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Partnerships for Promoting Pollinator Habitat

Prepared by CTC & Associates LLC

A **2014 Presidential Memorandum** promoting pollinator habitat in light of recent population declines has prompted strong interest in the use of roadside rights of way to promote native plants and support habitats for pollinators. MnDOT would like to learn about the experiences of other state departments of transportation and local agencies in maintaining pollinator landscapes on highway ROWs through partnerships with individuals, groups or local agencies.

In this Transportation Research Synthesis, results of a literature review are supplemented with findings from a survey of selected state DOTs and Minnesota counties. Nine state DOTs describe current practices or plans to develop new pollinator-specific partnerships; existing partnerships that have been expanded to address pollinators; and Adopt-a-Highway programs that support maintenance of vegetation in the ROW.



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The purpose of this TRS is to serve as a synthesis of pertinent completed research to be used for further study and evaluation by MnDOT and the Local Road Research Board. This TRS does not represent the conclusions of the authors, MnDOT or LRRB.

Partnerships for Promoting Pollinator Habitat

Introduction

A 2014 Presidential Memorandum promoting pollinator habitat in light of recent population declines has prompted strong interest in the use of roadside rights of way to promote native plants and support habitats for pollinators.

The following are just a few of the benefits provided by pollinators:

- Pollination for native plant communities.
- Food and habitat for wildlife.
- Pollination for crops that support humans.
- Purification of drainage and buffering of waterways.
- Prevention of soil erosion.
- Aesthetics along roadways.

MnDOT is interested in learning about the experiences of other state departments of transportation and local agencies in maintaining pollinator landscapes on highway ROWs through partnerships with individuals, groups or local agencies. Of particular interest are the ways in which these programs are developed, managed and funded, and how these efforts may relate to existing roadside maintenance programs such as Adopt-a-Highway and landscape partnership programs.

Summary of Findings

This Transportation Research Synthesis is divided into three sections:

- Current MnDOT Programs and Practices.
- Survey of Practice.
- Related Resources.

Current MnDOT Programs and Practices

The following highlights MnDOT's current program to establish partnerships to maintain ROW landscapes and other practices that promote the establishment of pollinator habitat. Survey respondents' experiences described later in this summary of findings may inform enhancement of MnDOT's existing practices or the development of a new pollinator-specific partnership program.

Seed Mixes

MnDOT has partnered with the Minnesota Board of Water and Soil Resources and Minnesota Department of Natural Resources to establish more than 20 native seed mixes for use on Minnesota roadsides. MnDOT's online PlantSelector tool includes a seed mix tab to help designers and novices select the right seed for the right place.

Community Roadside Landscape Partnership Program

MnDOT does not have a partnership program that focuses solely on promoting pollinator habitat. The Community Roadside Landscape Partnership Program allows Minnesota communities to partner with MnDOT to establish and maintain landscaping in the ROW along highways that traverse their communities, and these landscaping treatments may benefit pollinators.

Launched in 1991, MnDOT’s award-winning CRLPP has completed more than 350 projects that have contributed more than \$7 million in roadside landscaping improvements in the ROW along state, U.S. and Interstate highways. Currently, 235 local governmental units participate in the program, providing funds or in-kind services to install and maintain state-funded landscape materials. MnDOT does not allow the participation of individuals or groups who are not directly affiliated with the local government applicant.

Communities can design their own ROW landscape projects or seek design assistance from MnDOT. Community volunteers may participate in the planting and maintenance of trees, shrubs, vines, perennial groundcovers, wildflowers and grasses. After planting, community volunteers are responsible for establishing a maintenance schedule and for the watering, weeding and monitoring for disease, insect and drainage problems required for the landscape planting.

Each of MnDOT’s eight districts sets aside an annual allocation for CRLPP participation, which can range from \$30,000 to \$100,000 (annual program costs are not tracked). MnDOT estimates nearly \$1.75 million in annual cost savings are associated with CRLPP volunteers’ maintenance of ROW landscape plantings.

Participating governmental agencies must pass a resolution authorizing the CRLPP partnership and execute a Cooperative Agreement with MnDOT that details the local government’s procurement, installation and maintenance responsibilities. MnDOT district maintenance personnel are responsible for engaging with a governmental agency if a problem with an installation or ongoing maintenance is identified. When problems cannot be resolved, MnDOT removes the plantings.

Partnerships with Other Agencies

During a May 2016 meeting of the AASHTO Board of Directors, senior executives from MnDOT, Federal Highway Administration and five other state DOTs—Iowa, Kansas, Missouri, Oklahoma and Texas—signed a memorandum of understanding that encourages the use of roadsides along Interstate 35 to develop and maintain pollinator habitat. The 1,500-mile I-35 corridor, which stretches from Minnesota to Texas, is a flyway for the monarch butterfly and provides spring and summer breeding habitat. While not creating an obligation for funding, the memorandum of understanding does provide for the establishment of “a cooperative and coordinated effort to establish best practices and promote public awareness of the monarch butterfly, honey bee and pollinator conservation.”

Survey of Practice

A print survey was distributed to 19 state DOTs expected to have experience with maintaining pollinator habitat on highway ROWs, or partnerships with volunteers to maintain roadside landscapes, to gather information about the development and management of such programs. Representatives from nine Minnesota counties also received the survey to assess pollinator-related activities within Minnesota.

Nine state DOTs responded to the survey; an additional respondent provided Web links with information about the agency’s pollinator partnership program in lieu of completing the survey. Only one Minnesota county—St. Louis—responded, indicating that the county has no pollinator projects or partnership programs. The table below identifies the type of partnership program supported by each respondent and the page number where a description of each program appears in this TRS.

Summary of Respondents' Partnership Programs				
State	Partnership Program	Pollinator-Specific Program	Start Date / Program Focus	For More Information
California	Adopt-A-Highway	No	1989 Program expanded from litter removal to permit landscape maintenance.	19
Idaho	Wildflower Program (affiliated with AAH)	No	Not known Volunteer groups disperse agency-approved wildflower seed on ROWs. Most ROW maintenance is completed by the agency, with exceptions for contracts for specific maintenance activities for specific road sections.	21
Iowa	Sponsorship of Highway Plantings	No	1990 Most plantings are at community gateways and cover less than a mile. Program supports pollinator habitat by requiring the use of native plants for applicants to receive grant awards.	18
Missouri	Adopt-A-Highway	No	1987 AAH agreements used with additional information about planting and maintenance; about 5 percent of all AAH projects are for beautification.	19
North Carolina	Wildflower Program	No	1985 Limited involvement of volunteers in effort to provide wildflowers along ROWs. Private companies and cities are primary participants.	16
Ohio	Ohio Pollinator Habitat Initiative	Yes	2014 Program includes participants from state and federal agencies, nonprofit and for-profit organizations, universities, schools, churches and businesses. All strategic roadways are included in the program; currently 300 acres of program projects.	13
South Carolina	No program but do promote native vegetation	N/A	N/A	Appendix A , 12
Texas	Unnamed Program	No	2015 Three groups participated in plantings at rest areas and a few wide ROWs.	21

Summary of Respondents' Partnership Programs				
State	Partnership Program	Pollinator-Specific Program	Start Date / Program Focus	For More Information
Virginia	Pollinator Habitat Program	Yes	2014 Program focus is more on rest areas and park-and-ride facilities but also includes ROW. Agency provides project management, site preparation and volunteers. Partners include private companies and conservation groups.	15
Washington	Unnamed Program	No	2014 New Roadside Policy Manual includes emphasis on partnerships for roadside development and enhancement using local interests.	22

The survey gathered information in a wide range of topic areas. The following presents a sampling of findings in eight topic areas:

- Program management and oversight.
- Volunteer activities.
- Program funding.
- Agreements and permits.
- Handling noncompliance.
- Pollinator program best practices.
- Other pollinator-related activities.
- Plans to develop pollinator programs.

Program Management and Oversight

For most of the responding agencies, program management and oversight are collaborative efforts within and across agencies:

- In Iowa, the DOT's districts work with applicants to approve permits and provide program oversight, while the Office of Maintenance is responsible for policy. The Roadside Development Section of the Office of Design reviews planting plans before permits are approved and assists in the review of policy and planting sponsorship criteria.
- Missouri DOT's AAH program is managed by a statewide coordinator and coordinators in each of the agency's districts. Similarly, North Carolina's Wildflower Program is managed by the agency's Central Roadside Unit and 14 regional Roadside Division teams.
- In Ohio, a program coordinator from the Ohio Field Office of the U.S. Fish and Wildlife Service is leading statewide efforts in collaboration with Ohio DOT staff. Ohio DOT staff oversees completion and maintenance of projects.
- In Washington, the program is managed by the DOT's design, maintenance and environmental offices. Local maintenance offices provide program oversight.

For California and Virginia DOTs, program management is handled by the agencies' maintenance divisions. In California, maintenance supervisors monitor AAH sites and report noncompliance to district AAH coordinators.

Volunteer Activities

Volunteer activities permitted under respondents' programs range from the sowing of wildflower seeds in Idaho Transportation Department's Wildflower Program to the site selection, site preparation, planting, evaluation and aftercare performed by volunteers in the Ohio Pollinator Habitat Initiative. In Iowa, applicants perform all activities related to planting. Iowa DOT's permit specifies how long the applicant is responsible for maintenance of the plantings (at least two years), after which the department takes back maintenance responsibility. Volunteer activities in Missouri and Washington are not specifically limited. Instead, these agencies allow volunteers to perform the types of activities the agency would normally perform after approval and consideration of safety (Missouri) or permit activities deemed beneficial and safe (Washington).

Program Funding

None of the respondents providing information about program funding reported the use of dedicated DOT funds. Contributions and donations fund at least part of the Ohio and North Carolina programs; the sales of customized license plates fund programs in North Carolina and Virginia. Grants and federal funds are used to fund Iowa DOT volunteers' roadside projects, and volunteers or contractors provide supplies for the AAH projects supported by California and Missouri DOTs.

Agreements and Permits

Note: Examples of many of the documents described below are available in [Appendix A](#) or in other appendices to this report.

Respondents provided or described the agreements and permits used in conjunction with their partnership programs:

- California and Missouri DOTs rely on AAH program documents and permits. Missouri DOT requires the submission of supplementary information about planting and maintenance.
- Applicants to Iowa DOT's Sponsorship of Highway Plantings program are required to submit planting plans and obtain the approval of the city if the proposed work is within an incorporated city. Applicants are required to maintain the plantings for a minimum of two years. Maintenance activities include watering, weed control, staking, guying and insect control. The regulations indicate that "[w]hen the sponsorship is discontinued, the sponsor shall restore the planting area to a condition approved by the district office."
- A Landscape Agreement identifies the responsibilities of the municipality that is a party to the agreement with North Carolina DOT, including the failure to comply, planning and design, and maintenance.
- The Ohio Pollinator Habitat Initiative uses several types of agreements, including a joint use license agreement, a memorandum of understanding, letter of commitment, letter of support and a standard maintenance agreement, to specify the responsibilities of the parties involved in a partnership.
- Washington State DOT's Roadside Vegetation Permit addresses failure to comply and the costs for corrective work. Bond coverage is among the additional provisions the agency can associate with a specific permit.

Handling Noncompliance

Respondents offered limited information about the actions taken when an applicant/volunteer fails to comply with the agreement:

- California, Iowa and Missouri DOTs terminate the agreement or permit.
- In North Carolina and Texas, the planting is removed.
- Ohio takes no action for failure to comply with a letter of support or letter of commitment.

Pollinator Program Best Practices

Program managers for the two pollinator-specific programs highlighted in this report offered advice for other agencies considering such a program:

- The Ohio survey respondent noted that “a bottom-up approach is best when trying to develop landscape-level partnerships and conservation efforts. Working on the ground with people involved will prove [to be] the most effective when building partnerships and trust.”
- An AASHTO case study included this advice from the manager of Virginia DOT’s Pollinator Habitat Program:

Educating the public is important, [Diane] Beyer said, but perhaps even more critical is internal agency education, especially for two groups: upper management and the maintenance team tasked with actually carrying out the work. As partnering goes, securing early collaboration from groups such as native plants societies, Extension Services, garden clubs and wildlife organizations is key to success. They will all help with the outreach and education of the program as well.

Finally, she urged agencies not to overlook the corporate sector: it definitely needs to be included on agencies’ teams to bring key expertise, networks, and financial support to the table. Partnerships also give others a sense of stewardship in promoting and furthering the program.

Other Pollinator-Related Activities

Two respondents highlighted projects or other activities other than the partnership programs that were the focus of the survey. Among them is the Roadside Pollinator Project, a partnership between Missouri DOT, Missouri Department of Agriculture and the St. Louis Zoo to secure a grant to plant native plants along roadsides near crops that require pollination in two Missouri counties. Missouri DOT is also on the steering committee for the Missouri Monarch and Pollinator Collaboration, which is developing the Missouri Monarch and Pollinator Conservation Plan. In other efforts, Missouri and Texas DOTs have updated the seeding mixes used by the agencies to benefit pollinators.

Plans to Develop Pollinator Programs

Three agencies are exploring pollinator-specific projects or programs. In Idaho, the agency is investigating the permitting of nonstate DOT staff or private companies to work on a pollinator demonstration pilot project. Missouri DOT’s Pollinator Working Group will further develop policy and guidelines to promote pollinators on the agency’s ROWs. In Washington, the DOT is developing a five-year implementation strategy that focuses on implementing pollinator-beneficial practices in project design/development, maintenance, vegetation management operations, and environmental analysis.

Related Resources

While the literature search uncovered efforts at the national and state levels to promote pollinator habitat, descriptions of mature partnerships to manage roadside landscapes for this purpose are limited. An expanded literature search sought to identify other types of partnership programs that permit individuals, groups or local agencies outside the state DOT to participate in maintaining vegetation, including native plants that may support pollinator habitat, in the highway ROW.

National Guidance for Promoting Pollinator Habitat

A June 2014 Presidential Memorandum that seeks to “reverse pollinator losses and help restore populations to healthy levels” identified actions expected of the U.S. DOT, which include identifying “opportunities to increase pollinator habitat along roadways and implement improvements.” Other documents associated with the memorandum include a literature review on best management practices in highway ROWs to promote pollinator habitat, a summary of interviews with nine state DOTs that have experience maintaining pollinator habitat, and guidance for maintaining habitats on federal lands. A 2013 e-book on vegetation management describes four partnerships and provides sample memoranda of understanding used to establish the partnerships.

Nonprofit Organizations

The Xerces Society for Invertebrate Conservation has a mission to protect wildlife through the conservation of invertebrates and their habitat. Among the group’s interests is pollinator conservation on roadsides.

State and Local Practices

Pollinator Programs

Notable state activities to promote pollinator habitat include an Illinois DOT project that seeks proposals from researchers to study and implement nectar corridors within the I-55 and I-57 ROWs in Illinois. In Minnesota, a state program funds the three-year Minnesota Pollinator Partnership. Through its sponsor, Pheasants Forever, this partnership is scheduled to complete 40 community pollinator projects while also educating and engaging youth and adults throughout Minnesota.

In other Minnesota publications related to pollinators, a Department of Agriculture brochure describes best practices for maintaining pollinator habitat on ROWs, and a publication about the Roadsides for Wildlife program offers information about establishing native plants and other practices that enhance wildlife habitat in roadsides. North Carolina DOT’s pollinator habitat effort is an extension of the North Carolina DOT Wildflower Program, while in Ohio, a district-level project has expanded to a statewide initiative to plant native prairie plant species to restore habitat and provide food for pollinators along state-owned ROWs.

Other publications describe programs in Virginia and Texas:

- A September 2015 press release describes the efforts of Virginia DOT, Dominion Virginia Power and local conservation groups to plant more than 8,000 pollinator-friendly plants at an I-95 rest area in northern Virginia as part of Virginia DOT’s Pollinator Habitat Program.
- Partnerships are at the center of a Texas DOT program, which established monarch butterfly conservation partnerships with the U.S. Fish and Wildlife Service and the Native Plant Society of Texas to develop a monarch garden installation project. The agency has also partnered with other Texas organizations as part of the Texas Monarch and Native Pollinator Conservation Plan.

Other Roadside Management Programs

There are two main categories of other roadside management programs highlighted in this report—landscape partnership programs and Adopt-a-Highway programs.

The state DOT landscape partnership programs highlighted in this report take two approaches: funding provided solely by the applicant partner, and funding provided by the managing agency. A Texas DOT program allows local governments or private entities to provide all associated funding to develop and maintain an agency-approved landscape project on the ROW. Programs in Minnesota and Wyoming provide agency funding for approved applicants to provide roadside landscaping located on state highway ROWs and in rest areas.

“Adopt” programs to maintain highway ROWs can be managed at the county or state level. Examples of county programs include a California program that organizes volunteers to do a wide range of roadside activities, and Iowa programs that focus on beautifying the roadside or supporting wildlife habitats. State programs include traditional AAH programs that have been expanded beyond litter removal to include the maintenance of roadside vegetation (Iowa, Missouri, New York, Pennsylvania and Washington), and special programs that encourage the planting of wildflowers or other native plants (Hoosier Roadside Heritage Program in Indiana and Grow Native! in Missouri).

Other programs include the Iowa Living Roadway Trust Fund, administered by Iowa DOT, which provides grant funding to eligible cities, counties and other applicants for various types of roadside enhancement and maintenance. Washington State DOT’s “Special Maintenance Areas” are sections of roadside for which unique maintenance requirements or existing arrangements have been established with external organizations.

Documenting yet another aspect of roadside management programs are publications from Ohio and South Carolina DOTs that address planting practices and vegetation management by nonstate DOT staff.

Cooperative Weed Management Areas

While not specific to promoting pollinator habitat, efforts to develop and maintain partnerships to manage roadside weeds can inform development of partnerships to promote pollinator habitat. Included in these documents are descriptions of organizational efforts and the development of strategic and operating plans. Samples of the agreements executed in connection with these partnerships are also provided.

Next Steps

Moving forward, MnDOT could consider:

- Developing partnerships with Minnesota corn and soybean growers, and the Minnesota Department of Agriculture, to establish vegetation that supports pollinator habitat along roadsides where crops require pollination.
- Expanding the selection of native seed mixes available through MnDOT’s online PlantSelector tool to include native seed mixes specifically designed to support pollinators in various parts of Minnesota.
- Structuring a partnership program that requires a limited level of commitment from volunteers by providing an easy application process and assistance with selecting appropriate seed mixes or plant materials that will require little maintenance.

Detailed Findings

Current MnDOT Programs and Practices

The following describes MnDOT's current programs and practices associated with partnerships to maintain highway ROW landscapes and other practices that promote the establishment of pollinator habitat. Survey respondents' experiences presented in the next section of this report may inform enhancement of MnDOT's existing practices or the development of a new pollinator-specific partnership program.

Seed Mixes

MnDOT has partnered with the Minnesota Board of Water and Soil Resources and Minnesota Department of Natural Resources to establish more than 20 native seed mixes for use on Minnesota roadsides. While not developed specifically for pollinators, these seed mixes contain plant species to support pollinators. MnDOT's PlantSelector program, an online plant selection tool available at <http://dotapp7.dot.state.mn.us/plant/>, includes a seed mix tab to help designers and novices "select the most appropriate vegetation for use along state roadsides and landscapes."

Community Roadside Landscape Partnership Program

MnDOT does not have a partnership program that focuses solely on promoting pollinator habitat. The CRLPP allows Minnesota communities to partner with MnDOT to establish and maintain landscaping in the ROW along highways that traverse their communities, and these landscaping treatments may benefit pollinators.

Launched in 1991, MnDOT's award-winning CRLPP has completed more than 350 projects that have contributed more than \$7 million in roadside landscaping improvements in the ROW along state, U.S. and Interstate highways (less than one-third of the \$7 million in improvements comes from Minnesota state highway funds). ROW landscapes created through the program must meet at least one of three program goals: roadside beautification, community improvement and environmental stewardship. Currently, 235 local governmental units participate in the program. While the program is not focused on developing pollinator habitat, the vegetation planted and maintained by program partners may provide support for pollinators.

Program Participation

The participating community must provide the funds or in-kind services to install and maintain state-funded landscape materials. MnDOT's local government partners establishing vegetation in the ROW may seek assistance from different groups to complete the installation, including:

- Volunteers such as students, garden clubs, Boy/Girl Scout troops, and members of other service organizations.
- Community public works employees.
- Contractors.

Currently, MnDOT does not allow the participation of individuals or groups not directly affiliated with the local government CRLPP applicant.

Communities can design their own ROW landscape projects or seek design assistance from MnDOT. Applications submitted by interested communities must include a resolution from the community stating the desire to enter into a Cooperative Agreement with MnDOT; a plan showing the location of the project site; a list of potential volunteers (if the project is to be installed by volunteers); and a cost estimate for the project. A Cooperative Agreement executed by the community and MnDOT includes the detailed landscape plan showing

locations and quantities of materials and the schedule of maintenance requirements agreed to by the applicant. MnDOT's CRLPP program coordinator assigns a MnDOT project manager (landscape architect, designer or forester) to each project to assist the community applicant in successfully executing the project.

Community volunteers may participate in the planting and maintenance of trees, shrubs, vines, perennial groundcovers, wildflowers and grasses. After planting, community volunteers are responsible for establishing a maintenance schedule and for the watering, weeding and monitoring for disease, insect and drainage problems required for the landscape planting. Plantings are usually placed as far off the road surface as possible to ensure the safety of volunteers participating in installation and maintenance. All participants are required to wear a safety vest when on-site, and on-site training provided prior to planting addresses participant safety.

Program participation is encouraged through the agency's website (see <http://www.dot.state.mn.us/roadsides/partners/index.html>), district personnel and word-of-mouth.

Program Funding

Each of MnDOT's eight districts sets aside an annual allocation for CRLPP participation, which can range from \$30,000 to \$100,000 (annual program costs are not tracked). Funding assistance for participants is limited to the estimated cost of providing the required landscape materials, which may include soil amendments, herbicides, plant materials, seed, sod, mulch and other materials necessary for the project. MnDOT estimates nearly \$1.75 million in annual cost savings are associated with CRLPP volunteers' maintenance of ROW landscape plantings.

Program Agreements and Compliance

The participating governmental agency must pass a resolution authorizing the partnership and execute a Cooperative Agreement with MnDOT. The Cooperative Agreement, prepared by MnDOT after an application and funding are approved, details the local government's procurement, installation and maintenance responsibilities. A sample resolution is included in the May 2015 *MnDOT Community Roadside Landscaping Partnership Program: Application Manual* available at <http://www.dot.state.mn.us/roadsides/partners/pdf/partnerapplication.pdf> (see page 13 of the PDF).

MnDOT district maintenance personnel are responsible for engaging with a governmental agency if a problem with an installation or ongoing maintenance is identified. If the local government partner fails to address the problem, MnDOT removes the plantings. MnDOT has identified challenges associated with the long-term maintenance of plantings.

Note: Citations for documents associated with the CRLPP appear in the **Other Roadside Management Programs** section of this report; see page 30.

Partnerships with Other Agencies

A May 2015 White House report, *National Strategy to Promote the Health of Honey Bees and Other Pollinators* (see page 24 of this report for a citation), encouraged the development of a collaborative effort to "identify opportunities for improving pollinator and monarch habitat along transportation rights-of-way, in local parks and public spaces, and other promising locations along the I-35 corridor." The 1,500-mile I-35 corridor, which stretches from Minnesota to Texas, is a flyway for the monarch butterfly and provides spring and summer breeding habitat.

This collaboration was formalized during a May 2016 meeting of the AASHTO Board of Directors, when senior executives from MnDOT, FHWA and five other state DOTs—Iowa, Kansas, Missouri, Oklahoma and Texas—signed a memorandum of understanding that encourages the use of roadsides along I-35 to develop and maintain pollinator habitat.

While not creating an obligation for funding, the memorandum of understanding does provide for the establishment of “a cooperative and coordinated effort to establish best practices and promote public awareness of the monarch butterfly, honey bee and pollinator conservation.” The I-35 route will be informally named the “Monarch Highway,” and partners may work together to develop a logo for the route for use on maps, route signage, brochures and other materials.

A May 2016 MnDOT news release, available at <http://www.dot.state.mn.us/newsrels/16/05/26pollinator.html>, highlights MnDOT’s participation in the memorandum of understanding to support pollinator habitat along the I-35 corridor. The memorandum of understanding is available at http://downloads.transportation.org/Monarch_Highway_MOU_052616.pdf.

Survey of Practice

Survey Approach

A print survey was distributed to 19 state DOTs expected to have experience with maintaining pollinator habitat along highway ROWs and other state DOTs engaging in partnerships with volunteers to maintain roadside landscapes. Representatives from selected Minnesota counties also received the survey to assess current practices within Minnesota. Included in the survey distribution were the seven counties in the Twin Cities metropolitan area (Anoka, Carver, Dakota, Hennepin, Ramsey, Scott and Washington counties) and Stearns and St. Louis counties.

The survey consisted of the following questions:

1. Please describe your agency’s/county’s program and other efforts to promote native vegetation and support habitat for pollinators along highway rights of way.
 - 1A. If you have an existing program, how do you measure your success in increasing pollinator habitat along highway ROWs?
2. Do you permit nonagency/noncounty staff (private individuals, private companies, groups or local agencies) to plant, establish and/or maintain native vegetation along highway ROWs? These activities may be focused on the support of pollinator habitat, roadside beautification or other purpose.
 - A. If no, do you have plans to develop partnerships to permit this type of volunteer effort on highway ROWs? Please describe and then proceed to Question 7.
 - B. If yes, please describe your partnership program by responding to the questions below.

Program Development and Structure

- A. What is the name of your program?
- B. How long has the program been in existence?
- C. Please describe how the program was developed.
- D. Who manages the program?
- E. What types of ROW are included in the program?
- F. How many miles of ROW are involved in the program?

Program Participants

- A. How many participants are involved in the program?

- B. How do you encourage program participation? For example:
 - i. Do you have a formal outreach program or make other efforts to attract volunteers?
 - ii. Do you incentivize participation by allowing advertisement or signage on the ROW or through other means?
- C. Please describe the types of activities nonagency/noncounty staff are permitted to perform in planting, establishing, and/or maintaining native vegetation on highway ROWs.
- D. How do you address the safety of program participants?

Program Funding

- A. Please describe how the program is funded.
- B. What are the program’s annual costs?

Program Agreements/Permits

- A. Please describe the agreements and/or permits executed with program participants.
- B. How is risk and liability managed differently between public/governmental and private program participants?
- C. Please describe how you ensure compliance with the agreement or permit, including who is responsible for this oversight.
- D. When a partner that is not affiliated with or sponsored by a unit of government fails to comply with the agreement or permit, what type of action do you take?

Program Documents

Please provide sample agreements, permits and other documents associated with your partnership program. Links to documents can be listed below; send any files not available online to Chris Kline at Chris.Kline@ctcandassociates.com.

- 3. Is your partnership program to plant, establish and/or maintain native vegetation in the ROW similar to or affiliated with other roadside maintenance programs supported by your agency/county (for example, your Adopt-a-Highway or landscape partnership program)? Please describe.
- 4. Has your agency/county worked with the state conservation agency or local agencies to expand the reach of your partnership program? Please describe and provide contact information for these partners.
- 5. Please describe the successes you have experienced in managing your partnership program.
- 5A. How are you measuring your program’s success?
- 6. Please describe the challenges you have experienced in managing your partnership program.
- 6A. How have you overcome these challenges?
- 7. Do you have other comments or additional information to share about any of the questions above?

Nine state DOTs responded to the survey:

- California.
- Idaho.
- Iowa.
- Missouri.
- North Carolina.
- Ohio.
- South Carolina.
- Texas.
- Washington.

In lieu of responding to the survey, the Virginia DOT respondent elected to provide links to Web-based information about the agency’s pollinator program. Only one of the nine Minnesota counties receiving the survey responded. A representative from St. Louis County reported no current projects or plans to support volunteer partnerships to maintain roadsides.

Summary of Survey Results

Survey responses indicated a varying degree of engagement with pollinator-specific programs and varying levels of partnering efforts. Summary tables are used in this report to organize and present much of the information provided in survey responses. These tables lack details in certain areas when a survey respondent provided limited information or did not respond to a question.

The full text of the survey responses appears in [Appendix A](#) of this report.

Following is a summary of findings in six topic areas:

- New pollinator-specific partnerships.
- Other pollinator-related activities.
- Plans to develop pollinator programs.
- Existing partnership programs expanded to address pollinators.
- Adopt-a-Highway programs supporting roadside maintenance.
- Other partnership programs.

Note: Some of the tables below that summarize survey responses include a link to a program website. Additional program-related documents, including permits, agreements and program regulations, are available in the **Related Resources** section of this report and [Appendix A](#).

New Pollinator-Specific Partnerships

In 2014, Ohio and Virginia began partnering programs that promote pollinator habitat. In Ohio, the focus is on strategic areas of ROW. For Virginia DOT, potential planting plots go beyond ROW to include park-and-ride facilities and rest areas. Both programs obtain funding from outside the DOT. The tables below summarize survey responses from these two states.

