

- 900.01 General
- 900.02 References
- 900.03 Project Development
- 900.04 Documentation

## 900.01 General

The Washington State Department of Transportation (WSDOT) recognizes roadsides as an asset. WSDOT manages roadsides, balancing operational and environmental functions and lowest life cycle costs consistent with a reliable, safe, and sustainable transportation system.

The roadside is the primary place used to blend transportation facilities into the context of the natural and built environments. The roadside is the [green infrastructure](#) that contributes to the transportation system. It integrates natural processes into the built environment and includes the concepts of [low-impact development \(LID\)](#). Good roadside design coordinates many elements, including, but not limited to: structures; vegetation; signs; pedestrian and bicycle movement; stormwater treatment facilities; and other right of way functions. All the elements work together to provide visual continuity in the highway corridor.

WSDOT is committed to ensuring designs meet the needs and functions of the project and the community in a way that is safe, cost-effective, attractive, and maintainable. WSDOT is also committed to building transportation facilities in context with the surrounding environment, which is reflected in the Context Sensitive Solutions Executive Order ([E 1028](#)) and the Washington Transportation Plan (WTP).

The WSDOT [Roadside Manual](#) is the “how-to” manual for roadside design. It shows the links and coordination necessary between all WSDOT partners responsible for roadside activities. It also provides in-depth information on how to restore the roadside, including chapters on law and policy, soil bioengineering, contour grading, vegetation, irrigation, and many more.

In the fall of 2013, WSDOT published the new [Roadside Policy Manual](#) (RPM). In conformance with current WSDOT policies, the roadside policy team developed the RPM into a comprehensive roadside policy that promotes our state’s healthy economy, environment, and communities. It contains vital policy information needed to design roadsides in conjunction with the [Roadside Manual](#). WSDOT’s policy is to preserve and restore roadside functions through the preservation and use of soils, vegetation, and other roadside elements. Chapter 2 of the RPM defines these important project requirements. The RPM is intended for use in all phases of transportation asset management: Planning, Program Management, Project Development, Construction, and Maintenance. For further information, see: [www.wsdot.wa.gov/design/roadside/](http://www.wsdot.wa.gov/design/roadside/)

## 900.02 References

*Maintenance Manual*, M 51-01, WSDOT

*Roadside Manual*, M 25-30, WSDOT

*Roadside Policy Manual*, M 3110, WSDOT

*Understanding Flexibility in Transportation Design – Washington*, WSDOT, 2004

*Utilities Accommodation Policy*, M 22-86, WSDOT

For utility-related roadside issues, see the *Utilities Manual*, and for Scenic Classification ratings, see the *Utilities Accommodation Policy*

For WSDOT Project Management web resources, start here:

 [www.wsdot.wa.gov/projects/projectmgmt/](http://www.wsdot.wa.gov/projects/projectmgmt/)

*Roadside Design Guide*, AASHTO, 2011

Roadside development concepts covered elsewhere in the *Design Manual* include the following:

- Fencing ([Chapter 560](#))
- Jurisdiction (Chapters [300](#), [1100](#), [1600](#))
- Noise barriers ([Chapter 740](#))
- Pedestrian facilities ([Chapter 1510](#))
- Public art ([Chapter 950](#))
- Retaining walls ([Chapter 730](#))
- Roadside safety, traffic barriers, and energy attenuators (Chapters [1600](#), [1610](#), [1620](#))
- Safety rest areas, parks, viewpoints, and historical markers ([Chapter 1710](#))
- Signs ([Chapter 1020](#))

## 900.03 Project Development

### 900.03(1) *Region Landscape Architect*

The region Landscape Architect is responsible for the following:

- Designs, supervises, has approval authority over, and stamps plans for wetland mitigation, roadside restoration, and revegetation.
- Coordinates the visual elements within highway corridors, in conjunction with the State Bridge and Structures Architect.
- Designs and supervises other roadside work, such as site design for park & ride lots or safety rest areas, to ensure roadside restoration is designed and constructed to WSDOT guidelines and standards.
- Provides visual discipline reports for environmental documentation.
- Assists the region in completing the plant establishment phase of projects.

The Headquarters (HQ) Roadside and Site Development Section will provide roadside and mitigation design, visual impact assessment, and construction inspection work for the project offices in regions without a Landscape Architect. Refer to the [Project Management Online Guide](#) for further descriptions of the roles and responsibilities of project teams.

### **900.03(2) Roadside Restoration Projects**

There are typically two types of roadside restoration projects pertaining to vegetation-related roadway construction projects: regulatory and restoration.

#### **900.03(2)(a) Regulatory**

The first type of project is work related to regulatory or permit requirements. Examples are wetland mitigation work or Hydraulic Permit Approvals (HPAs). This work typically must occur by the time the impacting project is complete.

#### **900.03(2)(b) Restoration**

The second type of project is the restoration of construction impacts to roadside functions to meet the WSDOT policy requirements outlined in the [Roadside Policy Manual](#).

### **900.03(3) Stand-Alone Project or Part of Roadway Construction?**

Roadside restoration work should be evaluated by the design team to determine whether it will be most efficient as part of the roadway construction contract or as a separate stage contract.

#### **900.03(3)(a) Roadway Construction Contract**

The benefits of roadside restoration during roadway construction include the following:

- All work can be done under one contract.
- The restoration can be completed without waiting for a new contract to be let and administered.
- Plant establishment can often begin sooner.

#### **900.03(3)(b) Separate Stage Project**

A separate stage contract provides the following opportunities because it would be done when road construction is completed:

- If construction impacts are different than originally anticipated, the restoration contract can be changed. For example, if disturbance is minimized, fewer plants and soil amendments may be needed.
- The site can be watched to see how the grading and hydrology interact before plants are planted.
- The prime contractor can be someone who specializes in roadside work.

### **900.03(4) Plant Establishment**

Plant establishment periods are included as part of roadside restoration and on all environmental mitigation projects.

- A minimum of three years of plant establishment work is required for all planted areas in western Washington, and planted and/or seeded areas in eastern Washington.
- In situations where it is important to provide a full cover of vegetation to achieve the environmental or operational functions, five years of plant establishment may be needed.
- If the plant establishment period will last longer than three years on a roadside restoration contract, discussion should occur with Program Management to request and justify additional funding.
- In an environment that uses woody plants, plant establishment may take up to 10 years for the woody vegetation to exclude weeds and reach a condition with the lowest life cycle cost.
- Regulatory aspects of projects can require 10 years of plant establishment to ensure the standards of success outlined in the permit, although aggressive weed control and favorable weather can allow sites to close out early.

The goal is to give WSDOT Maintenance a site that is nearly self-sustaining after the plant establishment period is complete.

### **900.04 Documentation**

Refer to [Chapter 300](#) for design documentation requirements.