iowa code 314.17 Mowing Law
- Local Laws: Shelby County has Ordinances relating to Roadsides that can be Viewed at: <http://www.shco.org/CountyDocuments.aspx?EntryId=522>

**SHELBY COUNTY  
JOB DESCRIPTION**

**Roadside Vegetation Manager**

**DEFINITION AND DUTIES:**

Work within the Secondary Road Department, in a working management position, under the direction of the County Engineer, or his/her designee, to manage roadsides within Shelby County.

**Knowledge of:**

- ◇ Secondary Road practices and procedures
- ◇ Prairie grass establishment and maintenance
- ◇ Principles and practices of noxious weed control and safe use of roadside chemicals
- ◇ IDOT signing and safety procedures
- ◇ Planning and budgeting skills
- ◇ Computer applications including word processing and spreadsheets

**Ability to:**

- ◇ Identify species of plants, flowers, and noxious weeds
- ◇ Identify environmentally sensitive areas within existing County right of ways and future construction right of way areas including but not limited to wetlands and woodlands
- ◇ Effectively apply knowledge and common sense to achieve work objectives
- ◇ Routinely stand, walk, sit, operate hand power tools, bend, kneel, stoop, balance and climb
- ◇ Work outdoors in extreme weather conditions and be exposed to dust, fumes and loud noises
- ◇ Routinely lift 75 lbs.
- ◇ Establish and maintain effective working relationships with co-workers and the public
- ◇ Effectively supervise staff
- ◇ Perform routine maintenance on vehicles and equipment
- ◇ Maintain records and prepare reports

**MINIMUM EDUCATION, TRAINING AND EXPERIENCE:**

High school graduate or equivalent with additional education in botany, horticulture, natural resources or related areas. Experience in weed control activities, supervision, public relations, or any combination of training and experience which provides the required knowledge, skills and abilities.

**Special requirements:** Must possess a valid commercial pesticide applicator license in Category 6, right of way pest control or be able to obtain within 30 days. Must have a valid driver's license and have, or be able to obtain, a Class A Commercial Driver's License and be insurable.

**SPECIFIC DUTIES:** *To be performed satisfactorily with or without reasonable accommodation*

**The following duties are normal for this position. These are not to be construed as exclusive or all inclusive. Other duties may be required and assigned.**

- ◇ Work with the County Engineer, the Maintenance Superintendent, and other Secondary Road Department staff to supervise, schedule and administer the Shelby County roadside vegetation management program.
- ◇ Responsibilities include all aspects of managing roadside vegetation including but not limited to: noxious weed/brush control, mowing, develop erosion control plans and seeding of construction and maintenance projects, prairie restoration/management, wetlands establishment/maintenance, equipment operation and maintenance, maintaining records, develop budget requirements and track costs, writing grants, woodland and wetland identification, and perform duties of weed commissioner.
- ◇ Inform and educate the public concerning roadside management techniques and policies, and serve on the Roadside Vegetation Management Technical Advisory Committees.

FLSA Status: Non-exempt

Date Revised: 5/30/2013

*I have carefully read and understand the contents of this job description. I understand the responsibilities, requirements and duties expected of me. I understand that this is not necessarily an exhaustive list of responsibilities, skills, duties, requirements, efforts or working conditions associated with the job. While this list is intended to be an accurate reflection of the current job, the Employer reserves the right to revise the functions and duties of this job or to require that additional or different tasks be performed as directed by the Employer. I understand that I may be required to work overtime, different shifts or hours outside the normally defined workday or workweek. I also understand that this job description does not constitute a contract of employment nor alter my status as an at-will employee. I have the right to terminate my employment at anytime and for any reason, and the Employer has a similar right.*

\_\_\_\_\_  
Employee's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Department Head

\_\_\_\_\_  
Date

The county of Shelby is an Equal Employment Opportunity Employer. In compliance with the Americans Disabilities Act, the County will provide reasonable accommodations to qualified individuals with disabilities and encourages prospective employees and incumbents to discuss potential accommodations with the Employer.

## **SHELBY COUNTY SECONDARY ROADS**

### **JOB DESCRIPTION**

**POSITION TITLE:** Roadside Tech I  
**REPORTS TO:** Roadside Manager  
**DATE:** April 2012

#### **PURPOSE OF POSITION:**

Responsible for providing support for the implementation of the Integrated Roadside Vegetation Management (IRVM) Plan in order to preserve and maintain roadsides. Respond to and resolve roadside complaints of erosion, weeds, brush, trees and rubbish.

#### **ESSENTIAL FUNCTIONS:**

Operates equipment assigned to and necessary for implementation of the IRVM plan. Equipment may include, but is not limited to: mowers, sprayers, chippers, tractors, loaders, rubber-tired backhoe, trucks, hydro-seeders and skidloaders.

Performs and documents routine and scheduled maintenance on assigned vehicle including, but not limited to changing the oil, filters and other engine fluids, greasing the vehicle and washing and cleaning the interior and exterior surfaces.

Controls traffic in construction and maintenance zones or emergency situations.

Hauls roadside materials, supplies and equipment to and from work sites.

Completes various written work records including but not limited to time sheets, materials used records, equipment repair and maintenance reports.

Performs manual labor including, but not limited to cutting brush, changing tires and unloading trucks.

Operates power and hand tools in the performance of duties.

Performs maintenance and housekeeping activities of county buildings and grounds when necessary.

**MARGINAL FUNCTIONS:**

Performs other duties as directed or as the situation dictates in classifications equivalent or lower than the pay grade of this position.

**ESSENTIAL KNOWLEDGE, EXPERIENCE AND ABILITY:**

Must be a licensed pesticide applicator according to Iowa Code Chapter 206.

Ability to deal with the public in a calm and professional manner.

Knowledge and ability to operate equipment in a safe manner according to departmental policy, traffic laws and regulations.

Knowledge and ability to operate assigned hand and power tools in a safe manner.

Knowledge of occupational hazards and safety precautions necessary for the proper operation and use of assigned vehicles, equipment, tools and materials.

Ability to establish and maintain effective working relationships with fellow employees, supervisors and the general public.

Ability to work independently without supervision.

Ability to communicate effectively, both orally and in writing.

Ability to read (English) and follow a series of oral and written instruction.

Ability to write (English) and accurately complete required records and reports.

**ESSENTIAL EDUCATION, CERTIFICATION AND/OR LICENSES:**

Must possess a valid State of Iowa, Class B Commercial Driver’s License (CDL) at the time of hire.

**ESSENTIAL PHYSICAL DEMANDS AND TYPICAL WORKING CONDITIONS:**

Work is performed in a variety of outdoor environments and locations throughout the year. Work environment is occasionally noisy and may be hazardous, if proper safety precautions are not taken.

Must be able to lift 50 pounds to perform job duties.

Operation and maintenance of vehicles and equipment requires that the incumbent be able to perform repetitive hand, wrist, shoulder and leg movements in tight and cramped spaces as well as bend, climb and crawl into, under and out of vehicles.

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Employee \_\_\_\_\_ Date \_\_\_\_\_

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Supervisor \_\_\_\_\_ Date \_\_\_\_\_

# SHELBY COUNTY IOWA

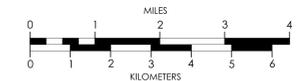


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In Cooperation With  
United States  
Department of Transportation

JANUARY 1, 2014



### 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 NAME
- UNINCORPORATED PLACE
- STATE PARKS
- STATE INSTITUTIONS
- FEDERAL LAND