Ohio Department of Transportation/Ohio Field Office, U.S. Fish and Wildlife Service	
Ohio Pollinator Habitat Initiative	
Start Date	2014
Description	<ul style="list-style-type: none"> • Developed statewide network of partners to provide landscape-level conservation for all Ohio pollinators on strategic areas of ROW. • Partners include state, federal, nonprofit and for-profit organizations, universities, schools, churches and businesses.
Volunteer Effort	Yes. Participants include Pheasants Forever/Quail Forever state and local chapters, Ohio Department of Transportation, Ohio Department of Natural Resources Division of Wildlife, Ohio Department of Corrections and Rehabilitation, U.S. Fish and Wildlife, U.S. Fish and Wildlife Partners, American Electric Power, Monarch Joint Venture and others.
Program Management	Program coordinator from the Ohio Field Office of the U.S. Fish and Wildlife

Ohio Department of Transportation/Ohio Field Office, U.S. Fish and Wildlife Service	
Ohio Pollinator Habitat Initiative	
	Service.
Types of ROW	All roadways.
Miles of ROW	Approximately 300 acres of conservation projects for monarchs and pollinators within strategic ROWs.
Volunteer Activities	Site selection, site preparation, planting, evaluation and aftercare.
Formal Outreach	Speaking engagements, workshops and meetings gather feedback, share expertise; the agency has identified more partners through these efforts.
ROW Signage/Other Incentive	Educational signs highlight the partnership.
Program Funding	Grassroots effort; all funds and supplies donated on a project-by-project basis.
Safety	Each group is responsible for its own safety and insurance.
Agreements	<ul style="list-style-type: none"> • Agreements with volunteers can be a joint use license agreement, memorandum of understanding, letter of commitment or letter of support. • Contracts are executed with contractors. • Agency's standard maintenance agreement with another party to maintain highway landscaping at a specific interchange or highway corridor is being modified for use with the pollinator program.
Program Oversight	Ohio DOT oversees completion and maintenance of ROW projects.
Noncompliance	If a paid contract, compensation is withheld until obligation is met. If a volunteer project subject to a letter of support or letter of commitment, no action is taken.
Partnerships (Conservation Agency, Local Agencies)	Ongoing, positive conversations with possible future partners.
Successes/Measuring Success	<p>Successes:</p> <ul style="list-style-type: none"> • Growing list of statewide partners. • Able to provide on-the-ground conservation. <p>Measuring success:</p> <ul style="list-style-type: none"> • Creating a database of projects with acreage and plant types. • Creating a database for all outreach, education and speaking engagements.
Challenges/Overcoming Challenges	<ul style="list-style-type: none"> • Collaborating with multiple individuals and agencies can be challenging; communication can also be challenging. • Quarterly meetings and informal gatherings encourage dialogue among participants and more effective collaboration going forward. • A bottom-up approach is best when trying to develop landscape-level partnerships. For Ohio, working on the ground with the people involved proved to be most effective when building partnerships and trust.
Program Website	http://www.dot.state.oh.us/districts/D09/Pages/Bee-Pollinator-Program.aspx

The Virginia DOT respondent elected to provide websites with information about the agency’s Pollinator Habitat Program rather than completing the survey. The following table reflects information gathered from the websites provided.

Virginia Department of Transportation	
Pollinator Habitat Program	
Start Date	2014
Description	<p>From the program’s website:</p> <ul style="list-style-type: none"> • Creates naturalized areas planted with native nectar and pollinator plant species along state-maintained roadways, within rest areas and park-and-ride facilities. • The program will continue to grow throughout the state, focusing on naturalized gardens and meadows at state rest areas for the next few years.
Volunteer Effort	Yes. Partners provide “technical expertise, on-site volunteers to help with planting, materials such as mulch and many other services.” Partners identified on the program’s website include Virginia Dominion Power/Dominion Trust, PBS Films, Loudoun Wildlife Conservancy, White House Office of Science and Technology Policy, Valley Land & Lawn, LLC, and Virginia Native Plant Society.
Program Management	Virginia DOT provided project management, site preparation and volunteers for a recent rest area/meadow restoration project.
Types of ROW	Specific miles/acres not identified. Since 2014, projects have been completed at three park-and-ride facilities, one rest area, and medians and roadsides in one district.
Formal Outreach	Collaborating with native plants societies, Extension Services, garden clubs and wildlife organizations will help with outreach and education.
ROW Signage/Other Incentive	Interpretive signage is in development.
Program Funding	Program is funded through purchases of the state’s wildflower license plate. The state also offers a new pollinator license plate; however, at this time funds from the new plate are not directed to the Pollinator Habitat Program (expected to be addressed through state legislation in 2016).
Program Website	http://www.virginiadot.org/programs/pollinator_habitat_program.asp

Other Pollinator-Related Activities

Survey respondents reported other activities beyond the volunteer maintenance of pollinator habitat on highway ROWs:

- Missouri DOT has partnered with the St. Louis Zoo to install a demonstration pollinator garden at MoDOT Highway Gardens on the Missouri State Fairgrounds in Sedalia. The agency is engaged in another partnership with the St. Louis Zoo and the Missouri Department of Agriculture—the Roadside

Pollinator Project—which secured a private foundation grant to plant native plants along roadsides near crops that require pollination in Cole and Webster counties.

- The Missouri DOT respondent reported additional involvement in pollinator-related activities:
 - MoDOT is on the steering committee for Missouri Monarch and Pollinator Collaboration. The mission of the group is to engage all Missourians to increase and sustain habitat for monarchs and pollinators. They are also developing the Missouri Monarch and Pollinator Conservation Plan to, in part, clearly state Missouri monarch and habitat needs and how to meet those needs. Various state and federal agencies, NGOs [nongovernmental organizations], private landowners, and for-profit groups are part of the collaborative.
- Two agencies have changed seeding mixes to benefit pollinators:
 - As the Missouri DOT respondent indicated, “the seeding mix for revegetation of rural construction projects includes white clover, native grasses and a variety of native wildflowers. The urban construction project seed mix includes white clover. Although white clover is not a native, it is beneficial to honey bees.”
 - Texas DOT has provided native seed and changed its seeding specifications in conjunction with the South Texas Natives project.

Plans to Develop Pollinator Programs

Several agencies noted efforts underway to promote pollinator habitat:

- Idaho Transportation Department is currently pursuing permitting of nonstate DOT staff or private companies to work on a pollinator demonstration pilot project. The project is in the planning phase, and the agency is seeking partners and interest groups wishing to participate.
- Missouri DOT has created a Pollinator Working Group, which will further develop policy and guidelines to promote pollinators on the agency’s ROWs.
- Washington State DOT is developing a five-year implementation strategy that focuses on implementing pollinator-beneficial practices in project design/development, maintenance, vegetation management operations, and environmental analysis. The agency has conducted research to “identify and prioritize areas suitable for pollinator habitat creation, preservation and enhancement on WSDOT-owned lands.”

Existing Partnership Programs Expanded to Address Pollinators

Other states described programs of long-standing that now also promote pollinator habitat. Summarized in the tables below:

- The North Carolina Wildflower Program, which contracts with cities and private companies to maintain native plantings in the ROW.
- The Sponsorship of Highway Plantings program supports pollinator habitat along Iowa ROWs by requiring the use of native plants for applicants to receive grant awards.

North Carolina Department of Transportation	
Wildflower Program	
Start Date	1985
Description	<ul style="list-style-type: none"> • Provide wildflowers along ROWs to support pollinator species. • Expand the Wildflower Program to include a specific perennial pollinator

North Carolina Department of Transportation	
Wildflower Program	
	<p>mix containing 26 pollinator-friendly species.</p> <ul style="list-style-type: none"> • Install native flowering trees along roadsides, including redbuds, sourwood and other ornamental plantings to support pollinator species.
Volunteer Effort	Limited. Agency contracts with several private companies and cities across the state to help maintain ornamental plantings that contain native plants.
Program Management	Central Roadside Unit and 14 regional Roadside Division teams.
Types of ROW	Interstate and primary roads.
Miles of ROW	15,000 eligible miles.
Volunteer Activities	Bed preparation, nutrient amendment applications, layout development, installation and all maintenance activities.
Formal Outreach	None.
ROW Signage/Other Incentive	None.
Program Funding	Program funding comes from contributions from citizens and private corporations and sales of personalized license plates.
Annual Cost	Last year the agency received \$1.3 million for statewide efforts.
Safety	Participating cities and North Carolina DOT provide safety training for respective staffs.
Agreements	Landscape Agreements describe responsibilities of each party and clarify expectations.
Program Oversight	North Carolina DOT inspectors.
Noncompliance	Email or telephone call is followed by a strongly worded letter. If that fails, the planting is removed and future applications for planting are likely denied.
Partnerships (Conservation Agency, Local Agencies)	None.
Successes/Measuring Success	<p>Pollinator-related successes:</p> <ul style="list-style-type: none"> • Photographic evidence supports the increase of pollinators on wildflower beds. • North Carolina State University researchers have collected pollinator information along state ROWs. Research shows a huge increase of pollinators on wildflower beds versus traditional ROWs. <p>Other program successes:</p> <ul style="list-style-type: none"> • Cooperation with cities has helped reduce North Carolina DOT's maintenance budget. • It is in the cities' interest to maintain plantings in their extraterritorial jurisdictions.

North Carolina Department of Transportation	
Wildflower Program	
Challenges/Overcoming Challenges	<ul style="list-style-type: none"> • City budgets have not provided long-term maintenance for plantings. • Teamwork and a cooperative spirit have proved to be effective in maintaining the program.
Program Website	http://www.ncdot.gov/doh/operations/dp_chief_eng/roadside/wildflowerbook/

Iowa Department of Transportation	
Sponsorship of Highway Plantings	
Start Date	1990
Description	<ul style="list-style-type: none"> • Seed all state ROWs to native vegetation, except shoulders, medians and urban areas. • Revegetate over 15,000 acres by killing out existing cool-season grasses and interseeding native grasses and wildflowers. • Install extensive tree and shrub plantings by contract, which include many flowering species, to provide nectar and wind protection for pollinators. • Requires the use of native plants for grant awards.
Volunteer Effort	Yes.
Program Management	<ul style="list-style-type: none"> • Districts work with applicants and approve permits. • Office of Maintenance is responsible for the policy. • Roadside Development Section of the Office of Design reviews planting plans before permits are approved, reviews the policy and planting sponsorship criteria, and administers grant programs.
Types of ROW	Interstate, U.S. and state highways.
Miles of ROW	Unknown; most plantings less than a mile at gateways to communities.
Number of Participants	Unknown; estimated in the hundreds.
Volunteer Activities	All activities related to planting; permit required if applicant wants to burn.
Formal Outreach	No formal outreach program; agency partners with Trees Forever and Iowa's Living Roadways Community Visioning Program to assist communities with landscape design.
ROW Signage/Other Incentive	Signage is provided only if the planting is included in an AAH-affiliated project.
Program Funding	Grants are available through the Living Roadway Trust Fund, Iowa Department of Natural Resources and federal enhancement funds.
Annual Cost	Varies.
Safety	The agency limits volunteers' access to ROW; requires adult supervision of volunteers 16 years or younger; requires volunteers to wear fluorescent green

Iowa Department of Transportation	
Sponsorship of Highway Plantings	
	safety vests; and restricts work hours to 30 minutes after sunrise to 30 minutes before sunset.
Agreements	The application and permit are currently under revision. The agency manages risk through a strong liability waiver and hold harmless statements on the permit. The applicant is required to maintain the plantings for a minimum of two years.
Program Oversight	Managed by districts.
Noncompliance	The agreement is terminated at the sole discretion of the department.
Partnerships (Conservation Agency, Local Agencies)	Outreach is conducted through Trees Forever (see http://www.treesforever.org/) and Iowa’s Living Roadways Community Visioning Program (see https://www.extension.iastate.edu/programbuilder/details.aspx?programid=26).
Successes/Measuring Success	Measuring pollinator-related successes: <ul style="list-style-type: none"> • Total acres seeded to native grasses and wildflowers through landscaping and erosion control contracts. • Total trees and shrubs installed through landscaping contracts.
Challenges/Overcoming Challenges	Maintenance of plantings can be an issue. Though the permit specifies the time period the applicant agrees to maintain the planting, there can be “misunderstandings” about when the department takes over maintenance.

Adopt-a-Highway Programs Supporting Roadside Maintenance

The AAH programs in California and Missouri go beyond litter removal and provide support for the volunteer maintenance of vegetation in the ROW.

Adopt-a-Highway Programs		
Program Description	California	Missouri
Start Date	1989	1987
Program Management	Division of Maintenance.	Statewide coordinator and coordinators in each of Missouri DOT’s districts.
Types of ROW	Federal and state highways.	All routes under Missouri DOT jurisdiction.
Miles of ROW	9,475 shoulder miles.	Maximum of 34,000 centerline miles (not all are suitable).
Number of Participants	12,810.	2,500 (estimate). (This is 5 percent of the 50,000 volunteers participating in the AAH program.)
Volunteer Activities	Vegetation control, tree/shrub planting, wildflower planting.	All types of activities the agency would normally do (with prior approval and

Adopt-a-Highway Programs		
Program Description	California	Missouri
		safety concerns addressed).
Formal Outreach	Yes, through AAH coordinators.	Not specifically, but some discussions with Master Naturalists and Master Gardeners.
ROW Signage/Other Incentive	AAH signs.	AAH signs.
Program Funding	Paid for by individual hiring contractor to perform adoption activities.	Volunteers provide plantings and labor and responsible for maintenance; the agency provides some supplies.
Annual Cost	Savings to the state valued at \$19 million.	Not known; program is included in overall costs.
Safety	Volunteers are required to attend safety orientation before beginning activities.	Use of AAH safety materials.
Agreements	<ul style="list-style-type: none"> • Maintenance agreements with public agencies. • Five-year encroachment permits with AAH participants. 	<ul style="list-style-type: none"> • AAH agreement plus additional planting and maintenance information. • No difference in how liability is handled between public and private entities.
Program Oversight	Maintenance supervisor monitors sites and reports noncompliance to district AAH coordinator.	Statewide coordinator and one coordinator in each of the agency's seven districts work closely with district roadside managers and/or Traffic Division.
Noncompliance	Letter of warning, then termination of permit.	Agreement can be revoked, but participants are encouraged to comply first.
Partnerships (Conservation Agency, Local Agencies)	Other agencies ask for Caltrans' information to begin own programs.	Missouri Monarch and Pollinator Collaboration.
Successes/Measuring Success	<p>Successes:</p> <ul style="list-style-type: none"> • Participation after 27 years. • Program valued at \$19 million. • Community beautification. <p>Measuring success:</p> <ul style="list-style-type: none"> • Tracking participation monthly. 	<p>Difficult to measure.</p> <p>Volunteers gain better understanding of the challenges experienced by the agency.</p>
Challenges	Increasing participation.	With limited staffing it is difficult to devote enough time to projects.
Program Website	http://adopt-a-highway.dot.ca.gov/	http://www.modot.org/services/community/adoptahighway.htm

Other Partnership Programs

Other partnership programs in Idaho, Texas and Washington have not had a great deal of activity until fairly recently (Idaho) or are relatively new (Texas and Washington). These programs are not specific to pollinators but do permit volunteer planting or maintenance of vegetation on highway ROWs.

Idaho Transportation Department	
Operation Wildflower	
Start Date	Not known.
Description	<ul style="list-style-type: none"> • AAH volunteer groups have the opportunity to participate in ITD-approved wildflower planting on their adopted sections through the dispersal of appropriate seed. • Program is funded and maintained by the district offices and staff. • Most ROW is maintained with agency resources and equipment; exceptions are contracts for specific maintenance activities for specific road sections.
Measuring Success	<ul style="list-style-type: none"> • 70 percent vegetation establishment over three to five years. • Annual visits to projects to gather visual information.
Volunteer Effort	Limited involvement of private citizens and specific groups. After a period of little activity, agency is seeing more interest in the program.
Program Website	https://itd.idaho.gov/highways/ops/maintenance/Volunteer/wild%20flower/wildflower.htm

Texas Department of Transportation	
Unnamed Program	
Start Date	2015
Description	<ul style="list-style-type: none"> • Program developed as a result of a written request from native plant societies to the agency. • Agency has provided native seed for use in rest areas and a few wide ROWs.
Volunteer Effort	Yes; limited.
Program Management	Texas DOT.
Types of ROW	Mainly rest areas; a few wide ROWs.
Miles of ROW	Very little.
Number of Participants	Three groups.
Volunteer Activities	Garden plantings and milkweed collections.
Formal Outreach	No.
ROW Signage/Other Incentive	Looking into providing signage.

Texas Department of Transportation	
Unnamed Program	
Program Funding	None.
Safety	Coordination with local district.
Agreements	AAH agreement.
Noncompliance	If the volunteer group is not maintaining the plantings, the plantings will be eliminated.
Partnerships (Conservation Agency, Local Agencies)	None.
Measuring Success	To be determined.
Challenges	Getting groups to follow through with plans.

Washington State Department of Transportation	
Unnamed Program	
<i>Note:</i> While the program has not been named as yet, parameters for the program are identified in the agency's 2014 Roadside Policy Manual and the recently updated Roadside Vegetation Permit. See Appendix A for more information about these documents.	
Start Date	2014
Description	<ul style="list-style-type: none"> • Roadside Policy Manual updated in 2014; encourages partnering for roadside development and enhancement where possible using local partners. • Program developed with input from DOT design, maintenance and environmental offices. Feedback also sought from The Common Acre, a Seattle nonprofit organization, and a state interagency group. • New Roadside Vegetation Permit allows for local government, volunteer or private business sponsorship of volunteer maintenance of roadsides on limited-access federal highways with FHWA signoff.
Volunteer Effort	Yes.
Program Management	Washington State DOT design, maintenance and environmental offices.
Types of ROW	All ROW, but greatest opportunity is along wider ROW on Interstate and limited-access facilities.
Miles of ROW	20,000 acres statewide where pollinator improvements could be made.
Number of Participants	Specific number not provided. Participants include those in AAH and parties to privately sponsored roadside management agreements; no pollinator-specific participants.
Volunteer Activities	Any activities DOT deems mutually beneficial and safe.

Washington State Department of Transportation	
Unnamed Program	
Formal Outreach	None. Informal outreach in the form of conversations with local agencies and groups like beekeepers association.
Program Funding	None.
Safety	Permit includes safety-related provisions; agency uses safety materials developed for the AAH program.
Agreements	Roadside Vegetation Permit includes bonding provisions.
Program Oversight	Local maintenance offices.
Noncompliance	Bonding provisions are included in the permit.
Program Website	http://www.wsdot.wa.gov/Design/Roadside/Pollinators.htm

Related Resources

While efforts at national and state levels to promote pollinator habitat were uncovered in the literature search, descriptions of mature partnerships to manage roadside landscapes for this purpose are limited. Because the development of such programs may be too recent to appear in publicly available literature, an expanded literature search sought to identify partnership programs that permit individuals or groups outside the state or local agency to participate in maintaining any type of vegetation in the highway ROW. The citations below are organized in the following sections and subsections:

- National guidance for promoting pollinator habitat.
- Nonprofit organizations.
- State and local practices.
 - Pollinator programs.
 - Other roadside management programs.
- Cooperative weed management areas.

National Guidance for Promoting Pollinator Habitat

National guidance in the form of a 2014 Presidential Memorandum that has prompted much interest in promoting pollinator habitat along roadsides is presented below along with other documents related to that memorandum.

Creating a Federal Strategy to Promote the Health of Honey Bees and Other Pollinators, Presidential Memorandum for Heads of Executive Departments and Agencies, Office of the Press Secretary, The White House, June 2014.

<https://www.whitehouse.gov/the-press-office/2014/06/20/presidential-memorandum-creating-federal-strategy-promote-health-honey-b>

In acknowledging the “breadth, severity, and persistence of pollinator losses,” this memorandum identifies the steps the White House is taking to “reverse pollinator losses and help restore populations to healthy levels.” The actions expected of the U.S. DOT include evaluating “its current guidance for grantees and informational resources to identify opportunities to increase pollinator habitat along roadways and implement improvements, as

appropriate. The Department of Transportation shall work with State Departments of Transportation and transportation associations to promote pollinator-friendly practices and corridors.”

Related Resources:

National Strategy to Promote the Health of Honey Bees and Other Pollinators, Pollinator Health Task Force, The White House, May 2015.

<https://www.whitehouse.gov/sites/default/files/microsites/ostp/Pollinator%20Health%20Strategy%202015.pdf>

Page 34 of the document (page 40 of the PDF) describes the tasks to be completed by the U.S. DOT in this national strategy to improve the health of pollinators:

- Complete pollinator best management practice materials by February 2016 with a target date to make materials publicly available by spring 2016. Among the deliverables:
 - A literature review (see the citation immediately following the **Note** below).
 - A report on the state of the practice based on interviews with nine state DOTs.
 - A high-level report on BMPs for Federal Highway Administration and state DOT program, policy and maintenance management staff.
 - A detailed and practice-oriented BMP guidance document for state DOT field staff and contractors.
- Make publicly available by spring 2015 the e-book *Vegetation Management: An Ecoregional Approach* (see page 6).
- Conduct a workshop in the fall of 2015 to promote I-35 pollinator corridor conservation. (Information about this workshop did not appear to be publicly available at the time of publication of this report.)
- Develop links on the agency’s website that provide access to additional resources promoting the role of the transportation sector in support of pollinator and monarch health (see https://www.environment.fhwa.dot.gov/ecosystems/vegmgmt_pollinators.asp).

Note: Deirdre Remley, environmental protection specialist with FHWA, provided information about the FHWA projects in process to address the requirements of the 2014 national strategy laid out by the White House.

Contact: Deirdre Remley, Environmental Protection Specialist, FHWA Office of Project Development and Environmental Review, Deirdre.Remley@dot.gov, 202-366-0524.

The report describing BMPs for managers and decision-makers is expected to be released within the next couple of months. The final product, which will address BMPs for practitioners, is scheduled for release later in 2016.

To inform development of the pollinator BMPs, FHWA conducted interviews with nine state DOTs known to have experience with establishing or maintaining pollinator habitat. Release of a report summarizing these interviews is pending receipt of permission from all participants. The nine state DOTs participating in this effort are:

- Arizona.
- California.
- Florida.
- Idaho.
- Iowa.
- Minnesota.
- New York.
- Ohio.
- Oregon.

When asked about partnerships developed to establish or maintain pollinator habitat, Remley noted:

With regard to partnerships, the ones I usually hear about are with universities, zoos, native plant societies and other government agencies (federal and state primarily). NCDOT is conducting their own pollinator activities with money from corporate philanthropy. [See page 8 of [Appendix A](#) for information about the North Carolina DOT project Remley references.]

Literature Review: Pollinator Habitat Enhancement and Best Management Practices in Highway Rights-of-Way, Federal Highway Administration, May 2015.

https://www.environment.fhwa.dot.gov/ecosystems/documents/pollinators_BMPs_in_highway_ROW.pdf

From Chapter 1 of the document:

The objective of this literature review is to establish a foundation for the development of best management practices (BMPs) for pollinator habitat protection and enhancement in highway rights-of-way (ROWs) that will be described in two subsequent reports: (1) a high-level technical report for Federal Highway Administration (FHWA) and States' Departments of Transportation (DOT) program and policy staff; and (2) a detailed BMP guidance document for field applications by State DOT field staff and contractors. This document represents a first step in an effort to provide practicable BMPs that FHWA can offer transportation agencies to develop pollinator programs in their jurisdictions and enhance these programs where they already exist. This document does not include the FHWA BMPs, which are still under development.

Supporting the Health of Honey Bees and Other Pollinators, Council on Environmental Quality, The White House, October 2014.

https://www.whitehouse.gov/sites/default/files/docs/supporting_the_health_of_honey_bees_and_other_pollinators.pdf

This document “provides guidance and recommendations for creating and maintaining quality habitats for pollinators in new construction, building renovations, landscaping improvements, and in facility leasing agreements at Federal facilities and on Federal lands.”

Page 33 of the document addresses community-managed pollinator habitat, noting that “[t]he U.S. Forest Service with USDA provides numerous examples of participation activities with diverse community groups, encouraging partnerships and engagement with local, state, regional, and/or national organizations such as Master Naturalists, 4H Youth, Boy and Girl Scouts, Garden Clubs, and Audubon Clubs. Partnerships are constructed as agreements and in the form of memoranda of understanding. The intent is to connect with volunteer groups to leverage and educate community resources.”

Related Resource:

Eastern Region Native Plant Materials Accomplishment Report, Forest Service, U.S. Department of Agriculture, 2012.

http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5427015.pdf

As of the date of this report, 58 native plant and pollinator gardens had been established at the Eastern Region national forests and tallgrass prairie. Brief descriptions of project accomplishments provide information about volunteer opportunities and the partners/contractors/cooperators involved in the project.

Vegetation Management: An Ecoregional Approach, Federal Highway Administration, 2013.

https://www.environment.fhwa.dot.gov/ecosystems/veg_mgmt_rpt/vegmgmt_ecoregional_approach.pdf

Chapter 5 includes a description of four modern partnerships, including cooperative weed management areas; the Greater Yellowstone Area; interagency, Indian nation and international memoranda of understanding; and outdoor advertising and Florida. Included in the report are sample memoranda of understanding established in connection with these partnerships.

Nonprofit Organizations

Roadsides, Pollinator Conservation, The Xerces Society for Invertebrate Conservation, undated.

<http://www.xerces.org/pollinator-conservation-roadsides/>

The mission of this nonprofit organization is to protect wildlife through the conservation of invertebrates and their habitat. This Web page focuses on the organization's efforts to encourage pollinator conservation on roadsides.

Related Resource:

Pollinators and Roadsides: Managing Roadsides for Bees and Butterflies, Jennifer Hopwood, *Invertebrate Conservation Guidelines*, The Xerces Society for Invertebrate Conservation, May 2010.

http://www.xerces.org/wp-content/uploads/2010/05/roadside-guidelines_xerces-society1.pdf

This publication addresses roadside habitat creation and maintenance but not the use of volunteers to maintain the habitat.

State and Local Practices

States and local agencies offer a range of programs that can inform development of a partnership program to promote pollinator habitat. Some programs are specific to pollinators, while other programs are more general roadside management programs that encourage volunteer involvement in establishing or maintaining plant material along roadsides. Programs in the following states are addressed below:

- California.
- Illinois.
- Indiana.
- Iowa.
- Minnesota.
- Missouri.
- New York.
- North Carolina.
- Ohio.
- Pennsylvania.
- South Carolina.
- Texas.
- Virginia.
- Washington.
- Wyoming.

While most of the programs highlighted below are sponsored by state DOTs, county-level programs in California and Iowa are also addressed. Programs are organized into two categories:

- Pollinator programs.
- Other roadside management programs.

California

Other Roadside Management Programs

Yolo County Adopt-A-Road Program: A Plan for Community Road Care, Yolo County, California, July 2013.

<http://www.yolocounty.org/home/showdocument?id=23652>

While not specifically addressing the maintenance of pollinator habitat, this document describes a county roadside program that encourages the participation of volunteers to complete a wide range of roadside maintenance tasks.

From the program description:

The Adopt – A – Road Program encourages organizations, corporations, groups, and individuals to participate in keeping the county beautiful and safe by volunteering to maintain and enhance select Yolo County roadsides. When the public helps the county with pothole patching, tree trimming, roadside refuse removal and disposal, weed abatement, and ditch and culvert cleaning, the public directly contributes to creating a better community for the enjoyment of all residents. Adopt – A – Road participants will agree to maintain their commitments for 2 years, and they will have a lot to show for their efforts.

Illinois

Pollinator Programs

Highways as Nectar Corridors for Pollinators, Research Need for Sustainability Technical Advisory Group, Illinois Department of Transportation, August 2015.

<http://ict.illinois.edu/files/2015/08/Highways-as-Nectar-Corridors-for-Pollinators.pdf>

Illinois DOT's Sustainability Technical Advisory Group has identified this research need as part of its current research cycle. Research needs are used to solicit potential researchers to submit research ideas that might fulfill these needs.

From the research need statement:

Along with the federal government, the Illinois Department of Transportation (IDOT) and the Illinois Center for Transportation (ICT) recognize the need to increase and enhance habitat for pollinators and that this need could be met in part through the use of land within highway rights-of-ways. IDOT and ICT seek proposals to study the idea of establishing nectar corridors* within the Interstate 55 and 57 rights-of-ways in Illinois. A second part of the study would be to prepare a plan to implement measures to create a nectar corridor. The study would include field work to characterize vegetation within highway rights-of-ways. Close consideration would be given to the use of highway infields to create a series of habitat patches within the nectar corridor. There would be an emphasis on the creation (or enhancement) of habitat patches where rights-of-ways cross the central corn and soybean growing region of the state.

* Nectar corridors are a series of habitat patches containing plants that flower at the appropriate times during the spring and fall migrations. These patches provide stopping-off points for the migrating butterflies to refuel and continue their journey. Having these islands of nectar sources is particularly important within large areas of urban and agricultural development. The discontinuous patches of nectar sources are "corridors" that monarchs will follow, like stepping-stones across a stream to complete their migration (http://www.fs.fed.us/wildflowers/pollinators/Monarch_Butterfly/habitat/index.shtml).

"Rights-of-Way as Habitat Working Group," *Rights-of-Way as Habitat Working Group Meeting*, July 2015.

http://www.erc.uic.edu/assets/img/documents/1_Welcome_ROW_Working_Group.pdf

This presentation identifies the mission of a working group sponsored by the Energy Resources Center at the University of Illinois at Chicago. The ERC will contribute data and GIS tools, and facilitate the efforts of the Rights-of-Way Habitat Working Group. The working group's mission is to provide a forum to collaborate and share ideas, best practices and other information that promotes successful habitat projects along ROWs. Among the tasks the working group is expected to focus on are organizing meetings and workshops, assembling expertise and resources, and encouraging collaboration between landowners.

Indiana

Other Roadside Management Programs

Hoosier Roadside Heritage Program, Indiana Department of Transportation, undated.

<http://www.in.gov/indot/2583.htm>

The primary goal of this Indiana DOT project, begun in the late 1990s in an effort to beautify Indiana's roadways, is to "promote and incorporate native plants and wildflowers into Indiana's roadside landscape." Developed in cooperation with FHWA, the Indiana Department of Natural Resources, and the Indiana Department of Environmental Management, the program advocates "[g]reater use of native grasses and wildflowers," noting that "[r]oadsides planted with native grasses and wildflowers support more butterflies, bees and wildlife than roadsides dominated by non-native plants."

Iowa

Other Roadside Management Programs

Iowa Living Roadway Trust Fund, Iowa Department of Transportation, undated.

<http://www.iowadot.gov/lrtf/>

Administered by Iowa DOT, the Iowa Living Roadway Trust Fund is an “annual, competitive grant program that provides funding for integrated roadside vegetation management (IRVM) activities to eligible cities, counties, and applicants with statewide impact. In doing so, the Iowa DOT and its partners promote and educate the public about the need for an integrated approach to managing the vegetation along Iowa’s roadsides. This approach ensures that roadside vegetation is preserved, planted, and maintained to be safe; visually interesting; ecologically integrated; and useful for many purposes.”

