TOWN OF MEDFIELD

Vegetation Management Plan

2021-2025

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Town of Medfield – Department of Public Works

55 North Meadows Rd.

Medfield, MA 02052

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Statement of Goals and Objectives

This Vegetation Management Plan (VMP) establishes a diversified and safe series of methods to treat vegetation that poses a public safety hazard along municipal Rights-of-Way (ROW) in compliance to the regulations set in 333 CMR 11.00 as promulgated by the Massachusetts Department of Agricultural Resources (MDAR).

The primary objective of this VMP is to provide the public with safe and unobstructed ROWs while utilizing multiple control methods that will work towards achieving a long term, low maintenance management program. The success of this program will be based upon the monitoring of the areas, combining these methods of control (mechanical, physical and chemical) to reduce the need of herbicides and to promote healthy ecosystems while providing a greater natural species diversity.

Objectives of the VMP:

- Protection of the public and environment
- Maintain safe public ways
- Control of target vegetation
- Ensure all vegetation management operations are done in accordance to state, local and manufacture's rules and regulations.
- To use only certified, licensed and qualified vegetation management crews.
- Acknowledging and protecting sensitive areas.

The Town of Medfield's Department of Public Works has four licensed and certified Category 40 rights-of-way applicators to perform the vegetation management treatment program in accordance to the regulatory standards set forth in 333 CMR 11.00.

Target Vegetation

Target vegetation will be defined as vegetation that poses a safety hazard, compromises infrastructure and are a public nuisance, which includes vegetation classified as invasive that may have detrimental effects on natural resources.

1) Hazard Vegetation
   Hazard vegetation poses a risk to public safety along public ways. This may include vegetation obstructing roads, interfering with the safe travel of vehicles and pedestrians. Vegetation obstructing the view of a driver, operator or pedestrians can put them in danger. Hazard vegetation may include but is not limited to trees, shrubs and woody vegetation.

2) Nuisance Vegetation
   Nuisance Vegetation presents health problems to the general public, especially plant species that are poisonous or noxious. Target vegetation in this category is primarily poison ivy. Nuisance vegetation growing in cracks on asphalt, along guard rails, medians, sidewalks or adjacent curbing affect the structural integrity, longevity and accessibility of the public ways.

3) Invasive Vegetation
   Invasive vegetation can out-compete desirable species and eliminate the biodiversity of an area. This affects wildlife because of the change in habitat and the obstruction of natural hydrologic functions. Using mechanical methods could be ineffective and futile depending on the species. In some instances it could make the colonization stronger. In these situations, the use of an herbicide would be necessary. There may be opportunities to remove invasive vegetation and encourage growth of native species through selective application.

Integrated Vegetation Management Methods & Actions

Vegetation management methods will include both chemical and non-chemical techniques where necessary. The IVM (Integrated Vegetation Management) Program is diversified to minimize herbicide use and to control incompatible vegetation in an ecologically sound manner. The Vegetation Management may involve the following methods:

- ***Physical Control:***

Method	Example
Sustainable Landscapes	• Planting native trees, shrubs, flowers and grasses • Creating competition to undesirable vegetation
Pavement Maintenance	• Resurfacing • Patching • Sweeping areas that tend to accumulate sediment • Crack sealing

- ***Mechanical Methods:***

Method	Example
Hand Cutting	• Chain saws • Brush saws • Lopping shears • Used in environmentally sensitive areas
Mowing	• Riding mowers • Brush hogs • Line trimmers • Large roadside boom mowers
Selective Trimming	• Mechanical pruning of limbs that encroach on roadways and hamper access or visibility

- ***Chemical Control-***

Chemical control methods involve foliar treatment and cut stump surface treatment.

Method	Example
Foliar Treatments (Selective application of a water diluted herbicide to target vegetation foliage)	• Backpack sprayers • Hand-held pump sprayers
Cut Stump Treatment (Flush cutting of target species followed by application of herbicide on cut stump)	• Backpack sprayer • Hand-held pump sprayer • Squirt bottle • Hand painting

**Foliar treatments will be done when target vegetation is in full leaf and actively growing.*

**Cut stump treatment will be done during the target species' dormant stage and sap flow is less likely*

All applications will be made solely by state licensed and certified applicators in accordance with state regulations and manufacturer label recommendations.

Summary of Control Strategies

The purpose of an IVM is being able to choose from diversified treatment options that are the most appropriate for the target species, environment and target area. This is achieved through monitoring the target areas, being aware of the sensitive areas, consistent education and reliable experience of the applicators, and appropriate record keeping of treatments.

IVM Protocol

Monitoring- All public ways will be surveyed prior to any scheduled treatment. Monitoring will be done on foot or by vehicle. Monitoring may also result from public request. All monitoring records will be maintained by the town. Monitoring is a year round protocol.

Maintenance- All roads will be cleaned using a street sweeper. Cracks in asphalt, sidewalks and other ROW defects will be repaired.

Target Vegetation Control Tactics- The decision to use one or a combination of the IVM techniques will take into consideration the most efficient and environmentally responsible option.