Launched in 1990, the Living Roadway Trust Fund has provided more than \$17 million “for research and demonstration projects, vegetation inventories, education and training programs, gateway landscaping, snow and erosion control, and roadside enhancement and maintenance.”

“Iowa Roadside Management: Successes and What Could Be Better,” Joy Williams, Roadside Development Section, Office of Design, Iowa Department of Transportation, *Rights-of-Way as Habitat Working Group Meeting*, July 2015.

http://www.erc.uic.edu/assets/img/documents/3_Iowa_ROW_Habitat_Worksho_Chicago.pdf

This meeting presentation highlights the successes of county roadside maintenance programs in Iowa, contrasting them with the challenges associated with state DOT efforts. The Iowa Living Roadway Trust Fund is cast as the “key to success of county programs.”

Iowa’s Adopt-A-Highway Program, Iowa Department of Transportation, August 2015.

http://www.iowadot.gov/maintenance/pdf/adopt_a_highway.pdf

While most often associated with litter removal, the Adopt-A-Highway Program in Iowa is also used to permit volunteers to plant and/or maintain trees, shrubs, wildflowers and native grasses, and other activities if they receive the approval of Iowa DOT. This brochure describing the program notes that “[n]ew ideas on how to beautify our roadsides are encouraged.”

Some provisions of the program:

- Groups or individuals adopting sections of highway will be responsible for that roadside for a minimum of two years.
- Litter removal is automatically included in every Adopt-A-Highway sponsorship, even if the main project may be landscaping or another activity.
- In addition to litter pickup and beautification projects, adopting groups may also control noxious weeds by using Iowa DOT-approved methods, which may include hand weeding.
- A minimum distance for adoption is 0.5 mile for special project work. However, adoption of at least 2 miles is required for litter pickup.

The brochure notes that “[b]eautification projects may also be done along roads other than primary or state highways.” County conservation boards or county engineers oversee these activities.

“Adopt-A-Roadway Program Cleaning Up Johnson County,” Press Release, Secondary Roads Department, Johnson County, Iowa, May 2015.

<http://www.johnson-county.com/WorkArea/DownloadAsset.aspx?id=18083>

This press release encourages Johnson County residents to participate in the Adopt-A-Roadway program by becoming involved in “wildflower and native prairie plantings, preservation of existing native plant communities, landscaping or erosion control projects, the improvement of wildlife habitats and the control of invasive weeds or brush within the right-of-way.”

Related Resource:

Guidelines for the Adopt-A-Roadway Program, Secondary Roads Department, Johnson County, Iowa, undated.

<http://www.johnson-county.com/WorkArea/DownloadAsset.aspx?id=1373>

These guidelines describe program requirements, county responsibilities, the procedure for adopting a portion of the roadway and project-related rules.

Adopt-A-Roadside, Linn County, Iowa, undated.

<http://www.linncounty.org/576/Adopt-A-Roadside>

This website describes the county program to improve the quality of county road ROWs, including litter removal and beautification of the roadside.

Related Resources:

Adopt-A-Roadside Program Guidelines, Linn County Secondary Road Department, Linn County, Iowa, undated.

<http://www.linncounty.org/DocumentCenter/Home/View/736>

This two-page document outlines program requirements and responsibilities for Linn County and the sponsor (or applicant).

Application to “Adopt-A-Roadside,” Linn County, Iowa, undated.

<http://www.linncounty.org/DocumentCenter/Home/View/734>

This application specifies the sponsor’s (or applicant’s) and department’s responsibilities and stipulates what the sponsor agrees to by executing the application.

Minnesota

Pollinator Programs

Minnesota Pollinator Partnership, 2014 Request for Proposals, Environment and Natural Resources Trust Fund, Legislative-Citizen Commission on Minnesota Resources, State of Minnesota, July 2013.

http://www.lccmr.leg.mn/proposals/2014/pre-presentation_by_category/072-c.pdf

This request for proposal describes a project that was approved for funding for the period 2014-2017 by the State of Minnesota’s Environment and Natural Resources Trust Fund. Project sponsor Pheasants Forever and its partners “will complete 40 community pollinator projects on at least 40 acres, educate 800 youth & engage an additional 200 adults in the Minnesota Pollinator Partnership. The objectives of the Minnesota Pollinator Partnership will be to educate youth and communities across Minnesota on the value of important pollinating species and provide opportunities for youth groups and civic groups to help establish and maintain critical pollinator nesting and foraging habitat. Pollinator habitat will also be created on a minimum of 40-acres.”

Pollinator Best Management Practices for Roadsides and Other Rights-of-Way, Minnesota Department of Agriculture, undated.

https://www.mda.state.mn.us/protecting/bmps/~/_media/Files/protecting/bmps/pollinators/pollinatorbmpsroad.pdf

This document provides BMPs for MnDOT, county highway departments and engineers, Minnesota township supervisors, overhead utility companies and ROW-adjacent landowners to “reduce negative impacts on pollinator habitat resulting from current management practices, improve existing habitat, and create new habitat near, adjacent to, or in roadsides and other rights-of-way (ROW). Using these practices will make our landscape more pollinator-friendly, improve pollinator health, assist bee keepers, and help farmers produce food.”

Roadsides for Wildlife, Grassy Roadsides Can Be for the Birds!, Minnesota Department of Natural Resources, 2016.

<http://www.dnr.state.mn.us/roadsidesforwildlife/index.html>

The Roadsides for Wildlife program offers information about establishing native plants and other practices that enhance wildlife habitat in roadsides.

“What’s the BUZZ about Pollinators and Roadsides?” Minnesota Department of Natural Resources and Xerces Society, 2010.

<http://files.dnr.state.mn.us/assistance/nrplanning/community/roadsidesforwildlife/beesforroadsides.pdf>

This poster provides tips for managing roadsides to promote habitat for bees and butterflies, including enhancing flower diversity, providing nest sites and reducing the impact of mowing and spraying. The poster also provides information about websites and books that offer additional information on the topic.

Other Roadside Management Programs

Community Roadside Landscape Partnership Program, Minnesota Department of Transportation, 2016.

<http://www.dot.state.mn.us/roadsides/partners/>

This district-funded program makes annual awards to approved projects. Community applicants include counties, home rule charters, statutory cities and towns. Applicants can opt to request design assistance from MnDOT or design their own project. As the website indicates, “[a]pplicants not defined as a community must be sponsored by a community or other unit of government, capable of executing a binding agreement with MnDOT.”

From the website:

Funds awarded under this program must be used for roadside landscaping located on state trunk highway rights of way, with fee or easement title. Many areas of interstate freeways and high volume divided highways, with controlled access are excluded from this program due to liability, safety and access problems. Your MnDOT representative will help you determine if your location would be eligible. County State Aid highways are typically excluded since different funding mechanisms and procedural requirements apply to these roadways.

Related Resource:

MnDOT Community Roadside Landscaping Partnership Program: Application Manual, Minnesota Department of Transportation, February 2012.

<http://umvrdc.org/wp-content/uploads/MnDOT-Landscaping-Program.pdf>

From the abstract:

This manual describes the program and application requirements, and provides examples of required documents. Part I is the Program Description. Part II is the Application Form and the instructions to complete the form. Part III is the Appendices that provide other information pertinent to the application process.

Minnesota’s Railroad Rights-of-Way Prairie: A Report to the 1999 Legislature, Minnesota County Biological Survey, Division of Fish and Wildlife, Minnesota Department of Natural Resources, 1999.

http://files.dnr.state.mn.us/eco/mcbs/publications/railroad_row_booklet_scan.pdf

This report is the result of a directive of the 1997 Minnesota State Legislature to the Minnesota Department of Natural Resources to conduct a field review of active railroad ROW, identify native prairie and work cooperatively with railroad companies to develop voluntary best management practices for prairie lands within the companies’ ROW. The report summarizes “the methods and results of the field review and the effort to evaluate management practices.”

Among the tools that can assist the railroad industry with conservation efforts are a registry program (nonbinding commitments in which “railroads agree to provide good prairie stewardship in exchange for formal recognition

and technical assistance”); site-based planning (the cooperative development of site plans for prairie along railroad ROW to facilitate maintenance of prairie resources); and management agreements (a formal arrangement between the railroad industry and state or private agencies that exchanges technical expertise for limited access to land).

Missouri

Other Roadside Management Programs

Adopt-A-Highway, Missouri Department of Transportation, 2013.

<http://www.modot.org/services/community/adoptahighway.htm>

This program offers participants four options: litter removal, mowing, beautifying through landscaping and Grow Native! by planting native Missouri wildflowers and grasses. The agency provides participants with a safety training video and safety materials.

Related Resource:

Types of Adoption, Adopt-A-Highway, Missouri Department of Transportation, 2013.

<http://www.modot.org/services/community/adoptahighwaytypes.htm>

This website describes the types of activities that can be conducted within Missouri DOT’s Adopt-A-Highway program. Activities related to MnDOT’s interest in promoting pollinator habitat include landscape beautification and the Grow Native! program.

From the website:

Landscape Beautification

The department encourages adopters to plant and maintain highway roadsides to enhance the beauty of the environment. MoDOT suggests plantings such as flowers, shrubs, trees, wildflowers and native grasses to complement the roadsides’ neighboring land.

Grow Native!

A group can adopt a section of right of way solely for roadside native wildflowers and grasses. This option requires a group to plant Missouri native wildflowers on the roadside of their selected section and maintain their plantings. The adopted area will be larger and the plants used must be native to Missouri. Grow Native! is a Missouri Prairie Foundation program. www.grownative.org

Some native wildflowers and grasses that could be used for this project would be the coreopsis, which is pictured on the Adopt-A-Highway sign, coneflowers, little bluestem and others plants that originated in Missouri.

“Missouri Partnerships Result From Increased Awareness,” *Greener Roadsides*, Federal Highway Administration, Spring 2002.

https://www.environment.fhwa.dot.gov/ecosystems/greenerroadsides/gr_spring02p2.asp

While dated, this article in FHWA’s quarterly newsletter about vegetation management describes several examples of nontraditional partnerships in Missouri that have expanded Missouri DOT roadside programs.

New York

Other Roadside Management Programs

Adopt-A-Highway Program, New York State Department of Transportation, undated.

<https://www.dot.ny.gov/programs/adopt-highway>

Participants in this program are required to pick up litter along the adopted section of state highway at least four times a year for two years. Participants may also plant flowers and other New York State DOT-approved vegetation.

North Carolina

Pollinator Programs

NCDOT Pollinator Habitats, Wildflower Program, Roadside Environmental Unit, North Carolina Department of Transportation, undated.

http://www.ncdot.gov/doh/operations/dp_chief_eng/roadside/wildflowerbook/pollinator/

From the website:

The pollinator habitat effort is an extension of the popular NCDOT Wildflower Program focusing on sustaining the state’s strong agribusiness community. The NCDOT Roadside Environmental Unit is establishing pollinator habitats across the state. By utilizing land along the right-of-way to plant specific species of flowers, NCDOT is able to provide habitat for the dwindling pollinator population and enhance the traveling experience.

....

NCDOT partnered with the N.C. Department of Agriculture and Consumer Services to make 2015 the “Year of the Pollinator.” In addition, sponsors are joining in the effort. Bayer CropScience has pledged \$100,000 to NCDOT to establish these pollinator habitats along state roadways and the Bayer CropScience’s Bee Care Program will monitor the roadside plantings to determine the diversity of pollinator species that forage and collect pollen.

Ohio

Pollinator Programs

District 9’s Bee Pollinator Program, Ohio Department of Transportation, undated.

<http://www.dot.state.oh.us/districts/D09/Pages/Bee-Pollinator-Program.aspx>

This website describes an Ohio DOT pilot project to plant native prairie plant species to restore habitat and provide food for pollinators. The site includes links to program materials.

Related Resource:

“**Saving Ohio’s Pollinators — ODOT State Initiative**,” Candy Sarikonda, Monarch Joint Venture, September 8, 2015.

<http://monarchjointventure.org/news-events/news/saving-ohios-pollinators-odot-state-initiative>

This article describes a district-level pilot program to improve pollinator habitat along state-owned ROW that has been expanded to a statewide initiative called Saving Ohio’s Pollinators.

Other Roadside Management Programs

Section 900, Roadside Safety Landscaping Guidelines, Location and Design Manual, Ohio Department of Transportation, July 2014.

https://www.dot.state.oh.us/Divisions/Engineering/Roadway/DesignStandards/roadway/Location%20and%20Design%20Manual/Section_900_Jul_2014.pdf

While focused on the planting of trees and shrubs in ROWs by nonstate DOT entities, this publication may be of interest to MnDOT given the document's discussion of the application process and maintenance of plantings.

Pennsylvania

Other Roadside Management Programs

Chapter 13, Roadside Management, Publication 23: Maintenance Manual, Pennsylvania Department of Transportation, February 2016.

<http://www.dot.state.pa.us/public/PubsForms/Publications/PUB%2023/Pub%2023-Chapter%2013%20.pdf>

The Highway Beautification section of this chapter includes two programs addressing the use of nonstate DOT staff in managing roadside vegetation (see page 31 of the PDF):

Adopt And Beautify (AAB)

Volunteers beautify highway roadsides through landscape plantings and litter pick up over a two year commitment. District Roadside specialist handles site approval and the county coordinates supplies distribution.

Sponsor A Highway (SAH)

The department's contracted vendor secures interested businesses and other interested parties to pay for their skilled work force to perform roadside work including: litter removal, graffiti removal, sweeping, landscape plantings and mowing. Contractor also places signs recognizing sponsors along the roadside. Litter removal under this program covers one mile at a time and does not cover the same locations as the AAH program.

Links to permits and agreements appear on page 22 of the PDF, including:

Application for a Right-of-Way Vegetation Management Permit (For Limited Access Only), Form M-688L, Pennsylvania Department of Transportation, May 2012.

<http://www.dot.state.pa.us/public/PubsForms/Forms/M-688L.pdf>

The procedures in Pennsylvania DOT's Maintenance Manual describe the use of this permit:

All permit applicants must submit a complete M-688L for vegetation trimming, removal and/or planting with all required documentation, to the respective District Maintenance Office before a permit and agreement to maintain vegetation will be granted.

Highway Vegetation Management Agreement, Form M-688LA, Pennsylvania Department of Transportation, May 2012.

<http://www.dot.state.pa.us/public/PubsForms/Forms/M-688LA.pdf>

The procedures in Pennsylvania DOT's Maintenance Manual describe the use of this agreement:

All landscaping and compensatory vegetation planting must have a Maintenance Agreement (M-688LA). This agreement will control the landscaping and planting, including but not limited to administrative procedures, maintenance work and a maintenance schedule showing vegetation maintenance to be performed by the applicant.

Related Resource:

Adopt-A-Highway Application, Pennsylvania Department of Transportation, undated.

<http://www.dot.state.pa.us/public/Bureaus/hwybeaut/AAHApplicationForm.pdf>

This application includes the terms and conditions for participation in Pennsylvania DOT's Adopt-A-Highway program and a discussion of safety practices.

South Carolina

Other Roadside Management Programs

Vegetation Management Guidelines, Director of Maintenance Office, South Carolina Department of Transportation, February 2016.

<http://www.scdot.org/doing/technicalpdfs/publicationsmanuals/vegmgmtguide.pdf>

This guidance document includes sections addressing vegetation management (see page 19 of the guide) and beautification or enhancements (see page 21 of the guide) by non-DOT entities including utility providers, government entities, adjacent property owners, business owners, private citizens, and groups or organizations. An encroachment permit is required for any vegetation management activity performed by any non-DOT entity. Permits are reviewed by the local resident maintenance engineer in the respective county where the project is to occur. Applicants must include a plan with the application.

Related Resource:

Encroachment Permit Application Site, South Carolina Department of Transportation, October 2015.

http://www.scdot.org/doing/permits_Encroachment.aspx

This website provides access to South Carolina DOT's automated Encroachment Permit Processing System. These permits are required under South Carolina law to perform work on South Carolina DOT-maintained ROWs.

Texas

Pollinator Programs

Texas Monarch and Native Pollinator Conservation Plan, Texas Parks and Wildlife, October 2015.

https://tpwd.texas.gov/publications/pwdpubs/media/pwd_rp_w7000_2070.pdf

Addendum F, which begins on page 26 of the plan, describes Texas DOT's role in the conservation plan. The agency's partnerships are discussed on page 30:

TxDOT has established monarch conservation partnerships with USFWS [U.S. Fish and Wildlife Service] and NPSOT [Native Plant Society of Texas] on the monarch garden installation project. TxDOT maintains its partnership with CKWRI [Caesar Kleberg Wildlife Research Institute] on the TNS [Texas Native Seeds] and STN [South Texas Natives] projects, which directly benefits the conservation of all pollinator species. In addition, TxDOT is currently collaborating with the Mid-Coast Chapter Texas Master Naturalists, South Texas Chapter NPSOT, Texas Monarch Watch, and the USDA's Kika de la Garza Plant Materials Center on green antelope horn milkweed research within the US 77 ROW in Victoria County. As the Texas Monarch and Native Pollinator Conservation Plan continues to develop[,] TxDOT looks forward to establishing working relationship and collaborative partnerships with other entities sharing the same vision.

Other Roadside Management Programs

Landscape Partnership Program, Texas Department of Transportation, 2016.

<http://www.txdot.gov/government/programs/landscape.html>

Roadways eligible to participate in this partnership program include Interstate highways, U.S. highways, state highways, state spurs, state loops, farm-to-market and ranch-to-market roads, business routes and recreational roads. City streets and county roads are not eligible.

From the website:

The program was created to allow local governments, civic organizations or private businesses an opportunity to support the aesthetic improvement of the state highway system by donating 100 percent of the development, establishment, and maintenance of a landscape project on the right of way.

Donors

Landscape Partnership projects are initiated by the donor (local government or private entity). The donor submits an application to the appropriate TxDOT district office. The application includes a project concept plan containing sketches, drawings, specifications, and descriptive text as necessary for the department to consider the application.

Applications are evaluated by the department and an agreed value is placed on the project. Following evaluation of the application an agreement is developed that stipulates the donation calculation for the project.

Continued Maintenance

The donor must agree to perform landscape maintenance for a period of not less than two years. All project activities and landscape maintenance responsibilities are documented in a project agreement. The project agreement is executed by both parties prior to the initiation of any project activities.

Related Resource:

Landscape Partnership Program, Texas Department of Transportation, October 2007.

http://ftp.dot.state.tx.us/pub/txdot-info/library/pubs/bus/design/landscape_partnership.pdf

This document provides responses to frequently asked questions about Texas DOT's Landscape Partnership Program, sample agreements, the state regulation controlling the program and the program application.

Virginia

Pollinator Programs

Pollinator Habitat Program (PHP), Virginia Department of Transportation, December 2015.

http://www.virginiadot.org/business/resources/maintenance/PHP_Dec_2015.pdf

This publication describes Virginia DOT's Pollinator Habitat Program to "create naturalized areas planted with nectar and pollinator species." Launched in 2014 as a pilot project, the program's goals include:

- Provide enhanced habitat areas for threatened and dwindling pollinator species such as bees and butterflies while maintaining VDOT mission of safety. "Pretty" roadsides have actually been shown to reduce driver fatigue and improve mood.
- Reduce maintenance costs by reducing the number of mowings/year and other vegetation maintenance costs such as invasive species control and herbicide applications.
- More holistically implement an Integrated Vegetation/Pest Management program statewide. This will include increases in erosion and sediment control, reductions in stormwater runoff, less use of pesticides, increases in habitat and visual aesthetics.

Currently, the program is funded through the purchase of the state's "wildflower" license plate. Partners, including Virginia Dominion Power/Dominion Trust, PBS Films, Valley Land, White House Office of Science & Technology, Loudoun Wildlife Conservancy and Virginia Native Plant Society, also provide funding, labor and materials. The agency plans to expand the program statewide, focusing for the next year on naturalized gardens and meadows at state rest areas. Interpretive signage is being developed to educate the public about the program.

Related Resource:

"VDOT's Pollinator Habitat Program Moves Toward Statewide Implementation," Press Release, Virginia Department of Transportation, September 29, 2015.

http://www.virginiadot.org/newsroom/statewide/2015/vdots_pollinator_habitat_program86655.asp

From the press release:

The Virginia Department of Transportation (VDOT) and Dominion Virginia Power teamed up with the Loudoun Wildlife Conservancy, Native Plant Society and Valley Land on Tuesday to plant more than 8,000 pollinator-friendly plants at the Dale City Rest Area on Interstate 95 north in Northern Virginia. This project is part of VDOT's Pollinator Habitat Program, which aims to create "waystations" or refuges for Monarch butterflies and other threatened pollinators.

....

VDOT provided project management, site preparation, and volunteers for the Dale City project. Dominion Virginia Power provided volunteers, and Loudoun Wildlife Conservancy provided additional technical expertise. Valley Land provided mulch for the project area.

Washington

Other Roadside Management Programs

Integrated Roadside Vegetation Management Plan, Eastern Region, Area 3, Washington State Department of Transportation, 2012.

<http://www.wsdot.wa.gov/NR/rdonlyres/C94EE6EC-65AD-4F24-A28C-3A075EC9A63B/0/DavenportPlanERarea3.pdf>

Page 18 of the report (page 21 of the PDF) addresses "Special Maintenance Areas," which are sections of roadside for which unique maintenance requirements or existing arrangements have been established with external organizations. These maintenance areas may include interchanges, community entrances or enhancement areas, areas maintained by cities, bicycle paths, stormwater retention ponds, state parks, wellheads, environmentally sensitive areas, school zones and roadsides adjacent to individual properties.

The plan also addresses the state's AAH program, indicating that in addition to its focus on litter control, the program also allows participants to conduct limited planting and maintenance of specific areas. The agency also permits other partnerships that are established through general permits and agreements. As the plan indicates, "[v]olunteer groups that do enhancement planting on WSDOT roadsides are typically required to establish and maintain the plantings."

Wyoming

Other Roadside Management Programs

Cooperative Highway Landscape Program, Wyoming Department of Transportation, 2013.

http://www.dot.state.wy.us/home/engineering_technical_programs/environmental_services/chlp.html

This is a grant-based program for which the “sponsoring organization must demonstrate they have adequate resources to complete the project and associated maintenance. Examples of qualifying organizations may include: municipalities, counties, conservation districts, and civic groups.”

From the website:

Purpose:

Encourage the planting and nurturing of native vegetation, wildflowers and xeriscape plantings within Wyoming highway system right of way and rest areas.

Overview:

This program provides financial assistance to projects which encourage well-designed landscaping featuring low-maintenance, native-adapted species and xeriscapes. Financial assistance can be provided to organizations and public entities responsible for installation of landscape materials under WYDOT supervision. Xeriscapes are low-maintenance landscapes composed of adaptive low water-use plants.

Related Resource:

Wyoming Cooperative Highway Landscape Program: Application, Wyoming Department of Transportation, August 2007.

http://www.dot.state.wy.us/files/live/sites/wydot/files/shared/Environmental_Services/Documents/Wyoming%20Cooperative%20Highway%20Landscape%20Program%20Application.pdf

This application for participation and funding must be accompanied by a map of the proposed project location and a planning detail diagram.

Cooperative Weed Management Areas

Presented below are documents that describe efforts to develop and maintain partnerships to manage roadside weeds. These documents address organizational efforts, the development of strategic and operating plans, and the agreements developed in connection with the partnership.

CWMA Cookbook: A Recipe for Success; A Step-by-Step Guide on How to Develop a Cooperative Weed Management Area in the Eastern United States, Midwest Invasive Plant Network, 2011.

<http://bugwoodcloud.org/mura/mipn/assets/File/CWMACookbook2011reduced.pdf>

This guide describes the steps involved in developing a cooperative weed management area, including organizational efforts and development of strategic and operating plans, and the agreements that can be used to formalize the partnership.

Memorandum of Understanding Template, Center for Invasive Species Management, 2006.

www.weedcenter.org/cwmas/docs/CWMA_MoU%20sample.doc

This is a sample memorandum of understanding to be executed by the entities participating in a cooperative weed management area, which is defined as “a partnership of federal, state, and local government agencies, tribes, individuals, and various interested groups that manage invasive species (or weeds) within a defined area.”

Cooperative Weed Management Areas, Montana State University, Montana Department of Agriculture and U.S. Department of Agriculture Natural Resources Conservation Service, 2011.

<http://store.msuextension.org/publications/AgandNaturalResources/4521.pdf>

This brochure describes the steps involved in organizing, developing and operating a successful cooperative weed management area.

Chapter 9, Roadsides — Front Yard of the Nation, Bonnie Harper-Lore, Invasive Plant Management Issues and Challenges in the United States: 2011 Overview, pages 93-108, 2011.

Citation at <http://pubs.acs.org/doi/abs/10.1021/bk-2011-1073.ch009>

From the abstract:

Through the years, a number of constraints to roadside vegetation management have been identified. These include inconsistent terminology, a lack of expertise at the local level, a lack of public awareness, safety practices that conflict with effective vegetation management practices, erosion control requirements that led to planting of weed infested seed mixes, and climate change. In recent years, these challenges have been addressed in some areas by the formation of interagency weed management areas, such as the Greater Yellowstone Weed Coordinating Committee. Such interagency partnerships allow land management agencies and organizations in a defined area to cooperate in controlling invasive plants that spread across the local landscape without consideration for political boundaries. Managing vegetation along roads and highways that pass through and connect different communities is the first line of defense in making sure that invasive plants are not spread across the landscape of America.

Appendix A

Partnerships for Promoting Pollinator Habitat: Survey Results

The full text of survey responses is provided below. For reference, an abbreviated version of each question is included before the response. Where applicable, survey sections have been omitted if the respondent chose not to respond to those questions. The full question text appears on page 8 of this report.

California

Contact: Ken Murray, Senior Landscape Architect, Office of Landscape and Litter Abatement, California Department of Transportation, 916-653-0086, Kenneth.Murray@dot.ca.gov.

1. **Description of pollinator program:** Caltrans uses native plants and grasses in their erosion control mixes for all projects that disturb soil. They are not tailored per se for pollinators, however, the plant material that is used may benefit pollinators.
- 1A. **Measuring program success:** No, there is no existing program that focuses specifically on pollinators.
2. **Permit volunteer efforts to maintain roadsides?** Yes.
- 2A. **Plans to develop partnership program:** N/A

Program Development and Structure

- A. **Program name:** The Caltrans Adopt-A-Highway (AAH) Program.
- B. **Program in existence since:** Since 1989.
- C. **Describe program development:** Participation in the FHWA roadside adoption program.
- D. **Who manages program?** Caltrans Division of Maintenance.
- E. **Types of ROW in program:** Federal and state highways.
- F. **Number of miles of ROW in program:** 9,475 shoulder miles.

Program Participants

- A. **Number of program participants:** 12,810.
- B. **Encouraging program participation:**
 - B1. **Formal outreach program?** Yes, AAH coordinators and maintenance supervisors promote the AAH program.
 - B2. **ROW signage or other incentive?** Participants receive acknowledgement signs for their participation in the AAH program.
- C. **Activities volunteers perform:** Vegetation control, tree/shrub planting, wildflower planting.
- D. **Addressing safety of program participants:** All new adoptions are required to attend a safety orientation meeting prior to beginning adoption activities.

Program Funding

- A. **How program is funded:** This is a primarily a volunteer program. Sponsored adoptions are paid for by the individual hiring a contractor to perform the adoption activities.
- B. **Annual costs:** Program is valued at over \$19 million from the volunteer participation in the program as a savings to the state.

Program Agreements/Permits

- A. **Description of agreements/permits:** Handled as encroachment permits with a five-year length.
 - B. **Risk/liability for public versus private program participants:** Maintenance agreements are used between Caltrans and other public agencies. Liability language is contained in the maintenance agreement. Encroachment permits are used for participants in the AAH program. Encroachment permit language covers liability.
 - C. **Ensuring compliance with agreement/permit:** Maintenance supervisor monitors site and reports any noncompliance to the district AAH coordinator that informs the participant of needed action for compliance with the permit requirements for the site they are responsible for.
 - C1. **Responsibility for agreement/permit oversight:** See above.
 - D. **Actions taken when nonpublic partner fails to comply?** Letter of Warning (initially) and termination of permit if the permit holder fails to comply with requests for meeting permit requirements.
- 3. **Partnership program similar to other roadside maintenance programs?** See response above.
 - 4. **Partnerships with state conservation, counties or local agencies?** They usually ask for our program information for creating their own volunteer adoption-type programs.
 - 5. **Program successes:** Continual participation in the program after 27 years. Value of \$19 million. Cleanup of litter and graffiti to benefit the environment and community beautification.
 - 5A. **How measuring success:** We are currently working on expanding participation in the AAH program and tracking participation monthly.
 - 6. **Program challenges:** Difficulty in increasing participation in a volunteer program.
 - 6A. **How challenges overcome:** Benefits of program participation to businesses and groups.
 - 7. **Additional comments:** [No response.]

Program Documents

The Adopt-A-Highway (AAH) Program, California Department of Transportation, 2016.

<http://adopt-a-highway.dot.ca.gov/>

This website provides information about Caltrans' AAH program, including an application, regulations and informational handouts.

Adopt-A-Highway Program Regulations, California Department of Transportation, January 2010.

http://adopt-a-highway.dot.ca.gov/13_Regulations_1-21-10.pdf

This publication includes the California code for the AAH program.

Appendix D: Forms, Encroachment Permits Manual, California Department of Transportation, March 2015.

[http://www.dot.ca.gov/hq/traffops/developserv/permits/pdf/manual/Appendix_D_\(WEB\).pdf](http://www.dot.ca.gov/hq/traffops/developserv/permits/pdf/manual/Appendix_D_(WEB).pdf)

See page 14 of the PDF for the encroachment permit for the AAH program.

Idaho

Contact: Cathy Ford, Roadside Program Manager, Idaho Transportation Department, 208-334-8416, Cathy.Ford@itd.idaho.gov.

1. **Description of pollinator program:** ITD promotes native species by including native species in all of our seed mixes for construction and maintenance projects. These projects are either contracted out (such as construction projects) or done with agency resources and equipment. ITD also implements the “Operation Wildflower Program” to support establishment of native species within appropriate ROWs which is funded and maintained by the district offices and staff. Currently, ITD maintains most ROWs with agency resources and equipment with the exception of contracting specific maintenance activities for specific road sections.
- 1A. **Measuring program success:** ITD uses the 70 percent vegetation establishment over three to five years as a rule or target for accomplishing and completing environmental requirements. I also make annual visits to various statewide projects and take photos and gather visual information on vegetation establishment and seeding projects.
2. **Permit volunteer efforts to maintain roadsides?** ITD authorizes private citizens or specific groups to disperse appropriate seed within the ROWs on selected wildflower projects under the Operation Wildflower Program. This program has not been very active in past years but is becoming more active in recent years. ITD is currently pursuing permitting of non-DOT staff or private companies to work on a pollinator demonstration (pilot) project. Not quite there yet, still in the planning phase, pursuing how this would work and obtaining interest groups and partnerships.
- 2A. **Plans to develop partnership program:** Yes.

Program Documents

Operation Wildflower, Idaho Transportation Department, undated.

<https://itd.idaho.gov/highways/ops/maintenance/Volunteer/wild%20flower/wildflower.htm>

From the website:

Through the Operation Wildflower Program, Adopt-A-Highway volunteer groups have the opportunity to participate in ITD-approved wildflower planting on their adopted sections.

Iowa

Contact: Joy Williams, Vegetation Management Agronomist, Iowa Department of Transportation, 515-233-7729, Joy.Williams@dot.iowa.gov.

1. **Description of pollinator program:** Since the early 1990s, we have seeded all state rights of way to native vegetation, except shoulders, medians and urban areas. We have also revegetated over 15,000 acres by killing out existing cool-season grasses with glyphosate and interseeding native grasses and wildflowers. We do extensive tree and shrub plantings by contract that include many flowering species that provide nectar and wind protection for pollinators.
- 1A. **Measuring program success:** We measure total acres seeded to native grasses and wildflowers through landscaping and erosion control contracts, and total trees and shrubs installed through landscaping contracts.
2. **Permit volunteer efforts to maintain roadsides?** Yes.
- 2A. **Plans to develop partnership program:** N/A

Program Development and Structure

- A. **Program name:** Sponsorship of Highway Plantings.
- B. **Program in existence since:** 1990.
- C. **Describe program development:** [No response.]
- D. **Who manages program?** Managing the program is a joint effort. The districts work with the applicants and approve the permits. The Office of Maintenance is responsible for the policy. The Roadside Development Section of the Office of Design reviews the planting plans before permits are approved, reviews policy and the planting sponsorship criteria, and administers grant programs.
- E. **Types of ROW in program:** Interstate, U.S. and state highways.
- F. **Number of miles of ROW in program:** We do not have that data. Most plantings are less than a mile, at gateways to communities.

Program Participants

- A. **Number of program participants:** We do not have that data. There are hundreds.
- B. **Encouraging program participation:**
 - B1. **Formal outreach program?** We do not have a formal outreach program through the DOT, but rather through partnerships with Trees Forever and Iowa Living Roadway programs that assist communities with landscape design.
 - B2. **ROW signage or other incentive?** We only offer signage if the planting is included in an Adopt-a-Highway program, in which two miles of litter pickup is required.
- C. **Activities volunteers perform:** All activities required for the planting, however, we require a separate “Work on Right-of-Way” permit if the applicant wants to burn. We require that any herbicide application be done by a certified pesticide applicator in Category 6, ROW.
- D. **Addressing safety of program participants:** We only allow access to the right of way through adjacent property or the back side of ramps. We require adult supervision if applicants are 16 years of age or younger. We require applicants to wear fluorescent green safety vests and restrict work to 30 minutes after sunrise to 30 minutes before sunset.

Program Funding

- A. **How program is funded:** Applicants can apply for grants through the Living Roadway Trust Fund, <http://www.iowadot.gov/lrtf/grants.html>, the DOT/DNR [Department of Natural Resources] fund, or federal enhancement funds.
- B. **Annual costs:** It varies from year to year.

Program Agreements/Permits

- A. **Description of agreements/permits:** See attached “Application and Permit to Sponsor Highway Plantings” [see Program Documents]. This permit is currently under revision to make it electronically fillable and add stipulations, such as the FHWA requirement for the fluorescent green safety vest.
- B. **Risk/liability for public versus private program participants:** Risk is managed through strong liability waiver and hold harmless statements on the permit.
- C. **Ensuring compliance with agreement/permit:** [No response.]
- C1. **Responsibility for agreement/permit oversight:** The district is responsible for oversight of the permit but usually does not have staff present during the planting process to ensure compliance with

the planting plan.

D. **Actions taken when nonpublic partner fails to comply?** We terminate the agreement, at the sole discretion of the department.

3. **Partnership program similar to other roadside maintenance programs?** Yes, we encourage use of native plants, and it is a requirement for grant awards.

4. **Partnerships with state conservation, counties or local agencies?** Most of the outreach has been through these two organizations:

[Iowa's Living Roadways Community Visioning Program]

<https://www.extension.iastate.edu/programbuilder/details.aspx?programid=26>

[Trees Forever]

<http://www.treesforever.org/>

See websites for contact information.

5. **Program successes:** [No response.]

5A. **How measuring success:** No specific measure.

6. **Program challenges:** Maintenance of plantings is sometimes an issue. Although the time period that the applicant agrees to maintain the planting is listed on the permit, there can be misunderstandings about when the department is responsible for maintenance.

6A. **How challenges overcome:** [No response.]

7. **Additional comments:** [No response.]

Program Documents

Sponsorship of Highway Plantings, Policy No. 610.14, Policies and Procedures Manual, Iowa Department of Transportation, October 2003.

See [Appendix B](#).

From the policy:

A. It is the policy of the Highway Division to require any person or organization desiring to establish or maintain plantings within the right of way of a primary highway to obtain a permit from the Highway Division before proceeding with such work.

B. Within the corporate limits of a city, the adjacent property owner or the city may sow appropriate lawn grasses in the right of way of less than fully controlled access highways without formal DOT permission. However, a permit is required for sowing grasses as an experimental plot or as an organization-sponsored project.

The policy includes Appendix A, Roadside Planting Sponsorship Criteria, and Application and Permit to Sponsor Highway Planting.

Missouri

Contact: Stacy Armstrong, Senior Roadside Management Specialist, Missouri Department of Transportation, 573-751-8647, Stacy.Armstrong@modot.mo.gov.

1. **Description of pollinator program:** MoDOT has many programs and practices that support the health of and habitat for pollinators. There is one program specifically named for pollinators.

- Reduced mowing for cost savings and to encourage wildflowers and native grasses. Generally,

urban areas are mowed more frequently than rural areas. Sight distance is maintained in all areas.

- Herbicides are selectively used primarily to control noxious weeds and brush, and to limit vegetation height. MoDOT uses no restricted-use herbicides and minimizes off-target overspray.
- Biological controls are used for musk thistle and spotted knapweed.
- Adopt-A-Highway has a beautification option for others to plant and maintain pollinator habitat on highway rights of way.
- Converted 1,100 acres of non-native vegetation to native vegetation using Transportation Enhancement funds in partnership with the Missouri Department of Conservation.
- The seeding mix for revegetation of rural construction projects includes white clover, native grasses and a variety of native wildflowers. The urban construction project seed mix includes white clover. Although white clover is not a native, it is beneficial to honey bees.
- The Roadside Pollinator Project is a partnership with the St. Louis Zoo. A demonstration pollinator garden at MoDOT's Highway Gardens on the State Fairgrounds in Sedalia was planted. The St. Louis Zoo secured a private foundation grant for pollinator plantings on rights of way in Cole and Webster counties.
- MoDOT is on the steering committee for Missouri Monarch and Pollinator Collaboration. The mission of the group is to engage all Missourians to increase and sustain habitat for monarchs and pollinators. They are also developing the Missouri Monarch and Pollinator Conservation Plan to, in part, clearly state Missouri monarch and habitat needs and how to meet those needs. Various state and federal agencies, NGOs [nongovernmental organizations], private landowners, and for-profit groups are part of the collaborative.
- MoDOT has created a Pollinator Working Group which is to begin soon to further develop policy and guidelines to promote pollinators on our rights of way.

1A. **Measuring program success:** Under development.

2. **Permit volunteer efforts to maintain roadsides?** Yes.

2A. **Plans to develop partnership program:** N/A

Program Development and Structure

- A. **Program name:** Most of this type of activity is handled through Adopt-A-Highway. The majority of adoptions are for litter cleanup; however, there are options for beautification, mowing and/or Grow Native!
- B. **Program in existence since:** 1987.
- C. **Describe program development:** Patterned after TxDOT, with additional options added.
- D. **Who manages program?** A statewide coordinator and one coordinator for each of MoDOT's seven districts, as a part of their overall duties (not full-time job, although it could be). These coordinators work closely with the district roadside managers and/or Traffic Division on beautification projects.
- E. **Types of ROW in program:** All routes under MoDOT's jurisdiction. Projects are reviewed on an individual basis to determine if it is a suitable location.
- F. **Number of miles of ROW in program:** Maximum of approximately 34,000 centerline miles, although not all of those miles are suitable.

Program Participants

- A. **Number of program participants:** Unknown how many are specifically involved in just

beautification projects. We have almost 5,000 adoptions with about 50,000 volunteers. My guess is about 5 percent are beautifications.

B. Encouraging program participation:

- B1. **Formal outreach program?** Not specifically for beautification although discussions have begun with Master Naturalists and Master Gardeners.
- B2. **ROW signage or other incentive?** Primarily the Adopt-A-Highway sign.
- C. **Activities volunteers perform:** All types of activities (that MoDOT would normally do) with prior approval and safety concerns addressed.
- D. **Addressing safety of program participants:** Use existing Adopt-A-Highway safety materials.

Program Funding

- A. **How program is funded:** Those wanting to do plantings are required to provide all planting materials, labor, etc. for the project. They are also responsible for maintenance of the planting. MoDOT supplies signs, trash bags, disposal of filled trash bags, safety vests, caution flags, safety video and safety tips for working along roadsides.
- B. **Annual costs:** Program is not a separate item and is included in overall costs.

Program Agreements/Permits

- A. **Description of agreements/permits:** Adopt-A-Highway agreement with additional planting and maintenance information provided [see Program Documents].
 - B. **Risk/liability for public versus private program participants:** No difference.
 - C. **Ensuring compliance with agreement/permit:** [No response.]
 - C1. **Responsibility for agreement/permit oversight:** District responsibility.
 - D. **Actions taken when nonpublic partner fails to comply?** The agreement can be revoked but they are encouraged to comply first.
- 3. **Partnership program similar to other roadside maintenance programs?** Yes, Adopt-A-Highway as explained earlier.
 - 4. **Partnerships with state conservation, counties or local agencies?** Ongoing, most recently through the Missouri Monarch and Pollinator Collaboration.
 - 5. **Program successes:** [No response.]
 - 5A. **How measuring success:** This is difficult to measure, since I don't think measuring miles and/or acres gives an accurate measure of success. My experience is that our volunteers come away with a better appreciation and understanding of what MoDOT has to deal with.
 - 6. **Program challenges:** [No response.]
 - 6A. **How challenges overcome:** With limited staffing, one of the challenges is getting enough time devoted to the projects. Difficult to overcome but try to build support from various levels.
 - 7. **Additional comments:** [No response.]

Program Documents

Adopt-A-Highway Agreement, Missouri Highways and Transportation Commission, revised October 2006.

See [Appendix C](#).

In addition to completing this agreement, participants in MoDOT's Adopt-A-Highway program are required to submit additional information about what they plan to plant, landscape design, etc.

North Carolina

Contact: Derek Smith, Roadside Vegetation Asset Management Engineer, North Carolina Department of Transportation, 919-707-2939, DCSmith@ncdot.gov.

1. **Description of pollinator program:** The North Carolina Department of Transportation recently completed its 30th anniversary of providing wildflowers along our rights of way to support pollinator species. We have expanded our wildflower program to include a specific perennial pollinator mix containing 26 pollinator-friendly species. In addition, along our roadsides, we have installed native flowering trees including redbuds and sourwood as well as a host of ornamental plantings to support pollinator species.
- 1A. **Measuring program success:** We have photographic evidence supporting the increase of pollinators on our wildflower beds. In addition, Dr. Danesha Seth Carley, North Carolina State University researcher, and her graduate student Ms. Jen O'Brien have collected pollinator information along our rights of way. Their research shows a huge increase of pollinators on wildflower beds versus traditional rights of way.
2. **Permit volunteer efforts to maintain roadsides?** As a general rule, no. However, we contract with several private companies and cities across NC to help us maintain many ornamental plantings that contain native plants.

Through an agreement process, if a city agrees in advance to maintain an ornamental planting, we will work with them to develop a mutually agreeable design, install the ornamentals and inspect their maintenance operations. A copy of one such agreement is attached [see Program Documents].
- 2A. **Plans to develop partnership program:** [No response.]

Program Development and Structure

- A. **Program name:** The North Carolina Wildflower Program.
- B. **Program in existence since:** 30 years.
- C. **Describe program development:** In 1985, our first lady, after reading an article about the Lady Bird Johnson Wildflower Program, asked the department to consider planting wildflowers along the roadsides. Initially, 12 acres were seeded in 1985. Last year our department managed 1,500 acres of wildflowers across North Carolina.
- D. **Who manages program?** The program is managed through a collaborative effort between the Central Roadside Unit and each of our 14 regional Roadside Division teams.
- E. **Types of ROW in program:** We focus our efforts along interstate and primary roads. According to published reports, North Carolina is the 6th most visited state and our travel and tourism industry generates about \$23 billion annually.
- F. **Number of miles of ROW in program:** There are approximately 15,000 miles of right of way that are eligible for this program.

Program Participants

- A. **Number of program participants:** Each of our 14 Roadside Departments has 2-3 employees that plant wildflowers during October and July. During the other months they have additional job responsibilities.

- B. **Encouraging program participation:**
 - B1. **Formal outreach program?** No.
 - B2. **ROW signage or other incentive?** N/A
- C. **Activities volunteers perform:** Bed preparation, nutrient amendment applications, layout development, installation and all maintenance activities.
- D. **Addressing safety of program participants:** The cities that participate have their own safety training and the department provides safety training for our employees.

Program Funding

- A. **How program is funded:** The North Carolina Wildflower Program is funded by contributions from citizens and private corporations as well as through the sale of personalized license plates.
- B. **Annual costs:** The budget varies depending upon the number of individuals purchasing personalized license plates, but last year we received \$1.3 million for our statewide efforts.

Program Agreements/Permits

- A. **Description of agreements/permits:** These written agreements vary depending upon location within the state. However, they describe the responsibilities of each party and clarify expectations [see Program Documents for an example].
 - B. **Risk/liability for public versus private program participants:** N/A
 - C. **Ensuring compliance with agreement/permit:** NCDOT inspectors routinely survey the planting projects for compliance.
 - C1. **Responsibility for agreement/permit oversight:** See above.
 - D. **Actions taken when nonpublic partner fails to comply?** Our first attempt to correct issues is through email or telephone calls. Our second line of defense is a strongly worded letter; if that fails, then the planting is removed and future applications for planting are generally denied.
- 3. **Partnership program similar to other roadside maintenance programs?** N/A
 - 4. **Partnerships with state conservation, counties or local agencies?** No.
 - 5. **Program successes:** Cooperation with cities has helped to reduce our routine maintenance budget. As the plantings are located within ETJs [extraterritorial jurisdictions], the cities want them to look good so as to leave a positive impression upon visitors and potential business prospects.
 - 5A. **How measuring success:** However, for the most part, these plantings are performing to their designed level of performance.
 - 6. **Program challenges:** We have experienced a few cases where city budgets have not provided long-term maintenance support for those managing the plantings.
 - 6A. **How challenges overcome:** Teamwork and a cooperative spirit have kept the program operational.
 - 7. **Additional comments:** No, but thank you for the opportunity to participate.

Program Documents

North Carolina Wildflower Program, Roadside Environmental Unit, North Carolina Department of Transportation, undated.

http://www.ncdot.gov/doh/operations/dp_chief_eng/roadside/wildflowerbook/

This website includes a link to the agency's pollinator-specific efforts.

Landscape Agreement, North Carolina Department of Transportation and City of Elizabeth City, September 2015.

See [Appendix D](#).

As the survey respondent noted, these agreements “describe the responsibilities of each party and clarify expectations.”

Ohio

Contact: Marci A. Lininger, Coordinator, Ohio Pollinator Habitat Initiative, U.S. Fish and Wildlife Service, Ohio Field Office, 614-416-8993, ext. 27, Marci_Lininger@fws.gov.

1. **Description of pollinator program:** We work with a strategic network of partners across the state that consists of state, federal, nonprofit, for profit, universities, schools, churches, businesses, etc. creating, enhancing or restoring habitat wherever possible.
- 1A. **Measuring program success:** Through efficient maintenance and monitoring efforts that inhibit invasive plant growth and provide establishment of native plants beneficial for pollinators and monarchs.
2. **Permit volunteer efforts to maintain roadsides?** Yes.
- 2A. **Plans to develop partnership program:** N/A

Program Development and Structure

- A. **Program name:** The Ohio Pollinator Habitat Initiative.
- B. **Program in existence since:** 1.5 years.
- C. **Describe program development:** The partnership was developed in the face of the petition to list the monarch butterfly. Through conversations on how the state of Ohio could provide best conservation practices, we developed a statewide network of partners to provide landscape-level conservation for all Ohio pollinators.
- D. **Who manages program?** The program is coordinated by Marci Lininger, but the program functions and works as a cohesive unit throughout the state.
- E. **Types of ROW in program:** All roads, odd areas and strategic back slopes or other strategic areas are included.
- F. **Number of miles of ROW in program:** All strategic roadway areas are involved. Right now we have over 300 acres of on-the-ground conservation projects occurring for monarchs and pollinators within strategic areas of right of way.

Program Participants

- A. **Number of program participants:** Pheasants Forever/Quail Forever state and local chapters, Ohio Department of Transportation, Ohio Department of Natural Resources Division of Wildlife, Ohio Department of Corrections and Rehabilitation, U.S. Fish and Wildlife, U.S. Fish and Wildlife Partners, American Electric Power, Monarch Joint Venture and others.
- B. **Encouraging program participation:**
 - B1. **Formal outreach program?** Yes, we have many speaking engagements across the state and attend many meetings throughout the state providing feedback, expertise and education through talks and workshops (picking up more partners along the way).
 - B2. **ROW signage or other incentive?** Yes, we post educational signs that highlight the partnership

that took place in order to make the project a reality.

- C. **Activities volunteers perform:** Site selection, site preparation, planting, evaluation and aftercare.
- D. **Addressing safety of program participants:** We have agreements with the volunteers and contracts with contractors.

Program Funding

- A. **How program is funded:** The program is a grassroots effort. All funds or supplies are donated on a project-by-project basis.
- B. **Annual costs:** None.

Program Agreements/Permits

- A. **Description of agreements/permits:** Each project can be different depending on the type of organizing and partnering that has taken place. Each group has a standard permit or agreement that can be entered into depending on the needs of the project. For example, MOU [memorandum of understanding] or letter of commitment or letter of support.
 - B. **Risk/liability for public versus private program participants:** Each group is responsible for their own safety and insurance.
 - C. **Ensuring compliance with agreement/permit:** The DOT oversees the completion of and milestone markers for all projects that occur within rights of way.
 - C1. **Responsibility for agreement/permit oversight:** See above.
 - D. **Actions taken when nonpublic partner fails to comply?** If the agreement is an official paid contract, then compensation is withheld until the agreed upon contractual obligations have been met. With letters of support or letters of commitment, no action is taken.
- 3. **Partnership program similar to other roadside maintenance programs?** These conversations are ongoing and positive at this time.
 - 4. **Partnerships with state conservation, counties or local agencies?** These conversations are ongoing and positive at this time.
 - 5. **Program successes:** We have a growing list of partners statewide and have been able to provide tangible outreach and on[-the-]ground conservation that would have otherwise not occurred if not for the initiative.
 - 5A. **How measuring success:** We are creating a database of projects w[ith] acreage and plant types. We are creating a database for all outreach and education as well as speaking engagements.
 - 6. **Program challenges:** Collaborating with multiple individuals and agencies on a statewide scale can prove challenging at times. Being able to communicate like-minded ideas can also be challenging.
 - 6A. **How challenges overcome:** As the partnership grows, we learn more about each other and the requirements that partners need on the ground. Through quarterly meetings and informal gatherings, we have been able to get to know each other and how we can best work together moving forward.
 - 7. **Additional comments:** I would stress that a bottom-up approach is best when trying to develop landscape-level partnerships and conservation efforts. Working on the ground with people involved will prove [to be] the most effective when building partnerships and trust.

Program Documents

Joint Use License Agreement, Ohio Department of Transportation, Ohio Department of Natural Resources and Ohio Pheasants Forever, July 2012.

See [Appendix E](#).

This agreement between Ohio DOT, the Ohio Department of Natural Resources (technical oversight) and Ohio Pheasants Forever (responsible for compliance with agreement) grants a specific defined use of a portion of highway ROW to allow the licensee to “eliminat[e] non-native vegetation outside of the roadway safety clear zone, through the establishment of native grasses to promote wildlife in the general vicinity, consistent with plans, provisions and specifications approved by ODOT.”

Memorandum of Understanding, Ohio Department of Transportation Region 9, OCPM [Ohio Certified Public Manager] Pollinator Team Members and Deer Creek Chapter of Pheasants Forever May 2014.

See [Appendix F](#).

This memorandum of understanding relates “to the establishment and maintenance of Ohio native prairie with warm season grass/forb plantings at two areas along St Rt 207 in Ross County.”

Standard Maintenance Agreement, Ohio Department of Transportation, July 2008.

See [Appendix G](#).

This template agreement for use between Ohio DOT and another party to “maintain the highway landscaping” at a specific interchange or highway corridor is used for the agency’s Gateway Landscaping Program. The agency is in the process of finalizing the document for use with its pollinator program.

South Carolina

Contact: Timothy Edwards, Professional Landscape Architect, Roadway Design Support, South Carolina Department of Transportation, 803-737-1949, EdwardsFT@scdot.org.

1. **Description of pollinator program:** We have no such program; however, we do promote native vegetation.
 - 1A. **Measuring program success:** [No response.]
2. **Permit volunteer efforts to maintain roadsides?** Yes, we would, if requested, allow this work through the encroachment permit process, and on a limited basis.
 - 2A. **Plans to develop partnership program:** We have no plans at this time. Our main emphasis is to provide information about the new (July 1, 2015) FHWA pollinator Web page that is part of U.S. DOT’s ongoing efforts to meet the goals in the PM [Presidential Memorandum]. The page is located at: http://www.environment.fhwa.dot.gov/ecosystems/vegmgmt_pollinators.asp. For additional information, please contact Deirdre Remley at deirdre.remley@dot.gov or 202-366-0524.

See Attachment A at the end of this document for information about the PowerPoint webinar July 16, 2015. The slides from the presentation with links to other pollinator-related references can be viewed at this link: <https://attendee.gotowebinar.com/recording/7232406435984901889>.

Texas

Contact: Dennis Markwardt, Director of Maintenance Field Support, Texas Department of Transportation, 512-416-3093, Dennis.Markwardt@txdot.gov.

1. **Description of pollinator program:** Through a project called the South Texas Natives. I have provided native seed through the seed industry and enabled us to change our seeding specs.
- 1A. **Measuring program success:** TxDOT's wildflower program.
2. **Permit volunteer efforts to maintain roadsides?** Yes, mainly in rest areas and in controlled situations.
- 2A. **Plans to develop partnership program:** N/A

Program Development and Structure

- A. **Program name:** None.
- B. **Program in existence since:** First year.
- C. **Describe program development:** Written request from native plant societies to TxDOT.
- D. **Who manages program?** TxDOT.
- E. **Types of ROW in program:** Mainly rest areas. A few wide right of way areas.
- F. **Number of miles of ROW in program:** Very little.

Program Participants

- A. **Number of program participants:** Three groups.
- B. **Encouraging program participation:**
 - B1. **Formal outreach program?** No, they have come to us.
 - B2. **ROW signage or other incentive?** We are looking at doing this.
- C. **Activities volunteers perform:** Garden plantings and milkweed collections.
- D. **Addressing safety of program participants:** Coordination with the local district.

Program Funding

- A. **How program is funded:** It's not.
- B. **Annual costs:** N/A

Program Agreements/Permits

- A. **Description of agreements/permits:** Utilize an Adopt-a-Highway agreement.
 - B. **Risk/liability for public versus private program participants:** Stated above.
 - C. **Ensuring compliance with agreement/permit:** If they are not maintaining the garden, it will be eliminated.
 - C1. **Responsibility for agreement/permit oversight:** [No response.]
 - D. **Actions taken when nonpublic partner fails to comply?** Eliminate it so TxDOT does not maintain.
3. **Partnership program similar to other roadside maintenance programs?** Yes, previously stated.

4. **Partnerships with state conservation, counties or local agencies?** No.
5. **Program successes:** Still to be determined.
- 5A. **How measuring success:** Visibly.
6. **Program challenges:** Getting the groups to follow through.
- 6A. **How challenges overcome:** Still haven't.
7. **Additional comments:** None.

Program Documents

Wildflower Program, Division of Maintenance, Texas Department of Transportation, 2016.

<http://www.txdot.gov/inside-txdot/division/maintenance/wildflower-program.html>

From the website:

As with grasses, Wildflower Program initiatives strive to establish roadsides that blend into their surroundings. The grasses and wildflowers also help to conserve water, control erosion and provide a habitat for wildlife in all the [natural regions of Texas](#).

Virginia

Contact: Diane Beyer, State Vegetation Management Planner, Maintenance Division, Virginia Department of Transportation, 804-432-6197, Diane.Beyer@vdot.virginia.gov.

In lieu of responding to the survey, the respondent provided the links below and noted that “[o]ur PHP (Pollinator Habitat Program) is growing quickly! And we’d be happy to share what we can.”

Pollinator Habitat Program, Virginia Department of Transportation, January 2016.

http://www.virginiadot.org/programs/pollinator_habitat_program.asp

This agency website describes the program.

“VDOT’s Pollinator Habitat Program Moves Toward Statewide Implementation,” Press Release, Virginia Department of Transportation, September 29, 2015.

http://www.vdot.virginia.gov/newsroom/statewide/2015/vdots_pollinator_habitat_program86655.asp

This press release describes recent program activities.

“VDOT Program Aids Pollinators While Supporting Transportation Goals,” Case Studies: Invasive Species/Vegetation Management, AASHTO Center for Environmental Excellence, undated.

http://www.environment.transportation.org/environmental_topics/invasive_species/case_studies.aspx#bookmarksubVDOTProgramAidsPollinatorsWhileSupportingTransportationGoals

This case study provides an excellent summary of Virginia DOT’s program, including advice for other DOTs wishing to launch a similar program.

“Are Highway Rest Stops Pollinators’ Last Hope?” Mary Beth Albright, *The Plate*, nationalgeographic.com, November 3, 2015.

<http://theplate.nationalgeographic.com/2015/11/03/are-highway-rest-stops-pollinators-last-hope/>

This brief online article includes a discussion of Virginia DOT’s activities to promote pollinator habitat at rest areas.

Washington

Contact: Ray Willard, Roadside Asset Manager, Washington State Department of Transportation, 360-705-7865, WillarR@wsdot.wa.gov.

1. **Description of pollinator program:** WSDOT is developing a five-year implementation strategy that focuses on implementing pollinator-beneficial practices in project design/development, maintenance, vegetation management operations, and environmental analysis.
 - 1A. **Measuring program success:** The only related measure that WSDOT will be tracking at this time is a reduction in nonsafety-related mowing. Roadside areas beyond the safety clear zone will only receive mowing treatment if it is prescribed as part of an integrated treatment plan for weed control with a goal of eliminating mowing where possible.
2. **Permit volunteer efforts to maintain roadsides?** Yes, WSDOT is working to encourage this type of work. The agency recently updated a permit which allows local governments, volunteers or private business sponsorship of these types of action on limited-access federal highways with FHWA signoff. We do not yet have a pollinator-specific project underway but have seen some interest from local groups.

We have our new Vegetation Management Permit [see Program Documents] and also utilize our Adopt-a-Highway program to accomplish roadside enhancement work in addition to litter control.

- 2A. **Plans to develop partnership program:** N/A

Program Development and Structure

- A. **Program name:** No name, but parameters are laid out in WSDOT's Roadside Policy document [see Program Documents]. The agency is now working on a five-year implementation strategy for creating more pollinator beneficial roadsides.
- B. **Program in existence since:** WSDOT Roadside Policy was updated in 2014 with an emphasis on partnering for roadside development and enhancement where possible using local interest.
- C. **Describe program development:** It has evolved out of collaboration between design, maintenance and environment expertise within the agency. We have also solicited input and recommendations from a private nonprofit in Seattle called The Common Acre, and have been working with a state interagency group.
- D. **Who manages program?** Collaboratively between Design, Maintenance and Environmental Offices.
- E. **Types of ROW in program:** All ROW, but the most opportunity exists along wider ROW on interstate and limited-access facilities.
- F. **Number of miles of ROW in program:** WSDOT owns and operates 7,000 miles of corridor statewide and approximately 100,000 acres of unpaved ROW. We estimate there are approximately 20,000 acres statewide where pollinator beneficial improvements could be made.

Program Participants

- A. **Number of program participants:** Many AAH participants and a number of privately sponsored roadside management agreements but none are pollinator-specific at this point.
- B. **Encouraging program participation:**
 - B1. **Formal outreach program?** No formal outreach. Conversations with local governments and groups like local beekeepers association.
 - B2. **ROW signage or other incentive?** [No response.]

- C. **Activities volunteers perform:** Anything that DOT would [consider] mutually beneficial and safe.
- D. **Addressing safety of program participants:** The agreement provisions address this and we use safety materials developed for the AAH program.