A) Mechanical Methods
    1) Hand Cutting
    2) Mowing
    3) Selective Pruning

B) Chemical Methods
    1) Foliar Post Emergence Applications
    2) Soil Applications
    3) Cut Stem/ Cut Stump Treatments

Record Keeping- A log of surveyed areas will be kept by the town for future planning and reference. Areas maintained by either physical repair, mechanical or chemical control will be recorded. The Highway Department Supervisor or qualified individual designated to supervise the Town of Medfield's VMP will maintain the logs.

Justification of Herbicide Use

The Town of Medfield's VMP focuses on minimizing the use of herbicides within rights-of-ways. Vegetation management along public ways is necessary to control unwanted vegetation that poses a public nuisance, obstructs views and creates traffic or pedestrian hazards. By following proposed vegetation management methods and IVM protocol discussed in this plan, physical and mechanical methods control most plants that interfere with traffic visibility and safety. Chemical controls are necessary in management situations where access, growth rate, plant species, worker safety, or environmental/social concerns limit the potential for control by physical and mechanical methods.

The Town of Medfield's licensed and certified applicators will only use herbicides on the Massachusetts Department of Agricultural Resources (MDAR) sensitive area materials list. Applicator's will acknowledge sensitive areas and target sites through vigilant surveying and monitoring.

Chemical controls are often the preferred method or only method to control plants that pose a health hazard to the employee. Poison ivy for example, is extremely hazardous to handle and biologically resistant to mechanical removal. Attempting to control curbside plants and weeds by pulling or trimming can put employees in danger from traffic and is relatively ineffective for long-term control.

Herbicide applications are an effective treatment method to control invasive vegetation. Maintaining public ways by mechanical methods can prevent its establishment, however, once established some of the physical and mechanical methods used to treat the vegetation pose more of a risk to the employee than the actual use of herbicides.

The IVM promotes widely diversified practices that will not only aim to control target vegetation. It offers a "what next" approach to the management plan by creating sustainable landscapes to the target areas to reduce negative impact on surrounding natural resources. Planting native trees, grasses and shrubs to compete with the invasive species not only will be most cost effective in the long

run, but it will benefit the native wild life and reduce disturbances to the landscape.

Identification of Sensitive Areas

Sensitive areas are defined and regulated by 333 CMR 11.04 as areas within ROWs in which public and environmental concerns warrant special protection to minimize the risk of unreasonable adverse effects of herbicides. Identification of sensitive areas with respect to and in accordance with all state and local guidelines set by The Medfield Conservation Committee and MDAR allowing herbicide treatments within the proper distance, creating a safe and appropriate buffer zone. Sensitive areas will be identified and marked in the field by trained and experienced individuals. Additional sources available to identify these areas include:

- Massachusetts Department of Environmental Protection water supply maps
- Town of Medfield Water Department's most current maps, records and institutional knowledge to identify private water supplies.
- Correspondence from the Town of Medfield Conservation Committee.
- Available information from MassGIS maps.
- U.S. Fish and Wildlife Service National Wetlands Inventory Maps

Once these Sensitive areas have been identified, they will be marked and flagged in exact locations for the applicators in the field. The treatment crew will survey the areas prior to application to be aware of all boundaries. Applicators will maintain and study maps of sensitive areas and will be supervised by The Town of Medfield's Highway Department Supervisor to assure all procedures in regards to sensitive areas follow protocol. Only herbicides on MDAR's "Herbicides Recommended for Use in Sensitive Areas List" will be used. The herbicides will be applied selectively by low pressure, using foliar techniques or cut-stump treatments, or other methods approved by MDAR.

Table 1: In accordance to 333 CMR 11.04 Sensitive Area Restrictions

Sensitive Area	No Spray Area	Control Method	Time Between Applications
Public Ground Water Supply	400 ft.	Approved herbicides applied at selective low pressure.	24 months
Wetlands	10 ft.	Approved herbicides applied at selective low pressure.	12 months
Private Water Supply	50-100 ft.	Approved herbicides applied at selective low pressure.	24 months
Certified Vernal Pool	10 ft.	Approved herbicides applied at selective low pressure.	12 months
Public Surface Water Supply Class A	100 ft.	Approved herbicides applied at selective low pressure.	24 months
Public Surface Water Supply Class B	100-400 ft.	Approved herbicides applied at selective low pressure.	24 months
Inhabited and Agricultural Area	100 ft.	Approved herbicides applied at selective low pressure.	12 months

Operational Guidelines for Herbicide use:

As required by regulations, applications along ROWs requires a Category 40 pesticide certification from the Department of Agricultural Resources in which each employee on the treatment crew maintains in good standing with MDAR. All applicators will have a copy of the VMP, as well as the full label and safety data sheet of the herbicide at times to reference if needed. Applicators will abide by all rules and regulations set forth by state, local and manufacture's guidelines. Any herbicide product used must be listed on the current ROW Sensitive Materials List through MDAR. Every application will be documented and the records maintained.