Program Funding

- A. **How program is funded:** It is not.
- B. **Annual costs:** N/A

Program Agreements/Permits

- A. **Description of agreements/permits:** Copy of primary agreement is attached [see Program Documents].
 - B. **Risk/liability for public versus private program participants:** It is addressed in the agreement.
 - C. **Ensuring compliance with agreement/permit:** [No response.]
 - C1. **Responsibility for agreement/permit oversight:** Typically this is done through the local maintenance offices.
 - D. **Actions taken when nonpublic partner fails to comply?** Bonding provisions are included in the agreement.
3. **Partnership program similar to other roadside maintenance programs?** See previous responses.
 4. **Partnerships with state conservation, counties or local agencies?** [No response.]
 5. **Program successes:** [No response.]
 - 5A. **How measuring success:** [No response.]
 6. **Program challenges:** [No response.]
 - 6A. **How challenges overcome:** [No response.]
 7. **Additional comments:** [No response.]

Program Documents

Roadside Vegetation Permit, Washington State Department of Transportation, August 2015.
See [Appendix H](#).

Included in this permit are descriptions of failure to comply and the costs for corrective work for failure to comply. Additional provisions that can be applied by the agency include bond coverage.

Roadside Policy Manual, Washington State Department of Transportation, August 2015.
<http://www.wsdot.wa.gov/publications/manuals/fulltext/M3110/RPM.pdf>

See page 13 of the PDF for a discussion of community partnerships. A brief discussion of FHWA actions on Interstates for partnership projects appears on page 40 of the PDF.

Managing WSDOT Roadside to Benefit Pollinators, Pollinators and the Roadside, Washington State Department of Transportation, 2016.

<http://www.wsdot.wa.gov/Design/Roadside/Pollinators.htm>

This website describing the agency's roadside management practices to promote pollinator habitat includes this:

Any specific examples of how WSDOT is helping pollinators?

WSDOT also considers special status species in construction projects such as the new alignment of

US 12 near Walla Walla, where ground-nesting alkali bees exist in and near the proposed ROW. These bees pollinate alfalfa fields, and they are very important to the agricultural community. For this project, WSDOT utilized an agreement with WSU to conduct a study of bee movement patterns and they evaluated alternative routes to minimize bee impacts. Impacts were unavoidable because of the large area used by farming and the number of bee beds. Because alkali bee beds must be moved every few years to minimize bee pests, WSDOT is mitigating project impacts by funding farmers to move bees to new locations to minimize harm to the alkali bee. WSDOT may compensate farmers who decide to use Leaf Cutter Bees instead of moving bee beds.

WSDOT is also actively working with a team from the U.S. Forest Service on pollinator issues.

In May 2015, FHWA released case studies regarding Pollinator-Friendly Practices. FHWA developed case studies to showcase how different State DOTs are supporting pollinator-friendly practices, such as integrated vegetation management plans, reduced pesticide use and mowing, and increased native plantings. The case studies focus on practices in Indiana, Texas, and Washington.

Through the WSDOT Quick Response Research Program, the agency's pollinator team applied for funding to locate, download and analyze GIS data to identify and prioritize areas suitable for pollinator habitat creation, preservation and enhancement on WSDOT owned lands. The team also developed A 5 year plan to enhance pollinator habitat on our roadsides.



Title Sponsorship of Highway Plantings		Policy No. 610.14
Responsible Office Office of Design		Related Policies and Procedures 610.07
Effective/Revision Dates 10-15-90/ 10-3-03	Approval(s) Kevin M. Mahoney	

Authority: Director of the Highway Division.

Contents: This policy describes the procedures and criteria for the sponsorship of highway plantings.

Affected Offices: District Offices; Office of Design.

Who to Contact for Policy Questions: Office of Design.

Definitions:

Highway plantings - Trees, shrubs, flowers and grasses planted within the primary highway right-of-way.

Forms:

610006 - Application and Permit to Sponsor Highway Planting (see **Appendix B**).

Policy and Procedure:

I. Policy

- A. It is the policy of the Highway Division to require any person or organization desiring to establish or maintain plantings within the right-of-way of a primary highway to obtain a permit from the Highway Division before proceeding with such work.
- B. Within the corporate limits of a city, the adjacent property owner or the city may sow appropriate lawn grasses in the right-of-way of less than fully controlled access highways without formal DOT permission. However, a permit is required for sowing grasses as an experimental plot or as an organization-sponsored project.

II. Responsibilities and Procedures

- A. The district office shall:
 - 1. Accept and process Form 610006, *Application and Permit to Sponsor Highway Planting*. The applicant shall submit four original signed copies of this form.
 - 2. Provide the applicant with a copy of the *Roadside Planting Sponsorship Criteria* (see **Appendix A**) and ensure compliance with the criteria.
 - 3. Review the application and, if necessary, conduct a field review.

4. Determine considerations to be included as a part of the application and ensure all required information is included with the application.
5. Submit the application to the Office of Design for review and recommendations.
6. Approve or deny the application and notify the applicant of its decision. The district office is the final approval authority for the DOT.
7. Make proper distribution of the approved permit: return one copy of the permit to the applicant (who is now termed the "sponsor") and forward one copy to the Office of Design.
8. Maintain a record of the approved permit.
9. Monitor the work for conformance with the stipulations of the permit.

B. The Office of Design shall:

1. Assist in the review of the application in reference to design and future project considerations.
2. Review plans to ensure all safety considerations have been met and planting materials and methods are appropriate.
3. Coordinate a review with the Federal Highway Administration when necessary.
4. Furnish recommendations to the district office.

Appendix A

Iowa Department of Transportation Roadside Planting Sponsorship Criteria

August 2003

The Department of Transportation (DOT), in an effort to enhance aesthetic and environmental roadside qualities, has developed this policy to permit individuals, organizations and public agencies to establish or maintain plantings along the state highway system. The planting of trees, shrubs, flowers and grasses in the state highway right-of-way shall be in accord with the following:

General Criteria

Primary Roads.

1. Requests for permission to plant in the state highway right-of-way shall be made on Form 610006, *Application and Permit to Sponsor Highway Planting*. The applicant shall submit four original signed copies of this form to the district office.
2. The applicant shall submit planting plans with Form 610006. The plans shall be prepared at a suitable scale to show accurate planting locations. The plans shall include route, right-of-way line, north arrow, offset distances from the pavement edge, proposed species and spacings, township, range, section, and roadway stationing. Some of this information is available from the district office. The application shall include any special future maintenance requirements (e.g., burning, thinning, etc.).
3. If the proposed work is within an incorporated city, the application must be approved by that city.
4. The application will be reviewed by the district office and the Office of Design. The district office is the final approval authority for the DOT and will determine whether the application is approved or denied.
5. The DOT suggests the sponsor advise the adjacent property owner of proposed activities.
6. Prior to starting work, the sponsor shall check with utility companies for the location of underground lines. The sponsor assumes full responsibility for compliance with utility policies.
7. No plantings shall be allowed in any place that may cause snow to drift onto the roadway, restrict sight distance, or shade the roadway from the winter sun causing frost to remain on the road.
8. The sponsor shall maintain the plantings for a minimum of two years. Maintenance activities include watering, weed control, staking, guying, insect control, etc. The sponsor may use pesticides to prepare or maintain the planting area as approved in the permit application. Products and application methods shall be thoroughly described in the application. All applicators must be certified in Category 6 - Right-of-Way, through the Iowa Department of Agriculture and Land Stewardship.
9. The sponsor shall remove and properly dispose of any plant material not in a live and healthy growing condition.
10. The DOT assumes no responsibility for the maintenance or replacement of the plantings and may remove any plantings whenever it considers it necessary.

Policy No. 610.14

11. Any damage to DOT right-of-way or appurtenances (damage to fence or vegetation, ground rutting, erosion, etc.) caused by the sponsor's installation or maintenance activities shall be repaired by the sponsor at the sponsor's expense.
12. The sponsor shall indemnify and save harmless the State of Iowa, its agencies and employees, from any and all causes of actions, suits at law or in equity, or losses, damages, claims or demands, and from any and all liability and expense of whatsoever nature, arising out of or in connection with the sponsor's use or occupancy of the public highway right-of-way.
13. When the sponsorship is discontinued, the sponsor shall restore the planting area to a condition approved by the district office.

Interstates and Other Fully Controlled Access Facilities. The primary road criteria shall apply with the following additional stipulations:

1. Access to the planting site must be gained from side roads at grade separations or interchanges, or from temporary breaks in the access control fence. The sponsor shall not access the planting site from the mainline or ramps.
2. The DOT may permit the sponsor to make temporary breaks in the access control fence so that access to the planting site may be gained during actual work activities. Breaks in the access control fence shall be closed at all times when work activities are not underway. If the sponsor is not the adjacent property owner, written permission from the adjacent property owner granting access along the right-of-way shall be submitted with the sponsorship request. Any temporary fence break must be replaced with permanent access control fence within three years.
3. No plantings, personnel or equipment shall be allowed in the clear zone area or median. The DOT may permit plantings in interchange areas if access can be obtained from other than the ramps or mainline.
4. Plantings shall not interfere with a utility easement, which is normally located in the 10-foot strip adjacent to the highway side of the right-of-way line.
5. Plant materials shall be perennial unless they effectively self-reseed.

Plant Materials

The DOT encourages the use of perennial species that are native to Iowa. Native species are better suited to Iowa's soil and climatic conditions and have a greater chance of survival in the harsh roadside environment.

Trees and Shrubs. Trees and shrubs that can ultimately reach a diameter of four or more inches shall not be planted in the clear zone area. The clear zone area is reserved for recovery of errant vehicles. This area will be determined by the DOT.

Flowers. Flowers may only be planted in medians or in the areas between traffic lanes at intersections with an approved access and safety plan for establishment and maintenance.

Grasses. Within the corporate limits of a city, the adjacent property owner or the city may sow appropriate lawn grasses in the right-of-way of less than fully controlled access highways without formal DOT permission (e.g., perennial bluegrass, perennial rye, fescue, creeping red fescue, etc.).

A permit is required for sowing grasses as an experimental plot or as an organization-sponsored project.



Iowa Department of Transportation

APPLICATION AND PERMIT TO SPONSOR
HIGHWAY PLANTING

Date _____

Highway Number _____

County _____

APPLICANT:

Name of Applicant (Organization, Group or Individual)

Mailing Address (Street, P.O. Box, City, State, Zip Code)

The proposed work is located in Sec. _____ Twp. _____ Rge. _____ on Highway _____, located
_____ (miles) _____ (direction) from _____

(place, town, etc.) and further located on the _____ (side), from _____ station _____ station _____
milepost _____ to _____ milepost _____

The planting will be done in accordance with the approved plans and the Roadside Planting Sponsorship Criteria, dated August, 2003. This planting will consist of the following materials and as shown on the attached sketch.

AGREEMENTS:

The applicant agrees that the following stipulations shall apply:

1. This permit shall be approved prior to beginning any operations.
2. The applicant shall indemnify and save harmless the State of Iowa, its agencies and employees, from any and all causes of actions, suits at law or inequity, for losses, damages, claims or demands, and from any and all liability and expense of whatsoever nature, arising out of or in connection with the applicant's use or occupancy of the public highway right-of-way.
3. The applicant agrees to give the Department forty-eight hours notice of intention to begin work within the right-of-way. Notification shall be given to:

Authorized Highway District Representative Telephone Number

Address

4. Access to the work site on primary highways will, where possible, be obtained from private property or other roadways and not from the mainline or shoulders of the primary highway.

5. Access to the work site on controlled access facilities shall only be made from sideroads at grade separations and interchanges or from temporary breaks in the access control fence by the adjacent property owner or through an agreement with the adjacent property owner. No access will be allowed from the mainline or ramps.
6. The applicant shall carry on the work as required and authorized by this agreement with serious regard for the safety of the traveling public, adjacent property owners and volunteers or employees of the applicant. Traffic control, when deemed necessary by the Department, shall be in accordance with Part VI of the current Manual on Uniform Traffic Control Devices for Streets and Highways.
7. All work performed in the right-of-way shall be restricted to a time frame of 30 minutes after sunrise to 30 minutes before sunset.
8. Work shall be performed in a satisfactory, safe and professional manner in accordance with the Department's Roadside Planting Sponsorship Guidelines and good construction practices.
9. Applicant(s) will provide adult supervision at the work site when volunteers or employees are 15 years of age or younger.
10. The Department reserves the right to terminate this agreement when, in the sole judgement of the Department, it is found that the applicant has not met its terms and conditions.
11. Applicant agrees to maintain the planting until _____, _____ (Year) .

2 Years Minimum

APPLICANT _____ By _____
Signature

Address _____ Date _____

Telephone (_____) _____ (Days) (_____) _____ (Evenings)

APPROVAL OF CITY *(if proposed work is within an incorporated town or city, the city, the Council or other governing authority of the town or city must grant approval of this request prior to submission to the Department.)*

"The undersigned city or town hereby approves the above application to sponsor highway planting within its corporate limits."

By _____ (Title) _____ Date _____

DEPARTMENT OF TRANSPORTATION APPROVAL

Reviewed by Roadside Development Section, Office of Design

Approved _____ Date _____
Authorized Highway District Representative

Appendix C

CCO form MT11; Approved 03/01 (RMH); Revised 10/06 (MRA)

District _____ MS _____ ORG _____



Missouri Highways and Transportation Commission

Adopt-A-Highway Agreement

(This Agreement is considered an application until executed by the Missouri Highways and Transportation Commission)

Adopt-A-Highway agreement number: _____



(Check all that apply) _____ Litter pickup _____ Mowing _____ Beautification _____ Native Area

This Agreement is entered into by the Missouri Highways and Transportation Commission (hereinafter, "Commission") and _____ (hereinafter, "Adopter").

Is this request being made on behalf of a group or organization? _____ Yes _____ No

If yes, list the full name and street address of the group or organization. _____

Whereas, the Adopter requests permission to enter into the Adopt-A-Highway program in _____ County on Route _____ from _____ to _____.

Beginning log point _____ Ending log point _____ Length of adoption _____ miles; and

Whereas, the Commission has the sole responsibility in determining whether an application is rejected or accepted and whether a highway will or will not be available for adoption; and

Whereas, the Adopter representative hereby certifies that the following information is true and accurate to the best of his or her knowledge and if he or she has submitted any false statements of a material fact or have practiced or attempted to practice any fraud or deception, the Commission may refuse to grant the request to participate in the program.

1. Adopter Representative: The Adopter representative for the purpose of administering the provisions of this Agreement is:

Name: _____

Street Address: _____

City: _____ **State:** _____ **Zip:** _____

Telephone (day): _____ **(night):** _____

Fax: _____ **E-mail:** _____

2. Eligibility: Individuals, as Adopters or as members of Adopter organizations and enterprises, will not be approved to participate in the program if they have been convicted of, or pled guilty or no contest to, a violent criminal activity, unless 10 years have passed since completion of the latest incarceration, probation or parole for violent criminal activity.

3. Administrative Rules: The Adopter shall comply with the administrative rules of the Missouri Department of Transportation, under Title 7, Chapter 14, including any rules promulgated or amended after the date of this Agreement.

4. Signs: The sign shall have the actual name of either the adopter, or an individual in whose memory the adoption is being made, and shall not include telephone numbers, logos, slogans, dates, addresses, or Internet addresses. Please keep verbiage to a minimum for ease of reading. The Adopter's requested identification on the sign is worded as follows, with one character allowed per space:

5. Special Provisions: _____

6. Amendments: Any change in this Agreement, whether by modification or supplementation, must be accomplished by a formal contract amendment signed and approved by the Adopter representative and the Commission.

7. Safety Training: The Adopter or Adopter representative shall obtain safety materials, such as highway safety tips brochures and videos, from the Commission at a safety briefing, and agrees to abide by all provisions and safety requirements contained within these materials. Before any participant within a group takes part in the program, he or she must attend a meeting conducted by the Adopter representative to view these materials and discuss safety.

8. Indemnification: To the extent allowed by law, the Adopter assumes the obligation to indemnify and hold harmless the Commission, including its officers, employees and agents, from every expense, liability or payment arising from any claim, lawsuit or liability which may arise from the Adopter's participation in the program.

9. Commission Representative: The Commission's representative for the purpose of administering the provisions of this Agreement is:

Name: _____

Street Address: _____

City: _____ **State:** _____ **Zip:** _____

Telephone (day): _____ **Fax:** _____

E-mail: _____ **Adopt-A-Highway E-mail:** aah@modot.mo.gov

In Witness Whereof, the parties have entered into this Agreement on the date last written below.

Executed by the Adopter this _____ day of _____ 20____.

Executed by the Commission this _____ day of _____ 20____.

District Engineer
Missouri Highways and
Transportation Commission

Adopter Name

Adopter Representative

Appendix D

NORTH CAROLINA
PASQUOTANK COUNTY

LANDSCAPE AGREEMENT

DATE: 9/16/2015

NORTH CAROLINA DEPARTMENT OF
TRANSPORTATION

Project: U-4438(L)

AND

WBS Elements: 35742.3.2

CFDA: 20.205

CITY OF ELIZABETH CITY

THIS AGREEMENT is made and entered into on the last date executed below, by and between the North Carolina Department of Transportation, an agency of the State of North Carolina, hereinafter referred to as the "Department" and the City of Elizabeth City, a municipal corporation, hereinafter referred to as the "Municipality."

WITNESSETH:

WHEREAS, Section 1113 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA – LU), requires that the Surface Transportation Program funds be available for transportation enhancement activities in the Statewide Transportation Improvement Program; and,

WHEREAS, the Municipality has requested enhancement funding for certain landscape plantings in Pasquotank County; and,

WHEREAS, the Department has agreed to participate in the costs of said plantings, subject to conditions hereinafter set forth; and,

WHEREAS, the Department and the Municipality have also agreed to the maintenance of said plantings as hereinafter set out;

NOW, THEREFORE, the parties hereto, each in consideration of the promises and undertakings of the other as herein provided, do hereby covenant and agree, each with the other, as follows:

GENERAL PROVISIONS

FEDERAL FUNDING ACCOUNTABILITY AND TRANSPARENCY ACT

All parties to this Agreement, including contractors, subcontractors, and subsequent workforces, associated with any work under the terms of this Agreement shall provide reports as required by the Federal Funding Accountability and Transparency Act (FFATA) for this Project.

COMPLIANCE WITH STATE/FEDERAL POLICY

The Municipality and/or its agent, including all contractors, subcontractors, or sub-recipients shall comply with all applicable Federal and State policies and procedures, stated both in this Agreement and in the Department's guidelines and procedures, including the *Local Programs Management Handbook*.

FAILURE TO COMPLY - CONSEQUENCES

Failure on the part of the Municipality to comply with any of the provisions of this Agreement will be grounds for the Department to terminate participation in the costs of the Project and, if applicable, seek repayment of any reimbursed funds.

SCOPE OF THE PROJECT

1. The Project consists of planting shrubs, perennials and trees along US 158 from Harney Street to N. Water Street in Elizabeth City.

PLANNING AND DESIGN

2. The Department, at no expense to the Municipality, shall develop the landscape design and prepare the landscape plans and specifications in accordance with the Department's standard landscaping policies and procedures for highways. The Municipality shall have the opportunity to review the landscape design and plans prior to installation by the Department.

RIGHT OF WAY AND UTILITIES

3. All work shall be performed within the existing right of way and in accordance with Departmental standards, policies and procedures. In the event any additional right of way or construction easement is required for the plantings, the Municipality shall provide said additional right of way/or easement at no expense or liability whatsoever to the Department. Acquisition of all right of way and/or construction easements shall be in accordance with the Right of Way Acquisition Policy contained in the Federal-Aid Policy Guide, Part 712, Subpart B; and the North Carolina

Department of Transportation Right of Way Manual. The Municipality shall be solely responsible for all damages and claims for damages associated with the acquisition of right of way.

4. The Municipality, at no expense to the Department, shall be responsible for the relocation and adjustment of all utilities in conflict with the landscape planting.

CONSTRUCTION

5. The Department shall, without expense to the Municipality, prepare the site and install the plantings, or have the plantings installed by contract, in accordance with the approved project plans. All work shall be performed in accordance with the Department's standard landscaping policies and procedures for highways. Upon completion of the planting, the Department shall maintain the plantings for a three year warranty period, at no expense to the Municipality.

MAINTENANCE

6. Upon completion of a three year warranty period, the Department shall notify the Municipality in writing when the Municipality shall assume responsibility for all maintenance and replacement of the landscape materials. Maintenance shall include, but not be limited to, the following: watering, mulching, pruning, fertilizing, weeding, pest control, mowing, and replacing plant materials. All costs of maintenance shall be borne by the Municipality.
7. The Municipality agrees to continually maintain all plantings in accordance with generally accepted horticultural practices. The Department shall have the right to periodically inspect the maintenance practices being utilized by the Municipality.
8. If the Department determines that the Municipality is not properly maintaining the plantings, the Department shall notify the Municipality. If proper maintenance is not performed by the Municipality within a reasonable time after notification, the Municipality agrees that the Department shall perform the necessary maintenance, or at the Department's option, shall return the planted area to a natural condition (i.e. seeded and mulched, etc.). It is further agreed that the costs of the restoration shall be reimbursed to the Department by the Municipality. Reimbursement to the Department shall be made in one final payment within sixty (60) days of invoicing by the Department. The Department shall charge a late payment penalty and interest on any unpaid balance due in accordance with N.C.G.S. § 147-86.23.
9. In the event these plantings require relocation or removal for highway construction, reconstruction, maintenance or safety, the Municipality shall be given the option to remove or relocate any plantings it considers salvageable immediately upon notification by the Department, at no expense to the Department.

10. The Department shall not be responsible for any damage to the plantings that may be done by third parties.

ADDITIONAL PROVISIONS

11. The Municipality shall comply with Title VI of the Civil Rights Act of 1964, (Title 49 CFR, Subtitle A, Part 21). Title VI prohibits discrimination on the basis of race, color, national origin, disability, gender, and age in all programs or activities of any recipient of Federal assistance.
12. It will be the responsibility of the Municipality to follow the current and/or most recent edition of references, websites, specifications, standards, guidelines, recommendations, regulations and/or general statutes, as stated in this Agreement.
13. It is the policy of the Department not to enter into any agreement with another party that has been debarred by any government agency (Federal or State). The Municipality certifies, by signature of this agreement, that neither it nor its agents or contractors are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any Federal or State Department or Agency.
14. The Municipality shall certify to the Department compliance with all applicable Federal and State laws and regulations and ordinances and shall indemnify the Department against any fines, assessments or other penalties resulting from noncompliance by any entity performing work under contract with the Municipality.
15. The Municipality is solely responsible for all agreements, contracts, and work orders entered into or issued by the Municipality for this Project. The Department shall not be held liable by the Municipality for any expenses or obligations incurred for the Project except those specifically eligible for the federal funds and obligations as approved by the Department under the terms of this Agreement.
16. The Municipality will indemnify and hold harmless the Department, FHWA, and the State of North Carolina, their respective officers, directors, principals, employees, agents, successors, and assigns from and against any and all claims for damage and/or liability in connection with the project activities performed pursuant to this Agreement including construction of the Project. The Department shall not be responsible for any damages or claims for damages, which may be initiated by third parties.
17. All terms and conditions of this Agreement are dependent upon and subject to the allocation of funds for the purpose set forth in the Agreement and the Agreement shall automatically terminate if funds cease to be available.

18. If the Municipality decides to terminate the Project without the concurrence of the Department, the Municipality shall reimburse the Department one hundred percent (100%) of all costs expended by the Department and associated with the Project.
19. All terms and conditions of this Agreement are dependent upon and subject to the allocation of funds for the purpose set forth in the Agreement and the Agreement shall automatically terminate if funds cease to be available.
20. By Executive Order 24, issued by Governor Perdue, and N.C. G.S. § 133-32, it is unlawful for any vendor or contractor (i.e. architect, bidder, contractor, construction manager, design professional, engineer, landlord, offeror, seller, subcontractor, supplier, or vendor), to make gifts or to give favors to any State employee of the Governor's Cabinet Agencies (i.e., Administration, Commerce, Correction, Crime Control and Public Safety, Cultural Resources, Environment and Natural Resources, Health and Human Services, Juvenile Justice and Delinquency Prevention, Revenue, Transportation, and the Office of the Governor).

IN WITNESS WHEREOF, this Agreement has been executed, in duplicate, the day and year heretofore set out, on the part of the Department and the Municipality by authority duly given.

L.S. ATTEST:

CITY OF ELIZABETH CITY

BY: _____

BY: _____

TITLE: _____

TITLE: _____

DATE: _____

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

Approved by _____ of the local governing body of the City of Elizabeth

City as attested to by the signature of Clerk _____ of said governing body on

_____ (Date)

This instrument has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act.

(SEAL)

(FINANCE OFFICER)

Federal Tax Identification Number

Remittance Address:

City of Elizabeth City

DEPARTMENT OF TRANSPORTATION

BY: _____

(CHIEF ENGINEER)

DATE: _____

APPROVED BY BOARD OF TRANSPORTATION ITEM O: _____ (DATE)

Appendix E

STATE OF OHIO OHIO DEPARTMENT OF TRANSPORTATION JOINT USE LICENSE AGREEMENT

ODOT Lease No. D07-2012-7018	County: Darke
Property Manager for ODOT: Ann M. Althaus	Route: US Route 36 (south side of the roadway)
ODOT Address and Phone Number: ODOT District Seven Planning & Engineering Real Estate Property Management Services 1001 St Marys Ave., Sidney, OH 45365 937-497-6715 or 937-492-LAND (5263) ODOT DARKE COUNTY ADMINISTRATOR: Jeff Whetstone: 937-548-3015	Section: Between mile marker 8.35 to 21.04 Parcel(s): Two areas on the south side of DAR 36 in Neave and Adams Townships, per EXHIBIT "A" attached to this License Agreement, including the associated ODOT Permit #7-348-11.
Licensee: Address, Contact, Phone Number Ohio Department of Natural Resources Division of Wildlife Dave Kohler 614-265-6907 Dan Crusey 614-644-3925 1500 Dublin Rd, Columbus, OH 43215 Ohio Pheasants Forever Attn: Terry Lavy 7277 W. Piqua-Clayton Road Covington, OH 45318 937-606-4754	State Job No.: N/A Federal Project No.: N/A PID: N/A Begin Date: <i>on execution by ODOT</i> Ending Date: <i>on termination</i> Fee Amount: <i>waived</i> Pmt. Due Date: <i>N/A</i>

THIS JOINT USE LICENSE AGREEMENT is made by and between the State of Ohio, Department of Transportation ("ODOT"), and the State of Ohio, Department of Natural Resources ("ODNR") who will provide technical oversight, and Ohio Pheasants Forever ("OPF") who is responsible for compliance with this Joint Use License Agreement, hereinafter referred to as the "Licensee."

In compliance with ORC §5501.311 and ORC §5501.45 and the covenants, conditions, agreements and stipulations of the License Agreement expressed herein, ODOT agrees to cooperate with Licensee, more particularly in support of the mission of the State of Ohio, Department of Natural Resources, while effectively reducing ODOT's highway maintenance requirements within a 20+ acre area of limited access highway right-of-way, by permitting the elimination of non-native vegetation outside of the roadway safety clear zone, through the establishment of native grasses to promote wildlife in the general vicinity, consistent with plans, provisions and specifications approved by ODOT, in accordance with ORC §5515.01, and for no other purpose.

This Agreement therefore, is granting a specific defined Use of a portion of highway right-of-way, along the south side of Darke County US Route 36 (mile marker 8.35 to 21.04) in Neave and Adams Townships, hereinafter referred to as the "Property" and more particularly illustrated and described in the attached:

EXHIBIT "A": ODOT District Seven Permit No. 7-348-11 (dated 11/15/11)

The parties hereto covenant and agree as follows:

1. **NATURE OF INTEREST:**

The Licensee understands that by issuing this License, ODOT has merely granted the Licensee the right to enter the limited access highway right-of-way to clear vegetation, and to install/plant and maintain native grasses on the Property; and, this Agreement does not grant or convey to the Licensee any interest in the Property.

2. **CONSIDERATION:**

In cooperation with Licensee, ODOT agrees to waive the payment of monetary consideration for the privilege granted by this License.

3. **TERM:**

This Joint Use License Agreement will commence upon execution by ODOT; and, will continue to be in effect until terminated by any party to this Agreement, for any reason.

4. **DEFAULT/CANCELLATION/TERMINATION**

If Licensee or a contractor on behalf of Licensee fails to well and truly perform any and all covenants, conditions, agreements and stipulations of the License Agreement expressed herein, then ODOT may deem any such failure to be an act of default and ODOT may immediately terminate this License Agreement.

When possible, prior to cancellation of this Agreement ODOT will provide to Licensee written notice of the act or acts of commission or omission that ODOT deems to be an act or acts of default and Licensee shall have not less than 30 days (or longer period of time as may be provided for in such notice) from the date on which such notice is delivered within which to remedy and cure the same. If Licensee fails to remedy and cure any act or acts of default within the stipulated time period then this License Agreement shall be cancelled, and otherwise null and void.

In the event of a failure or act of default by Licensee or a contractor on behalf of Licensee, where ODOT finds such event or situation may impact the safety of the travelling public, ODOT reserves the right to remedy the situation and charge any expense incurred to Licensee.

There is to be absolutely no hunting or the shooting of firearms with in the Property, or from, on, across or along a public road or highway. It is the Licensee's responsibility to assure the enforcement of the law. Negligence in this regard negates this License Agreement.

Upon cancellation of this Agreement, Licensee shall vacate and peaceably and quietly leave, surrender and yield the privileges provided in this License. Licensee shall remove any and all of its personal property and other appurtenances from the Property; and, Licensee, at its sole expense, shall restore the Property to a condition that is satisfactory to ODOT's standards (i.e., eliminate established native grasses in their entirety and install and establish standard grasses per ODOT's specifications). Licensee waives any and all rights of reimbursement for the cost of vacating the Property.

5. **ODOT USE OF PROPERTY**

ODOT may locate, relocate, install, construct, reconstruct, maintain, inspect, operate, repair, remove, use, and/or make improvements to, in, on, over, under, or across the Property. ODOT will make a good faith effort to ensure that its activities do not unreasonably interfere with the Licensee's ability to install and maintain said native grasses on the Property; and, will cooperate with the Licensee should a planned improvement project impact Licensee's Use of the Property.

ODOT reserves the right, at its discretion, immediate entry upon the Property and to take immediate possession of the Property in the case of any national or other emergency, or for the purpose of preventing sabotage and for the protection of State property from an imminent threat of damage.

6. **MAINTENANCE OF PROPERTY**

Licensee shall, at its sole expense, keep and maintain the Property's native grasses and the areas where planting has occurred, free of all weeds, debris, and flammable materials of every description, and at all times. Licensee will maintain an orderly, clean, safe, and sanitary condition in and around the native grass areas. Any future modifications or improvement to the Property must be proposed, submitted and approved by ODOT prior to execution.

Licensee is responsible to notify adjacent property owners about the purpose of the project work and to resolve any related concerns that might arise.

Licensee is also responsible for the installation and maintenance of signage that has been approved and is permitted on the Property when located at a minimum of 30' from the edge of the pavement. Each sign is to be installed on two (2) sixteen foot posts, with the bottom of the sign located seven (7) feet from the ground.

Defoliant, noxious, or hazardous materials or chemicals are not to be stored on the Property. As identified in the Exhibit "A" - Permit #7-348-11, Licensee is permitted to use Round-Up to extinguish the existing vegetation, prior to planting the Warm Grass Seed Mix. The Licensee is also permitted to mow the native grass, up to two times after the initial planting. No planting is permitted within thirty (30) feet of the edge of the roadway pavement with the following restrictions: a) the native grass is not to be planted on foreslopes, and b) the native grass is not to be planted within a ditch, or on a backslope within ten (10') of the ditch flow line.

ODOT reserves the right to mow a fifteen (15) foot wide path at the limited access right-of-way fence line, in addition to a one time swath on the backside of the roadway ditch line. Licensee shall take all steps necessary to effectively protect the Property from damage incident to the Licensee's Use of the Property, all without expense to ODOT.

Licensee is liable for, and shall reimburse ODOT for any damage to the Property that may result from, or is attributable to the Use of said Property by the Licensee or any person entering upon the same with the consent of the Licensee, expressed or implied.

7. NECESSARY LICENSES AND PERMITS

Licensee, and any contractor acting on behalf of the Licensee, shall secure all necessary permits required in connection with the use of the Property and shall comply with all federal, state and local statutes, ordinances, rules, or regulations which may affect, in any respect, Licensee's Use of the Property, including, but not limited to, storm water, pollution and/or erosion control. No public utility will be required to move or relocate any of its facilities that may be located in or on the Property.

Prior to any excavation, as defined by the Ohio Revised Code Section 3781.25, the Licensee, or a contractor performing the work on behalf of the Licensee, is required by Ohio Revised Code Section 3781.27 to contact the Ohio Utilities Protection Service (O.U.P.S.) at 800-362-2764 to have utilities identified within the excavation site. The Licensee is responsible for any disturbance and/or repercussions from the disturbance of any utilities serving the Property and/or neighboring properties.

8. DRUG-FREE WORKPLACE

Licensee agrees to comply with all applicable state and federal laws regarding a drug-free workplace. Licensee shall make a good faith effort to ensure that all employees, and/or contractors, while working on ODOT property, will not purchase, transfer, use, or possess illegal drug or alcohol or abuse prescription drugs in any way.

9. NONDISCRIMINATION

Licensee, and any contractor acting on behalf of the Licensee, agrees that no person on the grounds of race, color, or national origin shall be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in the associated native grass maintenance and/or Use of the Property.

10. STORAGE AND VENDING

No storage of equipment, materials or supplies of any nature will be permitted on the Property except as directly relating to the specific Use of the Property; and, only so as to not impair the functional use of the roadway by the travelling public. No vending of any kind or character shall be conducted, permitted, or allowed on the Property.

11. RECORDATION

This Agreement shall not be recorded.

12. MODIFICATION

The terms of this License Agreement may be modified upon written agreement of the parties.

13. WAIVER

The failure of ODOT to take action with respect to any breach of any term or condition herein contained will not be deemed to be a waiver of such term or condition.

14. NOTICE

All notices, demands, requests, consents, approvals and other instruments required or permitted to be given pursuant to the terms of this License Agreement will be in writing

and will be deemed to have been properly given if sent by US registered or certified mail, return receipt requested, to the parties of this License Agreement as indicated on the first page of this License Agreement.

15. Obligations of the Licensee (ODNR) under this License Agreement are subject to the provisions of Ohio Revised Code Section 126.07.

IN WITNESS WHEREOF, this Joint Use License Agreement has been executed by the parties hereto, as of the date herein last written below. Licensee acknowledges receipt of a copy of this License Agreement and agrees to comply with the provisions herein contained.

LICENSEE: STATE OF OHIO DEPARTMENT OF NATURAL RESOURCES:
Director Jim Zehringer

By: Frederick Shimp
Print Name

[Signature]
Signature

Date: 7-16-12

[Signature]
Witness
(Print Name: Kimberly A. Berridge)

LICENSEE: OHIO PHEASANTS FOREVER
By Terry Lavy, Habitat Chair, Miami County, Ohio Pheasants Forever

[Signature]
Signature

Date: 7-20-12

[Signature]
Witness
(Print Name: Jane Lavy)

STATE OF OHIO DEPARTMENT OF TRANSPORTATION:
Director Jerry Wray
By Wayne Callahan, District Seven Real Estate Administrator

[Signature]
Signature

Date: 7-23-12

[Signature]
Witness
(Print Name: ANN M. ALTHAUS)

Attached:
EXHIBIT "A": ODOT District Seven Permit No. 7-348-11 (dated 11/15/11)

MR-50

Permit No. 7-348-11

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
Permit

Office Use Only
County or Jurisdiction Darke
Rte. 36 Log Pt. 8:35 - 21.04
AccCat 2

[1] Subject to all of the terms, conditions and restrictions printed or written below, and on the reverse side hereof or attached,

Name Ohio Pheasants Forever Attn: Tony Levy
Address 7277 W. Plaqu-Clayton Rd. Covington OH 45318
Phone (937) 606-4754 is hereby granted a permit under Section 5515.01 and 5515.02 of Ohio Revised Code, and permission to perform work necessary in the manner described and at the location indicated in the following or as attached to this permit.

To install on Ohio Pheasant Forever project involving grass plots on 20+ acres of ODOT Right of Way on South side of U.S. 36 from the 8.25mm to the 21.04mm per attached plan. The 20+ acres will have a grass seed mix that will grow to a height of approximately 42". Ohio Pheasants Forever will first use Round Up this Fall and again in the Spring of 2012 to kill the grass. Then the Warm Grass Seed Mix will be planted in the Spring of 2012. The Grass will be mowed up to twice after initial installation by O.P.F. Any further maintenance will be conducted by Darke County ODOT. ODOT reserves the right to mow a 15' wide path at the fence line and one swath on the backside of the delineator. ODOT also reserves the right to REVERSE any or all O.P.F. plots to original status if deemed necessary. O.P.F. will notify owners of the project and its purpose and will work with the property owners to resolve concerns. O.P.F. Signs will be allowed in ODOT Right of Way. The signs will be located a minimum of 30' off the pavement and installed on 2 round posts with the bottom of the sign being at 7 feet. The grass cannot be planted within 30 feet of the Edge of the Traveled way. Grass can be planted beyond the 30-foot offset with the following restrictions: a) the grass cannot be planted on fore-slopes, and b) the grass cannot be planted within a ditch or on a back-slope within 10 feet of the ditch flowline. The intent of this permit is to establish a habitat for game bird. It is unlawful to shoot from, on, across, or along a public road or highway.

Permittee shall have a copy of the permit and Ohio Department of Transportation approved, stamped plan on the job.

Any changes shall be approved by the Department prior to work being performed.

If permittee is excavating, he/she shall call "OUPPS" at 1-800-362-2764 and Oil and Gas Producers Underground Protection Service (OGPUPS) at 1-800-925-0988, as well as, all non-OUPPS utilities at least 2 days prior to start of work, for location of buried facilities.

Maintenance and/or repair of this installation shall in no way be the responsibility of the State of Ohio, Department of Transportation or the Federal Government.

Any damage done by this installation shall be restored to its original condition or better.

Permittee shall abide by current State and/or Local laws pertaining to storm water pollution and/or erosion control.

Permittee shall furnish sufficient flagmen and/or signs to protect the traveling public at all times, as per the Ohio Manual of Traffic Control Devices. Through traffic shall be maintained at all times.

The required intersection sight distance must be provided for vehicles exiting from drives/roadways located on the south side of US-36. Reference LDM Section 201.3 (Intersection Sight Distance) and LDM Figures 201-4E & 201-5E. Attached

Work shall be done under the supervision and approval of the Darke County Garage at (937) 548-3015. Permittee must contact this office 2 days prior to start of work. (Jeff Whitstone)

All disturbed earth shall be reseeded, compacted, and reshaped to its original cross-section and then re-seed it to the satisfaction of the Director of Transportation or his agent.

No signs shall be moved or taken down without the consent of the ODOT District 7 Traffic Engineer.

Permittee is responsible for all clean out work to keep this installation in operating condition.

Permittee shall be responsible for any & all utility installations/relocations as a result of this work.

The State of Ohio or Federal Highway Administration will not participate in the cost of this installation.

Traffic control shall be performed as per the latest Ohio Manual of Uniform Traffic Control Devices.

PERMITTEE SHALL CONTACT RUSS BERKKE, 937-497-6745, AT LEAST 2 DAYS PRIOR TO WORK FOR INSPECTION.

[2] This permit shall be in the possession of employees on site at all times who are in charge of the work and shall be shown, upon request, to any employee of the Department of Transportation.

[3] No work authorized by this permit shall begin until the permittee has contacted and received instructions from

Russ Berke 937-497-6745
(Authorized ODOT Employee)

NOTE: Any work performed by the permittee may be stopped if the above requirements are not met.

[4] To the extent applicable, this permit shall be void if the work described herein does not comply with the conditions, terms, and requirements applicable to this permit, and if the work is not completed by 10/31/2012

[5] All work requiring persons or vehicles within ODOT right of way shall comply with all applicable requirements of the Ohio Manual of Uniform Traffic Control Devices and Item 614 (Maintaining Traffic) of the Construction and Material Specifications, latest editions. Failure to comply with these requirements will be cause for immediate revocation or suspension of the permit until the proper traffic control devices have been provided.

[6] The permittee accepts the conditions, terms, and requirements printed, written on, or attached to this permit and understands that failure to comply fully with these conditions, terms, and requirements or any change in the use of this permit inconsistent with its terms and conditions will be considered a violation and cause for suspension, revocation, or annulment of the permit thereby rendering the permit illegal and subject to appropriate Department action, up to and including removal of the installation, if applicable, at the permittee's expense.

[7] Performance Bond Required

READ PERMIT-Call 937-548-3015 2 days before work-Refer to permit # at time of call.

Surety Company _____

Effective Date _____ Expiration Date _____ Amount _____

Permittee: M/F

Director: Jerry Whelan

DATE: 11/15/11

General Provisions Applicable to All Permits
(Sections 5515.01 and 5515.02 of O.R.C.)

Exhibit A
Page 2/12

- [1] This permit is not a substitute for satisfying the rights or obligations of any other party who may have an interest in the underlying fee interest.
- [2] The granting of this permit does not convey to the permittee or to the property served any rights, title, or interest in state highway rights of way or in the design or operation of the state highway; or in any way abridge the right of the Director of the Department of Transportation in his jurisdiction over state highways. If, in the process of any future work or for the benefit of the traveling public, it becomes necessary, in the opinion of the Director of Transportation to order the removal, reconstruction, relocation, or repair of any of the fixtures, or work performed under this permit, said removal, reconstruction, relocation, or repair shall be wholly at the expense of the owners thereof or the permittee and be made as directed by the Director of Transportation. Such changes in the state highway design or operation, necessary for improved safety and operation or for the benefit of the travelling public, shall not require a permit modification since the permit confers no private rights to the permittee over the control of the state highway.
- [3] The District Deputy Director acts for and on behalf of the Director in issuing and carrying out the provisions of all permits. The District Deputy Director has full authority to ensure that all provisions of the permit are met and to reject any materials, design, and workmanship that do not meet applicable Department standards. The District Deputy Director, at his/her discretion, may require a performance bond or certified check as a prerequisite to the issuance of a permit.
- [4] Failure on the part of the permittee to comply fully with the provisions and conditions of the permit will be cause for suspension, revocation, or annulment of the permit thereby rendering the permit illegal and subject to appropriate Departmental action. By accepting the permit, the permittee agrees to comply with all conditions, terms, and restrictions printed or written on or attached to the permit. If the permittee performs any work contrary to the conditions of the permit or to the instructions of the District Deputy Director and, after due notice, fails to correct the problem, the Department of Transportation may, with or without notice, correct such work and the permittee shall reimburse the Department for the costs.
- [5] The permittees shall indemnify and hold harmless the State of Ohio, Department of Transportation, its officers, representatives and assigns, from any and all loss, liability, damages, litigation costs, and claims for injury or death to any person, property, or business caused by or resulting from any act, omission, event, consequence, or occurrence, negligent or otherwise of the permittee, his employees, or assigns as a result of the issuance of this permit.
- [6] All work authorized under the permit shall be performed to the Department's satisfaction, and the entire expense shall be borne by the permittee. No work shall be performed until the permittee has contacted the Department's appointed representative named on the permit and received instructions. The Department's representative may inspect all work covered by the permit, or the Department reserves the right, during the time any or all of the work is being performed, to appoint an inspector over the work who shall represent the interest of the State on the work and any compensation arranged for shall be paid wholly by the permit holder. Work not in compliance shall be halted and the District Deputy Director shall be notified of the cause. The permittee shall be notified of the Department's action and its causes, and given an opportunity to correct the problem.
- [7] Failure to complete all work within the time specified on the permit shall void the permit, thereby making the permit illegal and subject to appropriate Departmental action. The permittee may request an extension in writing from the District Office, explaining why the extension is necessary and when the work is expected to be completed.
- [8] All work infringing on the pavement or shoulders shall comply with applicable standards and requirements regarding traffic control devices. Failure to comply will be cause for revocation or suspension of the permit. Any closure of lanes or shoulders shall be described in terms of location, duration, time of day, etc. Such work shall not begin until all traffic control devices are in place.
- [9] If any grading, sidewalk, or other work allowed by a permit interferes with the drainage of the highway in any way, such catch basins and outlets as necessary shall be constructed to take proper care of said drainages.
- [10] Upon completion of the work, the permittee shall leave the highway clean of all rubbish, excess materials, temporary structures and equipment, and all parts of the highway shall be left in a condition acceptable to the Department. Upon satisfactory completion of the work authorized by the permit, the Department's appointed representative shall complete the Permit Inspection Certificate, Form No. MR 678 certifying that the permittee has complied with the terms of the permit.
- [11] Except as herein authorized, no excavation shall be made or obstacle placed within the limits of the highway so as to interfere with the travel over the road.
- [12] All pole lines are to be built in accordance with Rule 49013-1-03 of Ohio Administrative Code promulgated and enforced by the Public Utilities Commission of Ohio.
- [13] The permittee shall comply with the Air Pollution requirements of Rule 3745-17-03 of the Ohio Administrative Code promulgated and enforced by the Ohio Environmental Protection Agency.
- [14] This permittee certifies that he or she is fully authorized to sign this permit. This permit shall apply to and be binding upon the permittee and his/her successors in interest. No change in ownership of the underlying property or of the facility owned by permittee shall in any way alter the permittee's obligations under this permit.
- [15] The permittee(s) for her/his/himself/herselves/itself, her/his/his/their/its personal representatives, and her/his/his/their/its successors in interest and assigns, as a part of the consideration hereof, do/does hereby covenant and agree that:
- (1) No person on the grounds of race, color, national origin, sex, age, or disability shall be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in the use of the above described property.
 - (2) In the construction of any improvements on, over, or under the above described property and the furnishing of services thereon, no person on the grounds of race, color, national origin, sex, age, or disability shall be excluded from the participation in, be denied the benefits of, or be otherwise subjected to discrimination.
 - (3) The above described property shall be used in a manner that at all times is in compliance with all other requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. DOT, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the U.S. DOT - Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations may be amended.
 - (4) In the event that this instrument grants a lease, license, or permit and any of the above nondiscrimination covenants is breached, then the State of Ohio, Department of Transportation, shall have the unfettered right to terminate the lease, license or permit and to re-enter and repossess the above-described property and hold the same as if said lease, license or permit had never been made or issued.
 - (5) In the event that this instrument grants a fee or easement interest and any of the above nondiscrimination covenants is breached, the State of Ohio, Department of Transportation, shall have the unfettered right to re-enter the above described property, and said property will thereupon revert to and vest in and become the absolute property of the State of Ohio and its successors and assigns for the use and benefit of the Department of Transportation.
 - (6) In the event that this instrument grants a lease, fee or easement interest, all of the foregoing nondiscrimination covenants shall be and are covenants running with the land.

200 Horizontal and Vertical Design

201.2.1 Horizontal Sight Distance

The sight distance on horizontal curves may be restricted by obstructions on the inside of a curve, such as bridge piers, buildings, median barriers, guardrail, cut slopes, etc. *Figure 201-2* shows the relation of sight distance, horizontal curvature, line of sight, and obstruction offset. In using this figure, the designer should enter the required stopping sight distance from *Figure 201-1* and the degree of curvature or radius [curve radius]. Where these two lines intersect, the offset of the obstruction needed to satisfy the sight distance requirements may be read from the curved lines.

Where the horizontal sight distance is restricted by a cut slope in the inside of the curve, the offset shall be measured to a point on the cut slope that is at the same elevation as the roadway. This would allow a line of sight which is 3.5 ft. [1.07 m] above the roadway to pass over a cut slope with 2.75 ft. [0.84 m] of vegetative growth and view a 2.0 ft. [0.6 m] high object on the far side.

When a combination of spirals, tangents and/or curves is present, the horizontal sight distance should be determined graphically.

201.2.2 Vertical Stopping Sight Distance

The sight distance on crest vertical curves is based on a driver's ability to see a 2.0 ft. [0.6 m] high object in the roadway without being blocked out by the pavement surface. The height of eye for the driver used in the calculation is 3.5 ft. [1.07 m]. See *Figures 203-4 & 203-7*.

The sight distance on sag curves is dependent on the driver's ability to see the pavement surface as illuminated by headlights at night. The height of headlight is assumed to be 2.0 ft. [0.6 m], the height of object 0' and the upward divergence angle of the headlight beam is assumed to be 1°00'. See *Figure 203-6 & 203-7*.

201.3 Intersection Sight Distance (ISD)

Intersections generally have a higher potential for vehicular conflict than a continuous section of roadway due to the occurrence of numerous traffic movements. Providing adequate sight distance at the intersection can greatly reduce the likelihood of these conflicts.

The driver of a vehicle approaching an intersection should have an unobstructed view of the entire intersection and sufficient lengths along the intersecting highway to permit the driver to anticipate and avoid potential collisions. When entering or crossing a highway, motorists should be able to observe the traffic at a distance that will allow them to safely make the desired movement.

The methods for determining sight distance needed by drivers approaching an intersection are based on the same principles as stopping sight distance, but incorporate modified assumptions based on observed driver behavior at intersections.

To enhance traffic operations, intersection sight distance should be provided at all intersections. If intersections sight distance cannot be provided due to environmental or right-of-way constraints, then as a minimum, the stopping sight distance for vehicles on the major road should be provided. By providing only stopping sight distance, this will require the major-road vehicle to stop or slow down to accommodate the maneuver of the minor-road vehicle. If the intersection sight distance cannot be attained, additional safety measures should be provided. These may include, but are not limited to, advance warning signs and flashers and/or reduced speed limit zones in the vicinity of the intersection.

200 Horizontal and Vertical Design

201.3.1 Sight Triangles

Specified areas along intersection approach legs and across their included corners should be clear of obstructions that might block a driver's view of potentially conflicting vehicles. These unobstructed areas are known as sight triangles (see *Figure 201-4*). The waiting vehicle is assumed to be located at a minimum of 14.4 ft. [4.4 m] and preferably 17.8 ft. [5.4 m] from the through road edge of pavement. The position of the waiting vehicle is the vertex of the sight triangle on the minor road, otherwise referred to as the decision point. It represents the typical position of the minor-road driver's eye when a vehicle is stopped relatively close to the major road. The left edge of the moving vehicle on the through road is assumed to be a ½ lane width for vehicles approaching from the left, or 1½ lane widths for vehicles approaching from the right. The design speed of the through road is used to select the appropriate ISD length (see *Figure 201-5*). The dimension "b" in *Figure 201-4* is the ISD length.

The provision of sight triangles allows the driver on the major road to see any vehicles stopped on the minor road approach and to be prepared to slow or stop, if necessary.

201.3.1.1 Identification of Sight Obstructions with Sight Triangles

The profiles of the intersecting roadways should be designed to provide the recommended sight distances for drivers on the intersection approaches. Within a sight triangle, any object at a height above the elevation of the adjacent roadways that would obstruct the driver's view should be removed or lowered, if practical. Particular attention should be given to the evaluation of sight triangles at interchange ramps or crossroad intersections where features such as bridge railings, piers, and abutments are potential sight obstructions.

The determination of whether an object constitutes a sight obstruction should consider both the horizontal and the vertical alignment of both intersecting roadways, as well as the height and position of the object. In making this determination, it should be assumed that the driver's eye is 3.5 ft. [1.08 m] above the roadway surface and the object to be seen is 3.5 ft. [1.08 m] above the surface of the roadway. When the object height and the driver's eye are equivalent, the intersection sight distances become reciprocal (i.e., if one driver can see another vehicle, then the driver of that vehicle can also see the first vehicle).

201.3.2 Intersection Control

The recommended dimensions of the sight triangles vary with the type of traffic control used at an intersection, because different types of control impose different legal constraints on drivers and, therefore, result in different driver behavior.

At signalized intersections and all-way stop control, the first vehicle stopped on one approach should be visible to the driver of the first vehicle stopped on each of the other approaches. Left turning vehicles should have sufficient sight distance to select gaps in oncoming traffic and complete left turns. Generally, sight distances are not needed for signalized intersections.

The most critical intersection control is the stop control on the minor roadway. Sight triangles for intersections with stop control on the minor road should be considered for three situations:

1. Left turns from the minor road
2. Right turns from the minor road
3. Crossing the major road from the minor road approach.

200 Horizontal and Vertical Design

201.3.2.1 Left Turn from the Minor Road

The intersection sight distance along the major road is determined by the following formula:

$$\text{English Units: } \text{ISD} = 1.47 \times V_{\text{major}} \times t_g$$

$$\text{[Metric Units: } \text{ISD} = 0.278 \times V_{\text{major}} \times t_g \text{]}$$

ISD = intersection sight distance (length of the leg of sight triangle along the major road) (ft) [m]

V_{major} = design speed of major road (mph) [km/h]

t_g = time gap for minor road vehicle to enter the major road (sec.)

The design values for intersection sight distance for passenger cars are shown in *Figure 201-5*.

The values for t_g can vary (see *Figure 201-5*) due to deviations of the intersection approach grade, truck usage, and the numbers of lanes of the facility. The values provide sufficient time for the minor-road vehicle to accelerate from a stop and complete a left turn without unduly interfering with major-road traffic operations. Where substantial volumes of heavy vehicles enter the major road (such as a ramp terminal), the t_g value for the single-unit or combination truck values should be considered.

Sight distances for left turns at divided highway intersections have special considerations. If the design vehicle can be stored in the median with adequate clearance to the through lanes, a sight triangle to the right for left turns should be provided for that design vehicle turning left from the median roadway. Where the median is not wide enough to store the design vehicle, a sight triangle should be provided for that design vehicle to turn left from the minor-road approach.

Also, the median width should be considered in determining the number of lanes to be crossed. The median width should be converted to equivalent lanes.

201.3.2.2 Right Turn from the Minor Road

The intersection sight distance for right turns is determined using the same methodology as that used for left turns, except that the time gaps differ. The time gap for right turns is decreased by 1.0 second. Also, the sight triangle for traffic approaching from the left should be used for right turns onto a major road. The design values for intersection sight distance for passenger cars are shown in *Figure 201-5*.

201.3.2.3 Crossing Maneuver from the Minor Road

In most cases, the sight distance provided by the sight triangles (for right or left turns) are adequate for a minor road vehicle to cross a major roadway. However, if the following situations exist, the sight distance for a crossing maneuver should, in of itself, be checked:

1. Where left and or right turns are not permitted from a particular approach and the crossing maneuver is the only legal maneuver
2. Where the crossing vehicle would cross the equivalent of more than six lanes

200 Horizontal and Vertical Design

3. Where substantial volumes of heavy vehicles cross the highway and steep grades that might slow the vehicle while its back portion is still in the intersection are present on the departure roadway on the far side of the intersection

The formula for the sight distance at a crossing maneuver is the same as that for right turns. The time gap adjustments listed in *Figure 201-5* must be used to modify the formula for a crossing maneuver.

201.3.3 Vertical ISD

Also shown on *Figure 201-5* are "K" curvature rates for crest vertical curves based on ISD. The K rates are derived using the height of eye as 3.50 ft. [1.07 m] and height of object as 3.50 ft. [1.07 m]. Appropriate equations are shown on *Figure 201-5*.

If a road or drive intersection occurs on or near a crest vertical curve, the length of curve should be at least as long as that calculated from the K rate for ISD or the K rate for stopping sight distance, whichever is greater.

In some areas, the sight distance will be limited due to projections above the pavement surface, such as raised medians, curbs and sidewalks. An illustration of this type of obstruction is shown in *Figure 201-4*, Diagram B, where the left sight distance is limited by a portion of the bridge abutment. Locations such as this should be checked graphically and corrected by lengthening the vertical curve, eliminating the obstruction or moving the intersection.

201.4 Passing Sight Distance

Figure 201-3 lists the distance required for passing an overtaken vehicle at various design speeds. These distances are applicable to two-lane roads only. It is important to provide adequate passing sight distance for as much of the project length as possible to compensate for missed opportunities due to oncoming traffic in the passing zone.

Figure 201-3 also contains "K" curvature rates for crest vertical curves based on passing sight distance. The K rates are derived using a 3.50 ft. [1.07 m] height of eye and a 3.50 ft. [1.07 m] height of object. Appropriate equations are included on *Figure 201-3*.

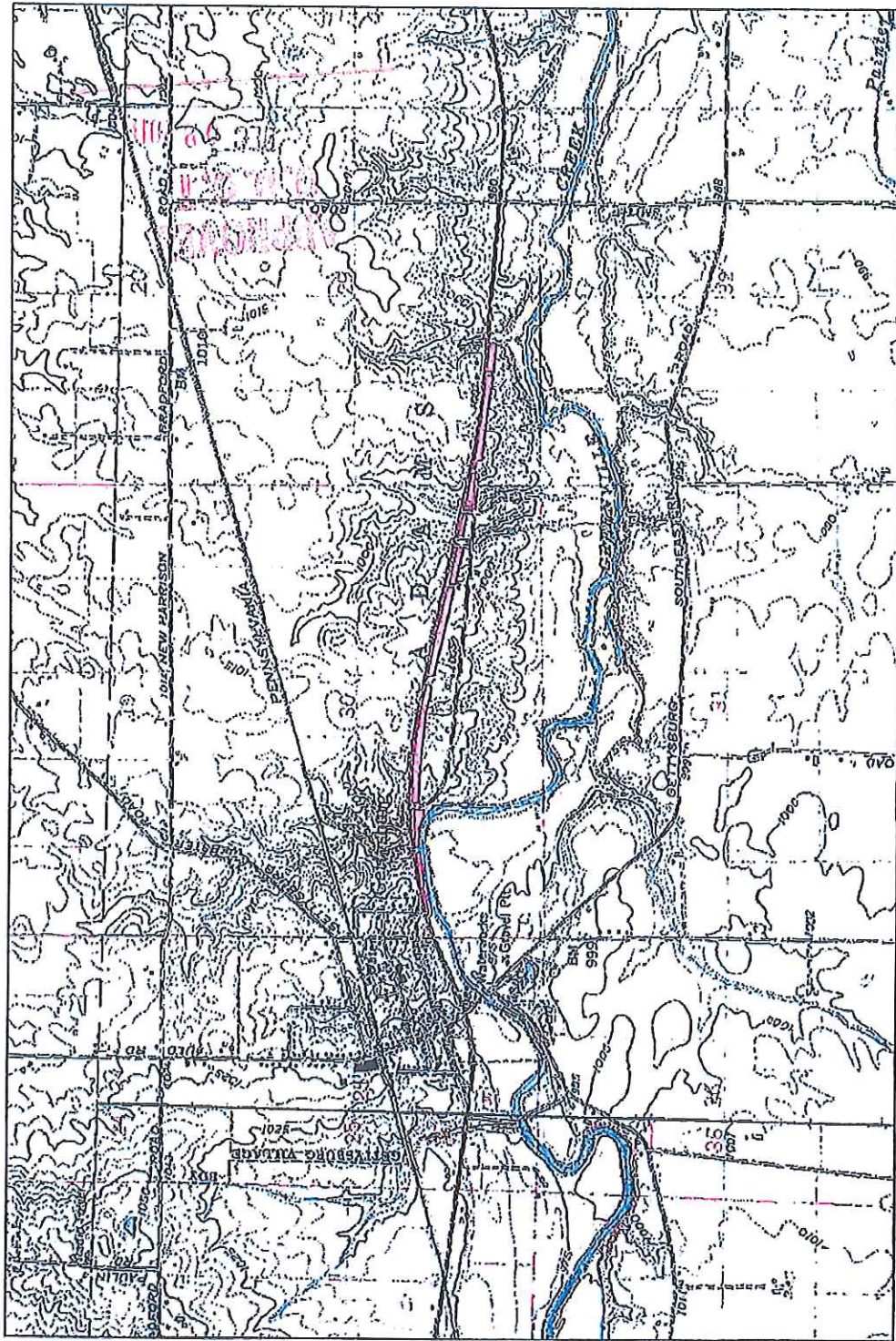
201.4.1 Available Passing Sight Distance

On 2-lane highways with design hourly volume (DHV) exceeding 400, the designer should investigate the effect of available passing sight distance on highway capacity using the procedures contained in the current edition of TRB Highway Capacity Manual. The designer should select the level of service to be used for design in accordance with *Figure 301-1*.