Weather

- No herbicide applications will be conducted during periods of precipitation or wind speeds deemed excessive through the manufacture's guidelines of application that could cause drift. Wind speeds will be measured and recorded through the applicator's records of treatment.
- Adjuvants may be added to herbicide mixture to lower the potential of drift and to increase effectiveness of foliar treatment.
- Foliar treatment will not be conducted to target vegetation that exceeds approximately twelve feet in height. Mechanical or physical methods shall be used for such target vegetation.

Equipment Calibration

- Foliar application equipment will be calibrated prior to each application to manufacture's recommendations for accuracy and effectiveness.
- All application equipment will be inspected by the applicator prior to treatment to assure equipment's integrity.
- Foliar application equipment will be calibrated to maintain pressures not exceeding 60 psi at the nozzle.

General Guidelines

- All treatments shall be done in accordance with The Massachusetts Department of Agricultural Resources' rules and regulations in regards to ROW's and standard applicator safety practices.
- Herbicides will be mixed to estimated amount needed to treat only target area.
- Herbicide manufacturer's full label, Safety Data Sheet, the VMP, YOP, and map of sensitive areas will be on site at all times for reference.
- All applications will be recorded at time of application and accurate. All records will be stored for review and future reference.

Alternative Land Use Options

For alternative land use, options as described in 333 CMR 11.05 must meet specific criteria to apply. The alternative land use option must control target vegetation in accordance to the VMP. Monitoring the target area will determine the need for vegetation control. A written agreement between the landowner and town will outline the owner's responsibilities for vegetation control.

Qualifications of Individual Developing/submitting plan

Robert Kennedy Junior, Department of Public Works Highway Department Supervisor, has been an employee of the Town of Medfield for over thirty years. Being a lifelong resident of Medfield, he is highly aware of the areas in need of the vegetation management plan the most. He bears the experience and knowledge of such target sites making him a valuable surveyor and coordinator for the Vegetation Management Plan. As a member of the Town of Medfield Conservation Committee, his commitment to land conservation and environmental sustainability for the Town of Medfield is prevalent within the community.

Joseph Rebola has been an employee for the Town of Medfield for over five years, and a licensed pesticide applicator for four years. Upgrading his pesticide license to a category 40 Rights-Of-Way, he has been involved in the development of a vegetation management plan for the Town of Medfield. Prior to employment at the Town of Medfield, Joseph was part of an organic gardening company, as well as a commercial landscaping company servicing the greater Boston area. His work experience and licensure has been beneficial to the development of this vegetation management plan.

Plan to Address Spills and Related Accidents

Having the applicators strictly follow common safety standards and procedures set forth by the Environmental Protection Agency (EPA), Massachusetts Department of Agricultural Resources (MDAR), Occupational Safety and Health Administration (OSHA), and local officials will minimize the risk of potential problems. Only the amount needed to carry out a specific application to target site through proper calculations will be mixed at the central facility to limit waste. All herbicides will be stored at a secure town facility abiding by local rules and regulations with proper documentation. The vehicles carrying the herbicides will have DOT approved spill kits and a copy of the full label and safety data sheets at all times.

Safety meetings prior to application will be held to mitigate the risks involved and bring attention to proper accident and spill prevention. In the event of a spill immediate action will take place by:

- Containing the spill.
- Securing the area by placing barriers.
- Placing employees at strategic locations to communicate the risk.
- Cleaning the spill.

Minor spills will be cleaned with absorption materials, then swept up and put in leak proof containers to be removed from the site and disposed of properly.

The Massachusetts Department of Environmental Protection will be contacted when there is a spill of a reportable quantity, regardless of major or minor spill status and accordance with 310 CMR 40.0000 Massachusetts Contingency Plan.

Emergency first responders will be immediately notified of any size accident that is deemed a possible risk to public health, safety and the environment.

In the Event of a spill, information on safety precautions and clean up procedures may be gathered from the following sources:

EMERGENCY SERVICE OR AGENCY	TELEPHONE NUMBER	SPECIAL INSTRUCTIONS
Medfield Police Dept.	508-359-2315	
Medfield Fire Dept.	508-359-2323	
Medfield DPW	508-359-8597	
Clean Harbors Field Service	508-970-8672	
Massachusetts Pesticide Bureau	617-626-1720	
Dept. of Public Health, Environmental Toxicology Program	617-339-8351	
Mass DEP, Emergency Response Section	508-946-2700 888-304-1133 (after hours)	Contact as soon as possible, within 48 hours.
Massachusetts Poison Information Centers	800-682-9211	

Herbicide Manufactures (information subject to change as necessary)

Monsanto (Now Bayer Environmental Science)	314-694-1000
Dupont	800-441-3637
Nufarm	800-345-3330

Notification procedures

Upon approval of proposed VMP and publication in the Environmental Monitor, the public will have 45 days to comment. A copy of proposed VMP will be provided either digitally or physically upon further request. At least 48 hours prior to ROW application, the applicant will publish in a local newspaper the methods and location of the pesticide application. Along with the approximate dates of application, the name of the herbicide used and the description/purpose of the application will also be published. Contact information for a designated Town of Medfield representative will be made available within the publication as well.