If the available passing sight distance restricts the capacity from meeting the design level of service, adjustments should be made to the profile to increase the available passing sight distance. If, after making all feasible adjustments to the profile, capacity is still restricted below the design level of service due to the lack of sufficient passing sight distance, consideration should be given to providing passing lane sections or constructing a divided multi-lane facility.

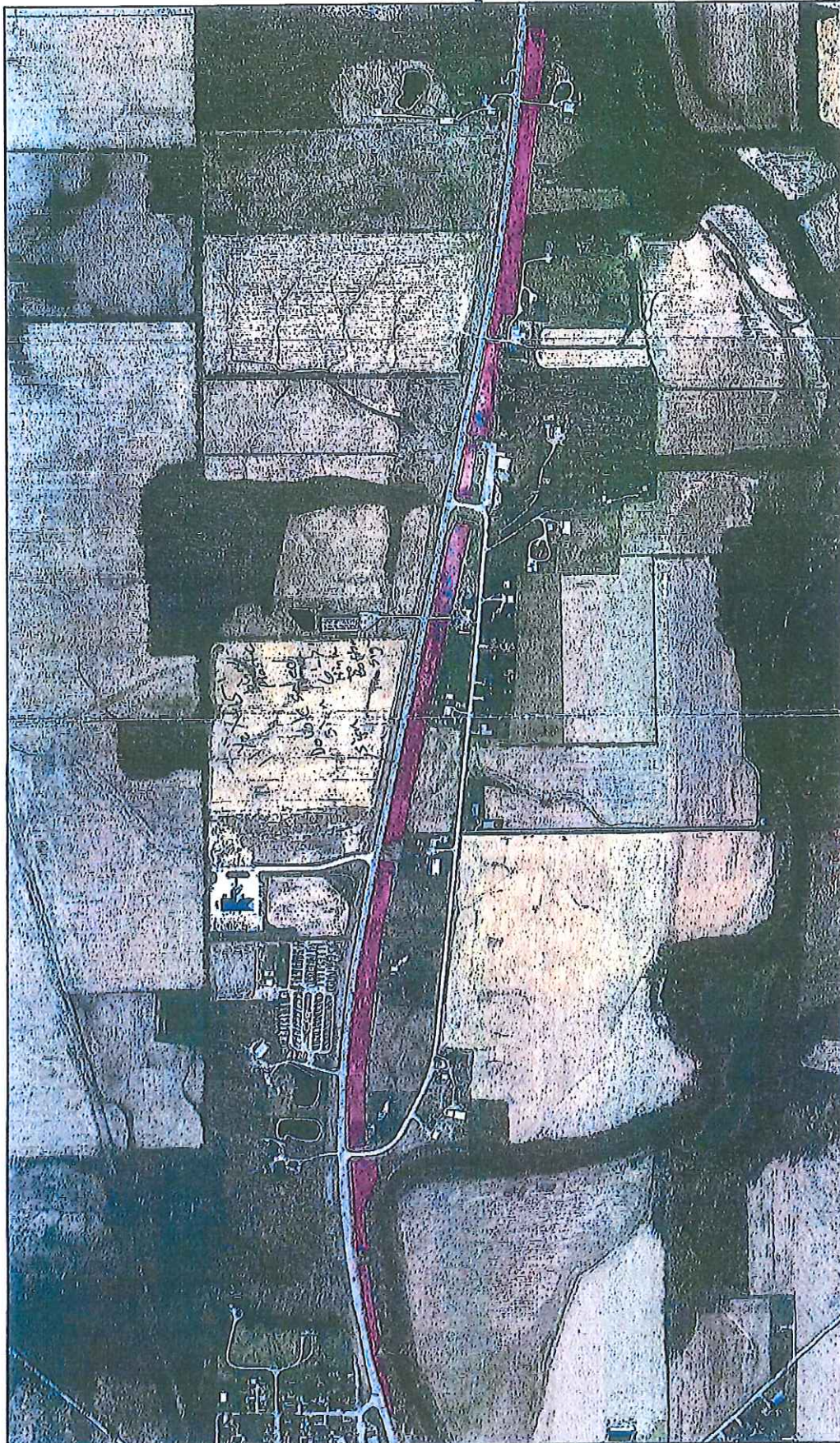
201.5 Decision Sight Distance (DSD)

Although stopping sight distance is usually sufficient to allow reasonably competent and alert drivers to come to a hurried stop under ordinary circumstances, it may not provide sufficient visibility distances for drivers when information is difficult to perceive, or when unexpected maneuvers are required. In these circumstances, decision sight distance provides the greater length needed by drivers to reduce the likelihood for error in either information reception, decision making, or control actions.



Gettysburg, Ohio Quadrangle

**DAR-Pheasants Forever Plantings
Adams Township Section
LIA Permit**

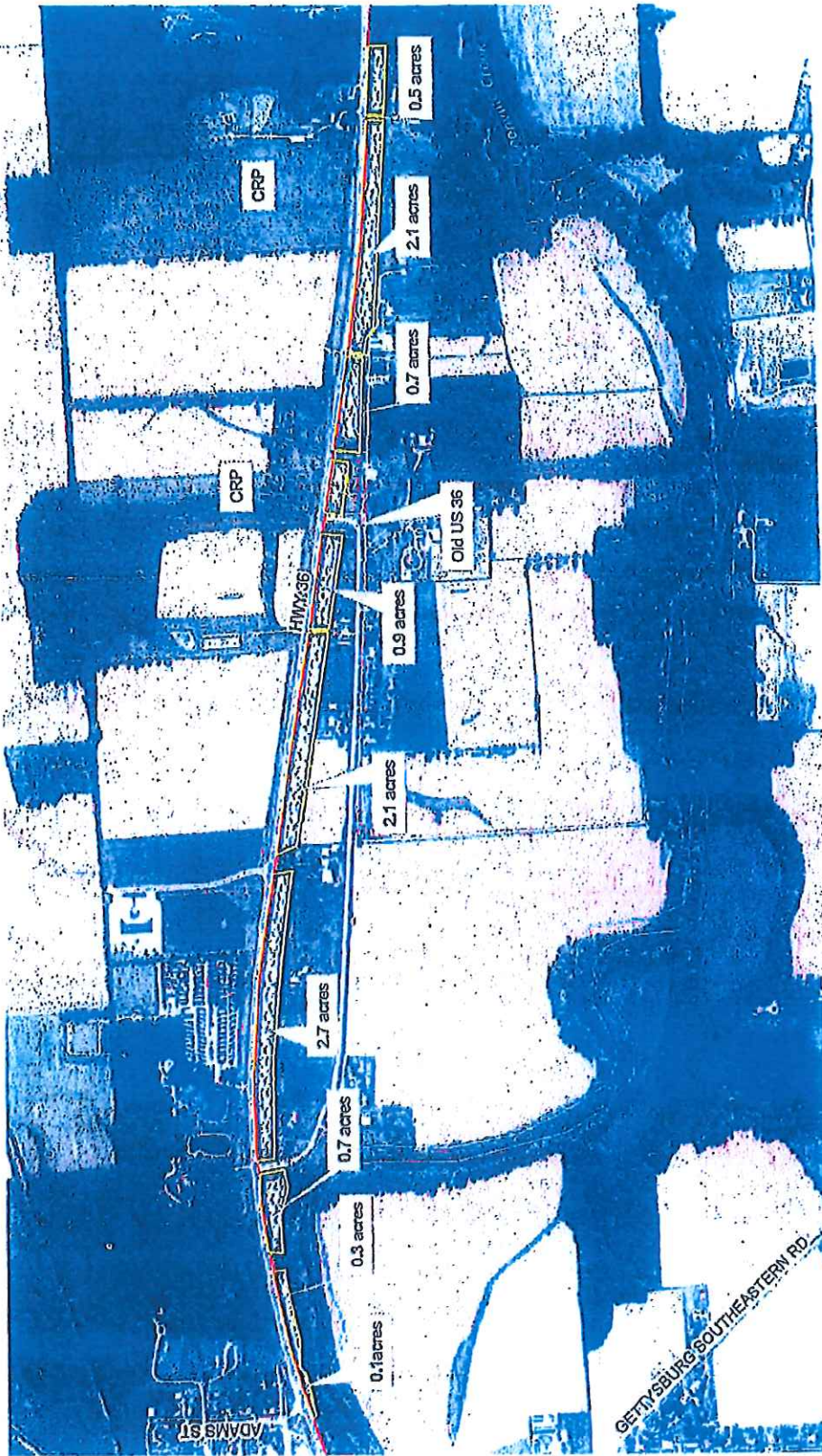


Scale: 1" = 500'

**DAR-Pheasants Forever Plantings
Adams Township Section
L/A Permit**

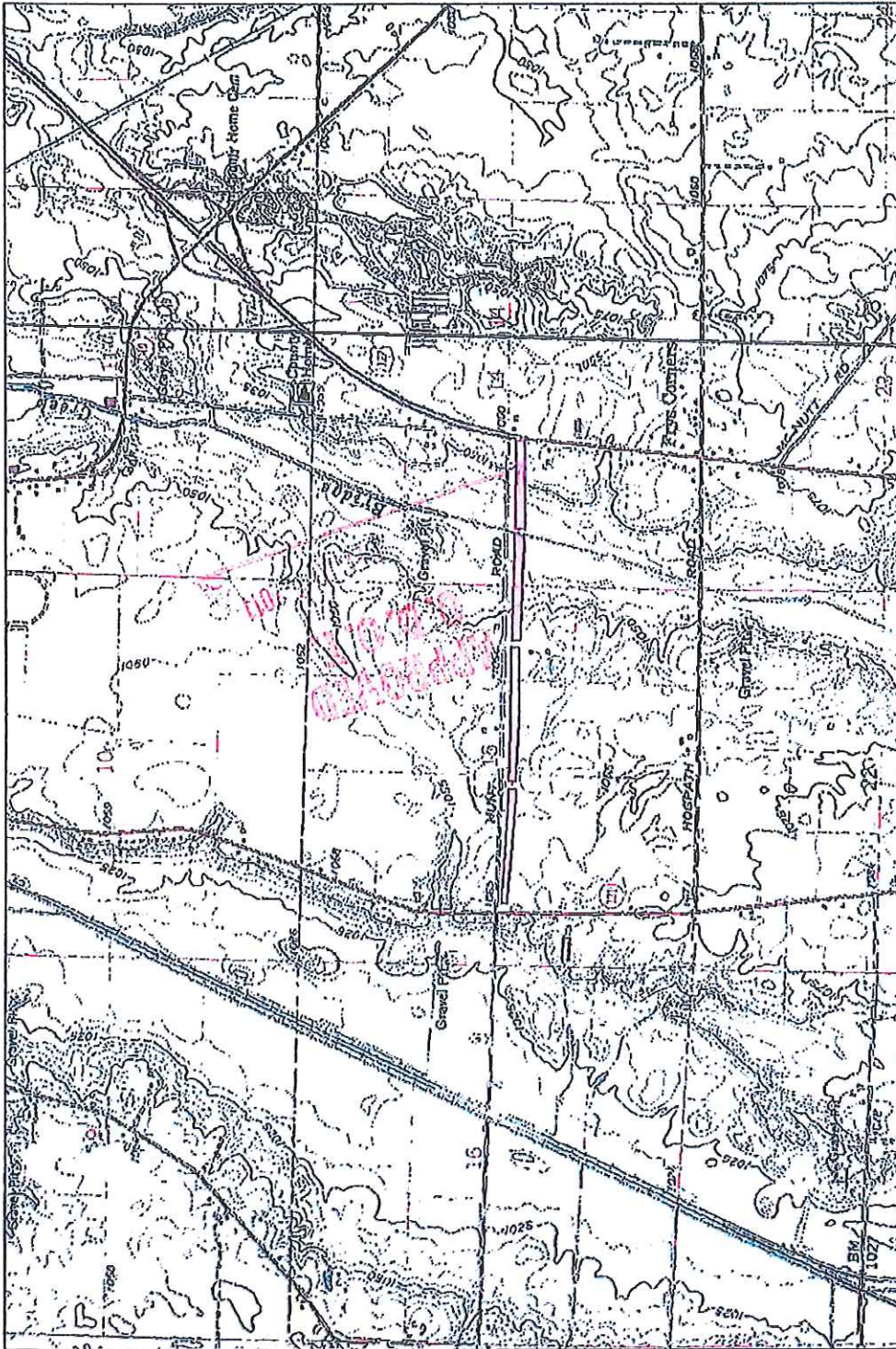


Area 1



APPROVED
C. S. O. F.

DEC 02 2011



Greenville West, Ohio Quadrangle

**DAR-Pheasants Forever Planting
Neave Township Section
L/A Permit**



Scale: 1" = 500'

DAR-Pheasants Forever Planting
Neave Township Section
L/A Permit

1800 03 2011

Area 2



APPROVED
O. B. O. T.

DEC 02 2014

Appendix F

Memorandum of Understanding

This Memorandum of Understanding ("MOU") is entered into by and between the Ohio Department of Transportation Region 9 ("ODOT"), OCPM Pollinator Team Members (OCPM) and the Deer Creek Chapter of Pheasants Forever relating to the establishment and maintenance of Ohio native prairie with warm season grass / forb plantings at two areas along St Rt 207 in Ross County. Area #1 is one (1) acre on the North side of the highway from state line mile (slm) 1.81 to 2.24, adjacent the Ross County Fairgrounds. Area #2 is one (1) acre on the North side of the highway from slm 1.25 to slm 1.55 just East of Structure No. 7104901

WHEREAS, the ODOT, OCPM and the Deer Creek Chapter of Pheasants Forever participated in a Site Preparation Scheduling Meeting held on February 18, 2014; and

WHEREAS, at the meeting the roles and responsibilities of each attendee was defined.

NOW THEREFORE, the Parties agree to proceed as follows:

1. Dianne Kahal-Berman, ODOT is responsible for coordination of schedule and contacting Mike Darbyshire, ODOT and Seth Rankin, Deer Creek Chapter of Pheasants Forever as events become necessary. She will be on site for all site preparation including; roundup applications, seed planting, and continued maintenance such as mowing and burning. She will provide adequate notice to all involved persons at least three days prior to events.
2. Mike Darbyshire, ODOT will identify at least one, maybe two employees who may be interested in participating with this pilot program. Their roll would be maintenance of site and possibly future leadership in the development of native Ohio pollinator habitat in the future.
3. Site Preparation– As soon as the snow clears, preferably late February or early March, Dianne Kahal-Berman, ODOT will contact Mike Darbyshire, ODOT so that the two of them can review site and make preparations for the placement of "Do Not Mow, Do Not Spray Signs" at the corners of each of the two project areas with two additional signs placed at the project area's bisecting points. Site boundary will be adjusted as needed to allow for 16' mowing lane along site perimeters. Twelve signs will be required. Mike Darbyshire, ODOT with the Ross County forces will provide the signs.
4. At the first Spring "greening" of area grass, ODOT will apply Roundup® to site areas for First Kill. This is anticipated to occur in March or early April. ODOT will provide Roundup®. This event will be coordinated between Mike Darbyshire, ODOT and Dianne Kahal-Berman, ODOT.
5. The Deer Creek Chapter of Pheasants Forever and ODOT will later apply the second application of Roundup® simultaneously with planting of seed. The expected time will be late in May. ODOT District 9 will provide a tractor with hydraulic capabilities to be used with the no till drill provided by Deer Creek Chapter of Pheasants Forever. The drill will be delivered to the Ross County ODOT garage located at 255 Larrick Lane, Chillicothe Ohio 45601, at least 24 hours prior to the planting event with the intention of joining tractor with drill. This is intended to identify equipment incompatibilities that may exist and allow time to remedy this situation should it arise.
6. Upon germination of seed, ODOT will be responsible for mowing site as plantings grow to about 10" to 12". The plants will be mowed and maintained to 6" height with the intention of suppressing weed growth and allowing for sunlight to reach new growth. Mowing will not be performed on wet earth after rain events; mowing will only be allowed on dry ground in order to protect new growth.

7. Mowing maintenance will occur until the end of October as necessary for the first two seasons by ODOT.
8. The following season, site growth of habitat will be maintained to 12" growth by ODOT. Mowing will not be performed on wet earth after rain events; mowing will only be allowed on dry ground in order to protect new growth.
9. Either at the beginning of third season or fourth as necessary, a controlled burn will be performed by Deer Creek Chapter of Pheasants Forever. A permit approved by ODOT will be necessary for this event. If a controlled burn is not to occur at the beginning of the third season, then mowing to 3" (not allowing for scarification of the earth), will be performed early in the season by ODOT. The complete schedule of maintenance for season 3 and season 4 may be modified as necessary at this time.

Agreed to by the Parties this 27 day of May, 2014.

OHIO DEPARTMENT OF TRANSPORTATION-REGION 9

By: J. Troy Huff, P.E.
J. Troy Huff, P.E.
Highway Management Administrator

Date: 5/27/2014

DEER CREEK CHAPTER OF PHEASANTS FOREVER

By: Seth Rankin
Seth Rankin
Deer Creek Chapter of Pheasants Forever

Date: 5/22/14

OCPM POLLINATOR HABITAT TEAM

By: Dianne Kahal-Berman
Dianne Kahal-Berman
District 9 Project Manager- OCPM Team Lead

Date: 5/27/14

Appendix G

Standard Maintenance Agreement Mod. July 22, 2008

ODOT Agreement No. _____

**AGREEMENT
BETWEEN THE STATE OF OHIO,
DEPARTMENT OF TRANSPORTATION
AND _____
TO MAINTAIN THE HIGHWAY LANDSCAPING AT THE INTERCHANGE OR
HIGHWAY CORRIDOR OF
_____**

This agreement is made by and between the State of Ohio, acting by and through the Director of the Ohio Department of Transportation (hereinafter referred to as "ODOT"), 1980 West Broad Street, Columbus, Ohio 43223 and _____ (hereinafter referred to as the "APPLICANT"), _____.

1. **PURPOSE**

- 1.1 Sections 5501.11(D) and 5501.31 of the Ohio Revised Code provide that ODOT may cooperate with municipal corporations in the establishment, construction, reconstruction, and improvement of public roads and bridges.
- 1.2 Section 5501.03(A)(3) of the Ohio Revised Code provides that the director of Transportation may coordinate the activities of the Department of Transportation with other appropriate public authorities and enter into contracts with such authorities as necessary to carry out its duties, powers and functions.
- 1.3 The APPLICANT is willing to provide materials and, by way of construction, the costs associated with constructing the improvements, and is willing fully to cooperate with ODOT in completing and maintaining the PROJECT and ODOT is willing to accept the contribution under certain conditions.

2. **SCOPE OF WORK**

- 2.1 The work to be performed under this Agreement shall consist of the following:

The design and construction of _____ and landscape plantings as fully described in the construction plans titled _____, and approved by ODOT, Office of Maintenance Administration, and ODOT Agreement No. _____.

- 2.2 All work on the PROJECT shall be accomplished in accordance with the latest Permitting

for Vegetation Maintenance Standard Procedure, Design Criteria, Standard Drawings and Construction and Materials Specifications of ODOT, which shall include provisions for a Maintenance of Traffic Plan (“Plans and Specifications”), as agreed to by the APPLICANT.

3. **OBLIGATION OF THE APPLICANT**

- 3.1 The APPLICANT agrees to furnish, at no cost to ODOT, a complete set of the Plans and Specifications of the PROJECT prepared by (name of engineering firm) _____, and to submit the same in a timely manner for review and approval by ODOT and, if necessary, the FHWA.
- 3.2 The APPLICANT agrees to cooperate with ODOT and, where necessary, the FHWA in obtaining the approval of the PROJECT Plans and Specifications by all necessary parties.
- 3.3 The APPLICANT agrees to pay the entire construction cost of the PROJECT including, but not limited to, _____ and landscape plantings, as detailed in the Plans and Specifications and in subsequent construction change orders. As herein, “construction cost” means that total initial contract price adjusted upward or downward for change orders and claims made under the Construction and Material Specifications or under this Agreement.
- 3.4 The APPLICANT agrees to pay all costs and perform all construction, inspection, supervision, sampling and testing for the PROJECT.
- 3.5 The APPLICANT agrees to provide ODOT an executed copy of the Construction Agreement between the APPLICANT and its contractor.

4. **OBLIGATIONS OF ODOT**

- 4.1 ODOT agrees to grant to the APPLICANT a permit to use and occupy the ramps and rights-of-way in and abutting _____ for purposes of construction of this PROJECT.
- 4.2 ODOT will carefully review the right-of-way permit application and conduct a review of potential environmental impacts prior to right-of-way permit approval. As such, each District Environmental Coordinator will be responsible for assessing the project area and completing the necessary environmental documentation, if warranted, per the Programmatic Categorical Exclusion Agreement between The Federal Highway Administration and the Ohio Department of Transportation dated March 6, 2003. Due to the limited scope of work for vegetation removal projects, it is likely that many of these

projects will be exempt from environmental documentation. In the case where impacts or project criteria require a higher level of documentation ODOT will complete the appropriate documentation per the CE agreement.

5. **CONSTRUCTION**

- 5.1 The construction of the PROJECT will be accomplished by the APPLICANT letting a contract to a contractor pre-qualified by ODOT (as determined by and contained in a list prepared by the Ohio Department of Transportation) or by the APPLICANT's own forces.
- 5.2 The APPLICANT further agrees to require its contractor to pay wages based on the prevailing wage rates and to comply and have its contractor comply with all equal employment and civil rights provisions.
- 5.3 The APPLICANT shall prepare Plans and Specifications for any change orders required for satisfactory completion of the work.
- 5.4 The APPLICANT shall certify that the construction is completed in accordance with the provisions of the Agreement and in accordance with the current ODOT Construction and Materials Specifications and other appropriate and applicable specifications.
- 5.5 If the APPLICANT does anything contrary to the approved plans and specification and after due notice, fails to correct such action, ODOT may take those measures contained in the Construction and Materials Specifications to ensure full restitution and compliance.
- 5.6 Highway property, disturbed by the APPLICANT, shall be restored using materials, design and workmanship in conformance with the Ohio Department of Transportation Construction and Material Specifications, Location and Design Manual, or other existing Department Standards.
- 5.7 All work requiring men or vehicles on the pavement or shoulders shall comply with all of the requirements of the Ohio Manual of Uniform Traffic Control Devices and Item 614 (Maintaining Traffic) of the Ohio Department of Transportation Construction and Materials Specifications. Failure to comply with the requirement will be cause for immediate suspension of contract work until the proper traffic controls have been provided.
- 5.8 The APPLICANT, upon completion of the work, shall leave the highway clean of all rubbish, excess materials, temporary structures and equipment and all parts of the highway disturbed by the PROJECT shall be left in acceptable condition.

6. **NOTICE**

6.1 Notice under this Agreement shall be directed as follows:

(Applicant's information _____
(Address)
Attn: _____
Telephone: _____

Ohio Department of Transportation
(Address)
Attn: _____
Telephone: _____

7. **BREACH OF CONTRACT**

7.1 Neglect or failure of the APPLICANT to comply with any of the terms, conditions, or provisions of this Agreement, including misrepresentation of fact, shall be an event of default, unless such failure or misrepresentation are the result of natural disasters, strikes, lockouts, acts of public enemies, insurrections, riots, epidemics, civil disturbances, explosions, orders of any kind of governments of the United States or State of Ohio or any of their departments or political subdivisions, or any other cause not reasonably within the APPLICANT's control. The APPLICANT, however, shall remedy as soon as possible each cause preventing its compliance with this Agreement.

7.2 If notified by ODOT in writing that it is in violation of any of the terms, conditions, or provisions of this Agreement, and a default has occurred, the APPLICANT shall have thirty days or a time negotiated with ODOT from the date of such notification to remedy the causes preventing its compliance and curing the default situation. Expiration of the thirty days or negotiated time and failure by the APPLICANT to remedy the default shall result in termination of this Agreement by ODOT.

7.3 Upon a termination of this Agreement by ODOT, ODOT shall conduct an inspection of the PROJECT to determine whether or not the PROJECT has been completed to a degree acceptable to ODOT. If the PROJECT is not completed to a degree and condition acceptable to ODOT, then ODOT may take any measures necessary to complete the PROJECT. The APPLICANT shall be held responsible for full restitution of all expenses incurred in completing the PROJECT.

7.4 No remedy herein conferred upon or reserved by ODOT is intended to be exclusive of any other available remedy, but each and every such remedy shall be cumulative and shall be in addition to every other remedy given under this Agreement or now or hereafter existing at law or in equity. No delay or omission to exercise any right or option accruing to ODOT upon any default by the APPLICANT shall impair any such right or option or shall be construed to be a waiver thereof, but any such right or option may be exercised from time to time and as often as may be deemed expedient by ODOT.

8. **MAINTENANCE**

- 8.1 The APPLICANT agrees to keep the exit and entrance ramps to the interchange or corridor of _____ open to traffic at all times while performing any maintenance activities.
- 8.2 The APPLICANT agrees to perform all maintenance activities required by industry practices to maintain the PROJECT in an attractive manner. "Maintenance activities" can include, but shall not be limited to: litter removal, repairing the concrete edging, repairing the retaining wall, herbicidal spraying, on-going landscape maintenance, repair or replacement of any dead trees or plants and repair, mowing or replacement of ground cover. (List in this section what maintenance activities will take place, when they will take place how often, and any other specifics concerning the maintenance of the project.)
- 8.3 The APPLICANT agrees to make ample financial and other provisions for such maintenance of the PROJECT after its completion.
- 8.4 ODOT agrees to grant to the APPLICANT any necessary permits to use and occupy the ramps and rights-of-way in and abutting State Route _____ for purposes of maintaining landscaping, _____, and _____ in an attractive manner.
- 8.5 The APPLICANT agrees to submit any additional landscaping plans to ODOT for prior approval or to submit changes, additions, or deletions to existing landscaping to ODOT for prior in a timely manner.

9. **GENERAL PROVISIONS**

- 9.1 The signing of the Agreement does not in any way abridge the right of the Director of Transportation in his jurisdiction over the state highway system.
- 9.2 This Agreement and Permit No. _____ constitutes the entire Agreement between the parties. All prior discussions and understandings between the parties are superseded by this Agreement.
- 9.3 Neither this Agreement nor any rights, duties, or obligation described herein shall be assigned by either party hereto without the prior express written consent of the other party. Any change to the provisions of this Agreement must be made in a written amendment executed by both parties.
- 9.4 This Agreement shall be construed and interpreted and the rights of the parties determined in accordance with the laws of the State of Ohio.

- 9.5 The District Deputy Director of District __ shall have full authority to ensure the full compliance of the provisions of this Agreement.
- 9.6 The signing of the Agreement or the doing of any work thereunder shall constitute an agreement by the APPLICANT to comply with all of the conditions and restrictions of this Agreement and the Permit printed or written herein.
- 9.7 The APPLICANT shall save harmless the State of Ohio and all of its representatives from all suits, actions or claims of any character brought on account of any injuries or damages sustained by any person or property in consequence of any neglect or on account of any wrongful act or omission on the part of the APPLICANT as a result of the construction or maintenance of the PROJECT.
- 9.8 The APPLICANT shall comply with the Air Pollution requirements of Rule 3745-17-08 of the Ohio Administrative Code promulgated and enforced by the Ohio Environmental Protection Agency.

10. **TERMINATION**

- 10.1 Either party may terminate this agreement by giving the other party ninety (90) days written notice.
- 10.2 All maintenance obligations of the APPLICANT shall commence upon completion of the PROJECT and shall expire four years thereafter, unless otherwise extended by mutual agreement of both parties.

11. **SIGNATURES**

11.1 Any person executing this agreement in a representative capacity hereby warrants that he/she has been duly authorized by his/her principal to execute this agreement on such principal's behalf.

THE STATE OF OHIO

(APPLICANT'S ORGANIZATION)

Department of Transportation

James G. Beasley, P.E. P.S.
Director

(Applicant title)

Date: _____

Date: _____



(Not for use on Managed Access Highways within incorporated cities or towns)

Applicant Name and Address:	Permit Number: RVP	
	State Route:	Milepost: <input type="checkbox"/> Left <input type="checkbox"/> Right <input type="checkbox"/> Both
	Region:	Maintenance Area:
	County:	
Email:	Highway Access Control: <input type="checkbox"/> Limited Access – Interstate <input type="checkbox"/> Limited Access – Non-Interstate <input type="checkbox"/> Managed Access Highway	
Telephone:		
Location of Roadside Vegetation if not adjacent to address listed above:	National Scenic Byway? <input type="checkbox"/> Yes <input type="checkbox"/> No	
	If work is on Interstate right of way, FHWA approval has been obtained? <input type="checkbox"/> Yes (included as exhibit) <input type="checkbox"/> Not Applicable	
	If work is on Interstate right of way, NEPA approval has been obtained? <input type="checkbox"/> Yes (included as exhibit) <input type="checkbox"/> Not Applicable	
Public Land Survey System: ¼ of the ¼ of Section , Township N, Range <input type="checkbox"/> E <input type="checkbox"/> W		
The applicant hereinafter will be referred to as the "Permit Holder," and the Washington State Department of Transportation hereinafter will be referred to as the "Department." Pursuant to Title 47 RCW, the Department will allow the Permit Holder to alter and/or maintain roadside vegetation on the state-owned highway right of way, hereinafter the "Work," provided that the Permit Holder fully accepts all of the Permit's terms, conditions, and provisions. Exhibits, if any, are attached hereto and by this reference made a part of this Permit.		
This Roadside Vegetation Permit allows vegetation establishment and on-going vegetation maintenance. This Permit shall terminate on _____.		
Exhibit A: Right of Way plan or Vicinity Map Exhibit B: Planting Plan and/or Vegetation Plan Attach other Exhibits as applicable.		
By signing this Permit, the Permit Holder agrees to comply with all of the terms, conditions, and provisions of this Permit and agrees to be bound by such terms.		
PERMIT HOLDER	DEPARTMENT OF TRANSPORTATION	
By (Print Name) _____	By (Print Name) _____	
Print Title _____	Print Title _____	
Signature _____	Signature _____	
Date _____	Date _____	

Roadside Vegetation Permit General Provisions

1. INDEMNIFICATION

The Permit Holder, on behalf of itself and its successors, assigns, employees, contractors, and agents, agrees to protect the State of Washington, its officers, and employees and hold them harmless from any and all costs, claims, actions, judgments, and/or awards of damages (both to persons and/or property), of every kind and description, including the recovery of reasonable attorneys fees, which may accrue to or be suffered by any person, persons, or property by reason of the acts or omissions of the Permit Holder, its successors, assigns, employees, contractors, and agents, , or any person whomsoever in connection with the Permit Holder's, its successors', assigns', agents', employees', or contractors' construction, installation, maintenance, operation, use, or occupancy of the state-owned highway right of way or actions performed as authorized by the terms of this Permit. In case any suit or action is brought against the State of Washington, its officers, and/or employees, arising out of or by reason of any of the above causes, the Permit Holder or its successors or assigns will, upon notice of such action, defend the same at its sole cost and expense and satisfy any judgment against the State of Washington, its officers, and/or employees; PROVIDED that, if the claims or damages are caused by or result from the concurrent negligence of (a) the Department, its officers, and/or employees, and (b) the Permit Holder or the Permit Holder's successors, assigns, employees, contractors and/or agents, or involves those actions covered by RCW 4.24.115, this indemnity provision shall be valid and enforceable only to the extent of the negligence of the Permit Holder or the Permit Holder's successors, assigns, employees, contractors and/or agents.

The Permit Holder agrees that its obligations under the indemnity provision of this Permit extend to any claim, demand, and/or cause of action brought by, or on behalf of, any of its employees or agents while performing Work of any type on the state-owned highway right of way. For this purpose, the Permit Holder, by MUTUAL NEGOTIATION, hereby waives with respect to the State of Washington only, any immunity that would otherwise be available to it against such claims under the Industrial Insurance provisions of chapter 51.12 RCW.

The Permit Holder, on behalf of itself and its successors, assigns, employees, contractors and/or agents, waives any claims for losses, expenses, damages, or lost revenues, if any, incurred by it and its successors, assigns, employees, contractors, and/or agents in connection with the Permit Holder's, its successors', assigns', agents', employees', contractors' and/or agents' construction, installation, maintenance, operation, use, or occupancy of the state-owned highway right of way or Work performed pursuant to the terms, conditions and provisions of this Permit against the State of Washington, its agents, contractors, or employees, except for the reasonable costs of repair to the Work, resulting from the Department's, or its agents', contractors', and/or employees' negligent acts.

The terms of this indemnity and waivers shall survive the termination of this Permit.

2. INTERFERENCE WITH DEPARTMENT WORK AND/OR OPERATIONS

The Permit Holder shall not perform or allow to be performed any Work authorized under this Permit in such a way as to conflict with, impede, or disrupt in any way Department highway construction, maintenance, and/or operations, or interfere with or endanger the safety of the traveling public.

3. INSURANCE

The Permit Holder or its contractor (if applicable) shall obtain at its sole cost, and keep in force during the term of this Permit, for the Work specified in this Permit, the following insurance requirements with companies licensed to conduct business in the State of Washington and approved by the State Insurance Commissioner pursuant to chapter 48.05 RCW: The provisions in the Washington State Department of Transportation (WSDOT) Standard Specifications for Road, Bridge, and Municipal Construction, current edition ("Standard Specifications"), Section 1-07.18 Public Liability and Property Damage Insurance shall apply.

Private Entities

Commercial General Liability Insurance written under Insurance Services Office Form CG0001 or its equivalent with minimum limits of Three Million and no/100 Dollars (\$3,000,000) each occurrence and Three Million and no/100 Dollars (\$3,000,000) in the aggregate for each policy year, with the State of Washington named as an additional insured in connection with the Permit Holder and the Permit Holder's contractor's performance of the Work specified in this Permit, and

Commercial Auto Liability Insurance providing bodily injury and property damage liability coverage for all owned and non-owned vehicles assigned to or used in the performance of the Work for a combined single limit of not less than One Million and no/100 Dollars (\$1,000,000) each occurrence, with the State of Washington named as an additional insured in connection with the Permit Holder and the Permit Holder's contractor's performance of the Work specified in this Permit.

Local Governments and Tribes

The Permit Holder warrants that it is self-insured, and agrees to provide acceptable evidence of its self-insured status to the Department. The Permit Holder's insurance policy must provide liability coverage for the state-owned highway right of way identified in this Permit, including public liability coverage for bodily injury, property damage, and personal injury of not less than Three Million and no/100 Dollars (\$3,000,000) combined single limit per occurrence, with a general aggregate amount of not less than Three Million and no/100 Dollars (\$3,000,000) per policy period. The Permit Holder shall increase the policy limits at its sole cost, when and if the Department deems it necessary due to the Permit Holder's use of the state-owned highway right of way identified in this Permit.

The Permit Holder assumes all obligations for premium payment, and in the event of nonpayment, the Permit Holder is obligated to reimburse the Department the cost of maintaining the insurance coverage and any legal fees incurred in enforcing such reimbursement should Permit Holder fail to pay the policy premiums.

Coverage, if obtained by the Permit Holder in compliance with this section, shall not be deemed as having relieved the Permit Holder of any liability in excess of such coverage.

In the event the Permit Holder, after commencement of this Permit, elects to terminate its self-insured status and secure commercial liability coverage, the Permit Holder will promptly notify the Department and provide a certificate of insurance from an insurer licensed to conduct business in the State of Washington, with the State of Washington named as an additional insured in connection with the Permit Holder in the amounts and types as set forth within this section. Further, the Permit Holder shall provide a certificate of insurance within Ten (10) calendar days of receiving a written notice from the Department for an increase in the coverage amounts.

Prior to accessing the state-owned highway right of way for any reason, the Permit Holder shall file with the Department ACORD Form Certificates of Insurance evidencing the minimum insurance required above. All Certificates of Insurance shall include a requirement providing for a minimum of forty-five (45) calendar days prior to written notice to the Department of any reduction or cancellation of coverage.

4. DAMAGE TO STATE-OWNED HIGHWAY RIGHT OF WAY OR STATE-OWNED PROPERTY

All Work on state-owned highway right of way is subject to ongoing monitoring and inspection by the Department solely for the benefit of the Department and not for the Permit Holder or any third party. The Permit Holder shall not damage or allow to be damaged the state-owned highway right of way, state-owned property, and/or facilities constructed on, above, or under such lands in any way, and agrees to be directly responsible for all repairs and/or replacement costs for all such damages. The insurance requirements set forth in Section 3 shall not limit the Permit Holder's obligations for the repair and/or replacement costs for damages to state-owned highway right of way, state-owned property, and/or facilities constructed on, above, or under such lands. Should the Permit Holder fail to adequately repair any damages as directed by the Department to the Department's sole satisfaction, the Department may, by itself or by use of its contractor, repair the damages at the Permit Holder's expense. The Permit Holder agrees to reimburse the Department for such costs pursuant to Section 30.

5. SCHEDULE OF WORK SUBMITTAL

The Permit Holder shall prepare and submit a written schedule of the Work for the Department's prior approval. The schedule of Work submittal shall include the Work required for ongoing maintenance, if applicable. The Permit Holder shall adhere to the approved schedule and perform the Work in such a manner so as not to conflict with, impede, or disrupt in any way Department highway construction, maintenance, and/or operations, or interfere with or endanger the safety of the traveling public, except as specifically authorized by the Department.

6. PRE-WORK INITIAL CONFERENCE

Prior to beginning Work, a pre-Work conference shall be held at which the Department, the Permit Holder, the Permit Holder's contractor, if applicable, and the Permit Holder's inspector, if applicable, shall be present.

7. DEPARTMENT NOTIFICATION

The Permit Holder shall notify the Department's representative five (5) working days in advance of any scheduled Work within the state-owned highway right of way. This includes, but is not limited to: the pre-Work conference; the beginning of any Work; the implementation of any traffic control plan that closes or restricts a sidewalk, pathway, trail, highway shoulder, or traveled lane of the state highway; submittal of a new or revised traffic control plan; any extension of allowed working hours or days; and the final inspection upon completion of the Work. Maintenance activities notification, if approved by the Department, may be in the form of a pre-approved schedule of Work; such schedule shall be attached to this Permit as an exhibit.

Working days, for the purposes of Department notification of any Work or other activity as authorized by this Permit, are the weekdays Monday through Friday, excluding legal holidays.

8. WORKING HOURS

Work within the state-owned highway right of way shall be restricted to the hours of 8 a.m. to 5 p.m. unless otherwise noted in the Exhibits, and no Work shall be allowed on the state-owned highway right of way on Saturday, Sunday, or holidays as defined by RCW 1.16.050, or the day before and after a holiday or a holiday weekend, unless authorized by the Department. See the applicable exhibits for variances to the working days and hours and other pertinent information, if any.

9. PERMIT ON SITE

A copy of this Permit must be on the Work site and protected from the elements at all times during the authorized Work.

10. OBTAINING OTHER LOCAL, STATE, OR FEDERAL AGENCY PERMITS OR APPROVALS

It is the Permit Holder's responsibility to obtain any other local, state, or federal agency permits or approvals that may be required, including, but not limited to, Washington State Department of Ecology, Washington State Department of Fish and Wildlife, and the U.S. Army Corps of Engineers. Copies of such permits shall be provided to the Department.

11. PERMIT TERMINATION DUE TO UNTIMELY COMPLETION

If the Work cannot be completed in a timely manner, the Department, in its sole discretion, may terminate this Permit. The Permit Holder agrees that it shall have no right to appeal such termination or that it specifically waives any right it might have to appeal the Permit termination.

12. PERMIT HOLDER'S RESPONSIBILITY FOR SUPERVISION OF WORK

The Permit Holder, at its own expense, shall adequately police and supervise all Work, including but not limited to its contractor, subcontractor, agent, and others, performed on the state-owned highway right of way, so as not to endanger or injure any person or property. The Permit Holder's responsibility for proper Work performance, safe conduct, and adequate policing and supervision shall not be lessened or otherwise affected by the Department's Permit issuance or Work inspection, all of which shall be performed solely for the benefit of the State of Washington and no other person or entity. The Permit Holder shall be present during any active construction or maintenance Work authorized by this Permit. Should the Permit Holder not be present during the Work authorized by this permit, the Permit Holder shall designate a representative that has either the legal authority to represent the Permit Holder or the designated authority to make decisions on behalf of the Permit Holder with respect to the work authorized by this Permit. Failure to comply with this provision may result in the Department restricting any further Work by the Permit Holder within the state-owned highway right of way until this requirement is met.

13. MATERIALS AND WORKMANSHIP

All Work shall be done to the Department's sole satisfaction at the Permit Holder's expense. This Permit authorizes the Permit Holder to modify the physical condition of selected vegetative material located on the state-owned highway right of way. All material and workmanship shall conform to the Washington State Department of Transportation *Standard Specifications for Road, Bridge, and Municipal Construction; Standard Plans; Roadside Policy Manual; and Design Manual*, current editions where applicable, and shall be subject to Department inspection. The Department shall notify the Permit Holder in writing of unsatisfactory Work. Unsatisfactory Work shall be corrected by the Permit Holder at its sole expense and within the time frame specified by the Department. Any unsatisfactory Work not corrected as required by the Department may be corrected by the Department, at the Permit Holder's expense. The Permit Holder agrees to reimburse the Department for such costs pursuant to Section 30.

The WSDOT *Standard Specifications for Road, Bridge, and Municipal Construction* (M 41-10) may be accessed at:
<http://www.wsdot.wa.gov/Publications/Manuals/M41-10.htm>

The WSDOT *Standard Plans* may be accessed at:
<http://www.wsdot.wa.gov/Design/Standards/Plans.htm>

The WSDOT *Roadside Policy Manual* (M 3110) may be accessed at:
<http://www.wsdot.wa.gov/Publications/Manuals/M3110.htm>

The WSDOT *Design Manual* (M 22-01) may be accessed at:
<http://www.wsdot.wa.gov/Publications/Manuals/M22-01.htm>

14. IMPACT TO EXISTING VEGETATION

The Permit Holder shall not cut or otherwise damage any vegetation on the state-owned highway right of way unless specifically authorized by this Permit or by the Department in writing. The Department's region or headquarters Landscape

Architect shall be consulted to determine if pruning is necessary. For structural pruning, the services of an International Society of Arboriculture (ISA) certified arborist may be required. Should the Permit Holder damage existing vegetation designated to be preserved, the Permit Holder shall replace the vegetation as the Department requires per the WSDOT *Roadside Policy Manual*. Further, if the Permit Holder fails to replace the vegetation as directed by the Department, the Permit Holder shall be subject to the payment of treble damages in accordance with RCW 4.24.630, and the provisions of Standard Specifications Section 1-07.16(2).

15. UTILITY IMPACTS

The Permit Holder shall not impact existing utility facilities located on, over, or under the state-owned highway right of way. It is the Permit Holder's responsibility to contact the One-Call Center pursuant to chapter 19.122 RCW. **CALL BEFORE YOU DIG: Utility Notification Center, 811 or 1-800-424-5555, as modified.** Any locations or dimensions provided for existing utility facilities on exhibit plan sheets provided by the Department are in accordance with available information obtained without uncovering, measuring, or other verification.

The Permit Holder agrees that it is its sole responsibility to take care and caution when excavating near utility facilities. The Permit Holder agrees that it is its sole responsibility to understand and maintain utility standards for separation (setbacks) from a utility's facility.

The Permit Holder shall take into consideration the growth pattern of any shrubs or trees, so that the plantings will not impact nearby utility facilities. If future growth impacts a utility facility, the Permit Holder will be solely responsible for any repair or replacement due to damage caused by its Work, including the landscape plantings. The Permit Holder shall not place plantings in proximity to a utility facility as to impede the utility's ability to access and maintain its facility. Contact the Department's regional Landscape Architect for assistance, if needed, to determine plant growth characteristics.

At such time that any Work by the Permit Holder exposes or unexpectedly impacts a utility's buried facility; the Permit Holder shall immediately contact the utility owner and the Department. The Permit Holder shall allow the utility time and access for inspection of the exposed utility facility for any damage, prior to any backfilling in that area.

Any time gas lines are identified/marked in the area, it is the Permit Holder's responsibility to contact the owner of the gas lines to determine if the owner's representative must be on site during the Work.

16. SURVEY MONUMENTS

The Permit Holder shall not disturb, remove, or destroy any existing survey monument before first obtaining a Washington State Department of Natural Resources (DNR) permit. The Permit Holder further agrees that all Department control and alignment monuments may not be disturbed, removed, or destroyed unless specifically authorized by this Permit or pursuant to the Department's prior written approval. Any reset survey monument shall be set by or under the direct supervision of a Professional Land Surveyor who has active current professional license with the State of Washington.

17. EROSION AND SEDIMENTATION CONTROL

The Permit Holder shall comply with the WSDOT *Temporary Erosion and Sediment Control Manual* (TESCM), current edition, and implement best management practices (BMP's) to reduce erosion, trap sediment, and ensure sediment-laden water does not leave the Work site. The TESCM establishes minimum requirements and provides uniform technical guidance for avoiding, minimizing, and/or mitigating potential water resource impacts. All water discharges to and/or from the State highway right of way due to the Work activities authorized by this Permit shall conform to all applicable Federal, State, and local water quality regulations.

The WSDOT *Temporary Erosion and Sediment Control Manual* (M 3109) may be accessed at:
<http://www.wsdot.wa.gov/publications/manuals/fulltext/M3109/TESCM.pdf>

18. TRACKING OF MATERIAL

The Permit Holder shall comply with RCW 46.61.655 and shall not track material onto highway pavement, and the Permit Holder or the Permit Holder's contractor shall immediately clean up the highway pavement. If the Permit Holder does not comply with RCW 46.61.655 and fails to clean the highway pavement, the Department may, by itself or by use of its contractor, perform the necessary Work at the Permit Holder's expense. The Permit Holder agrees to reimburse the Department for such costs pursuant to Section 30.

19. STORMWATER AND DRAINAGE MAINTENANCE

The Permit Holder shall not modify the highway drainage in any manner. The Permit Holder further agrees that it shall not direct surface water from private property onto the state-owned highway right of way. All manholes, drainage features, biofiltration swales, media filter drains, filter strips, utility fixtures, and like appurtenances shall be located, marked, protected, and maintained by the Permit Holder as directed by the Department. All slopes, slope treatment, top soil, ditches, pipes, etc., disturbed by the Permit Holder's Work shall be restored to their original cross section, efficiency, and condition as directed by the Department. All such items shall be corrected or repaired to the Department's sole satisfaction at the Permit Holder's sole expense. Should the Permit Holder fail to adequately correct or repair any damages as outlined in this section to the Department's sole satisfaction, the Department may, by itself or by use of its contractor, correct or repair the damages at the Permit Holder's expense. The Permit Holder agrees to reimburse the Department for such costs pursuant to Section 30.

20. RIGHT OF WAY VEGETATION MAINTENANCE

The Permit Holder acknowledges any Work installed on state-owned highway right of way will become the property of the State of Washington, and the Department shall have no responsibility or liability for the ongoing maintenance, repair, or replacement of any of the Work, unless the Department specifically otherwise agrees in the Permit. The Permit Holder also acknowledges the Department may remove, or require the removal of, any Work installed on state-owned highway right of way if the Department deems that it is not in the best interests of the State of Washington for the Work to remain on the state-owned highway right of way.

The Permit Holder shall not cut, spray, retard, remove, destroy, damage, disfigure, or in any way modify the physical condition of any vegetative material located on the state-owned highway right of way, except for the Work specifically detailed, shown, and authorized by the Department in this Permit. It is the Department and Federal Highway Administration (FHWA) policy to remove vegetation only for highway purposes. The Permit Holder shall contact the Department to obtain written approval prior to any modification to any vegetative material located on the state-owned highway right of way. This includes any modification(s) to an earthen embankment. The indiscriminate cutting of timber or disfiguring of any highway feature or facility is not allowed. The Permit Holder shall be responsible, at its expense, to restore, repair, or correct the damage to the sole satisfaction of the Department. Should the Permit Holder fail to adequately restore, repair or correct the damage as outlined in this Permit, the Department may, by itself or by use of its contractor, restore, repair, or correct the damage at the Permit Holder's expense. The Permit Holder agrees to reimburse the Department for such costs pursuant to Section 30.

Any materials including, but not limited to, fertilizers, soil amendments, erosion control products, irrigation components, or pesticides used on WSDOT ROW must conform to the QPL (Qualified Products List).

The WSDOT Qualified Products List (QPL) may be accessed at:
http://www.wsdot.wa.gov/biz/mats/QPL/QPL_Search.cfm

21. FIRE PREVENTION

The Permit Holder shall observe and follow all laws and rules on fire prevention and suppression.

The Permit Holder shall follow the requirements of the *Standard Specifications for Road, Bridge, and Municipal Construction* 1-07.3(1) when the work is in, or next to State or Federal forests.

22. PERMANENT SIGNS OR IRRIGATION

The Permit Holder may be required to obtain additional approval for any signs or permanent irrigation systems. The Permit Holder shall be responsible for water and electrical costs.

23. TRAFFIC CONTROL

The Permit Holder shall not implement any traffic control plans (TCP) on state-owned highway right of way without the Department's prior written approval. It is the Permit Holder's responsibility to plan, conduct, and safely perform the Work authorized by this Permit. Should additional TCP's be needed for the construction and/or maintenance of the Work authorized by this Permit, the Permit Holder shall submit Work-specific traffic control plans to the Department for review and written approval before implementation.

A wide range of pedestrians might be affected by traffic control zones, including the young, elderly, and people with disabilities such as hearing, visual, or mobility. Bicyclists may also be impacted. The Permit Holder shall implement all reasonable means of traffic control necessary to adequately accommodate these needs if they can be reasonably expected to be encountered during the Work authorized by this Permit.

All traffic control plans shall be in compliance with the current editions of the WSDOT Work Zone Traffic Control Guidelines and Federal Highway Administration-approved Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways.

The WSDOT Work Zone Traffic Control Guidelines (M54-44) may be accessed at:
<http://www.wsdot.wa.gov/Publications/Manuals/M54-44.htm>

The MUTCD, including modifications for Washington State, may be accessed at:
<http://www.wsdot.wa.gov/Operations/Traffic/mutcd.htm>

24. CHANGES TO TRAFFIC CONTROL PLANS

The Department reserves the right to immediately modify, suspend, or revoke any traffic control plan or Work authorized under this Permit, including but not limited to lane closures and shoulder closures due to unexpected conditions or other circumstances which the Department determines is in the best interests of the state and/or safety of the traveling public. All costs associated with a modification, suspension, or revocation shall be borne solely by the Permit Holder. The Department shall in no way be held liable for any delays, costs, or other damages to the Permit Holder by reason of any such Department action.

25. SIGNS AND BILLBOARDS

No signs or billboards shall be erected on the state-owned highway right of way. The Permit Holder shall comply with the Scenic Vistas Act of 1971, chapter 47.42 RCW and Chapter 468-66 WAC.

26. HAZARDOUS MATERIALS

If anything is discovered that is suspected to be hazardous, the Permit Holder shall immediately take appropriate precautions and contact the Department to report the location and description of the material(s)/substance(s) to the Department's representative for proper disposal.

All fueling and maintenance of equipment shall occur off of the state-owned highway right of way and at locations greater than 300 feet from the nearest wetland, ditch, or other conveyance of waters of the State of Washington.

The Permit Holder agrees that a Department of Ecology-approved hydro-carbon spill kit shall be readily available during all Work operations.

The Washington State Department of Ecology Spills page, may be accessed at:
<http://www.ecy.wa.gov/programs/spills/spills.html>

27. REMOVAL OF ALL RUBBISH AND DEBRIS

On completion of Work, or each Work event, the Permit Holder shall immediately remove all rubbish and debris. The Permit Holder shall leave the state-owned highway right of way in a neat and presentable condition subject to the Department's sole satisfaction. Should the Permit Holder fail to perform the necessary cleanup Work to the Department's sole satisfaction, the Department may, by itself or by use of its contractor, remove all rubbish and debris at the Permit Holder's expense. The Permit Holder agrees to reimburse the Department for such costs pursuant to Section 30.

28. SUSPENSION, REVOCATION, AMENDMENT, OR CANCELLATION OF THIS PERMIT

The Department may, in its sole discretion, suspend, revoke, amend, or cancel this Permit, due to damage to the state-owned highway right of way, or any state highway facilities located on, above or under the land, or for any reason whatsoever, including, but not limited to, violations of the terms of this Permit, for transportation purposes, for highway construction, operations and maintenance requirements, and for the safety of the traveling public, without incurring any liability to the Permit Holder, its successors, assigns, agents, contractors, employees, and/or any other person whomsoever, upon written notice to the Permit Holder. The Permit Holder agrees to remove any Work from the state-owned highway right of way as required by the Department within thirty (30) calendar days after the date of the Department's written notice of suspension, revocation, amendment, or cancellation at the Permit Holder's expense. Should the Permit Holder fail to remove Work as required by the Department, it shall be in default of the terms of this Permit. The Department may, but is not required to, remove the Work, and the Permit Holder agrees that it shall pay the Department's costs, if any, of performing such removal of Work pursuant to Section 30.

29. FAILURE TO COMPLY

In the event the Permit Holder damages the State highway right of way or State property per Section 4; performs unsatisfactory Work as described in Section 13; does not comply with RCW 46.61.655 and fails to clean the highway per Sections 18 and 27; fails to adequately restore, repair or correct any damages as outlined in Sections 19 and 20; or fails to

remove Work as required by the Department per Section 28, the Department reserves the right to perform the necessary Work to the extent necessary for the safe operation and maintenance of the State highway right of way or State property.

The Department will notify the Permit Holder in writing of any of the above deficiencies. If the Permit Holder cannot correct the noted deficiency in the time provide by the Department's notice, the Permit Holder shall make a written request for Department approval of a time extension in which to remedy the noted deficiency.

30. COSTS FOR CORRECTIVE WORK FOR FAILURE TO COMPLY

The Department may perform restoration, repair, or corrective work should the Permit Holder fail to perform according to the terms, conditions, and provisions of this Permit. Should the Department deem it necessary that it must perform any restoration, repair, or corrective work, the Department may use its forces or a contractor. The Department shall provide a detailed invoice to the Permit Holder for the actual direct and related indirect costs associated with the restoration, repair, or corrective work performed. The Permit Holder agrees to and shall make payment to the Department within thirty (30) calendar days of invoice date. If the Permit Holder objects to all or any portion of an invoice, it shall immediately notify the Department within twenty (20) calendar days from the date of invoice and shall pay that portion of the invoice not in dispute. The Department and the Permit Holder shall immediately make every effort to settle the disputed portion.

31. CULTURAL RESOURCES

Prior to the Permit Holder performing Work in previously undisturbed areas, the area shall be reviewed for any potential cultural impacts. Further, if the Permit Holder discovers any archaeological or historical resources while performing the Work, the Permit Holder shall immediately stop Work and notify the Department's representative and retain a United States Government Secretary of the Interior's qualified archaeologist. Said archaeologist shall evaluate the site and make recommendations to the Department regarding the continuance of the Work.

32. AMERICANS WITH DISABILITIES ACT

This Permit is subject to all applicable provisions of the Americans with Disabilities Act of 1990 (ADA), 104 Stat. 327, 42 U.S.C. § 12101 *et seq.*, as amended. The Permit Holder agrees that all Work performed shall comply with all applicable ADA requirements.

33. ASSIGNMENT OF PERMIT

This Permit is not assignable or transferable, either in whole or in part.

34. OTHER PERMITS, FRANCHISE RIGHTS, AND AGREEMENTS

This Permit shall not be deemed or held to be an exclusive one and shall not prohibit the Department, in its sole discretion, from granting other permits or franchise rights of like or other nature to public or private entities or individuals for the use of the state-owned highway right of way, nor shall it prevent the Department from using any of its state-owned highway right of way or property, or affect the Department's right to full supervision and control over all or any part its property, none of which is hereby surrendered.

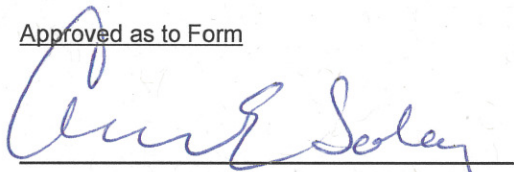
Roadside Vegetation Permit Special Provisions

Additional provisions selected by the Department are indicated with

- 1. Access to the Work site shall be from the highway shoulder. Vehicle parking and traffic control shall be in accordance with Department-approved traffic control plans.
- 2. A limited access break is required. The Permit Holder is responsible for contacting the Department for such break.
- 3. Access point(s) shall be gated and locked when not in use. Access points and configurations shall be subject to the Department's and, if applicable, the Federal Highway Administration's, prior approval.
- 4. The Department requires that access to the Work area be accomplished only from the Permit Holder's property.
- 5. No more than _____ vehicle(s) will be allowed on the highway right of way at any time.
- 6. No motorized equipment shall be operated or staged on the highway right of way during the Work. This provision does not apply to hand-operated tools.
- 7. The Department has determined that a mutual benefit exists for removal of certain vegetation. The vegetation is described as: the Work on page 1. If appropriate, the Department may assist in traffic control operations for removal of this vegetation, provided the Permit Holder gives the Department five (5) workdays advance notice before the date the Work is to be performed
- 8. The Permit Holder is responsible for control of all noxious weed species pursuant to chapter 17.15 RCW.
- 9. Stumps of trees removed shall be flush cut with the ground. All cut vegetation shall be disposed of by the Permit Holder.
- 10. Branches that have been removed shall be chipped and dispersed within the highway right of way at suitable locations as the Department directs.
- 11. Debris shall be removed from the highway right of way and legally disposed of by the Permit Holder
- 12. Mowing height shall be set at _____ inches from ground surface. Mowing shall be performed _____ per month during the months of _____ through _____ each year.
- 13. Application of any type(s) of pesticides to the highway right of way is prohibited.
- 14. Application of herbicides to the highway right of way is authorized. Applications shall comply with the Department's reviewed vegetation plan. Applicator shall be licensed by the State of Washington for the type of herbicide and application methods used. Herbicide applications shall be recorded in a format that is approved by the Department, and copies of the records of each application shall be submitted to the Department after each application.
- 15. Limited Waiver of Tribal Sovereignty: The Permit Holder agrees to waive its sovereign immunity from suit for the limited purpose of permitting the Department to enforce the terms of this Permit. This limited waiver of sovereign immunity is solely for the benefit of the Department. This limited waiver of sovereign immunity shall not be for, nor shall it be construed as for, the benefit of any other person or entity, and the Permit Holder does not waive its sovereign immunity with respect to any action brought by, or on behalf of, any other entity or person. Jurisdiction over any dispute involving this Permit shall be in the state courts of the State of Washington. *(Use when a Tribe is involved.)*
- 16. Bond coverage is required to ensure the Permit Holder's proper and timely completion of the Work or to cover the cost of the Department's restoration of slopes, slope treatment, topsoil, landscape treatment, drainage facilities, and cleanup of the highway right of way or the restoration, repair, or correction of Work performed by the Permit Holder to ensure a safe operable and maintainable highway right of way should the Permit Holder fail to perform the Work per the terms, conditions, and provisions of this Permit. Bond coverage shall cover the Department's cost in accordance with Section 30, "Costs for Corrective Work for Failure to Comply." The Permit Holder shall furnish a Surety Bond, Assignment of Escrow, Certificate of Deposit, Irrevocable Letter of Credit, Check or Money Order to the Department in the amount listed herein. If a bond is provided, it shall be written by a surety company authorized to do business in the State of Washington. The surety amount shall be: \$_____. The surety bond or amount shall be held at the Department and shall remain in force until all Work under this Permit has (1) received final Department concurrence, if required, and (2) all Department costs, including those costs incurred under Section 30, if any, have been paid by the Permit Holder; thereafter, the Department will issue a written release of the surety bond or amount.

Roadside Vegetation Permit
Permit No.

Approved as to Form



Ann E. Salay, Senior Assistant Attorney General

8-4-15

Date

Note: No changes may be made to this permit without
review by the Office of the Attorney General