

General

Design enhancement is the incorporation of manmade elements in the landscape to accomplish goals such as expression of community character, marking a community entrance, providing corridor continuity on a scenic or recreational highway, and as mitigation for visual impacts. Design enhancement can be found on tunnel portals, bridges, noise walls, community entrances, rest areas, and park and ride lots. It may consist of a landform, water feature, wall or barrier texture, color, pavement type, brick variation, site furnishings, or a combination of elements. Enhanced designs can lend a distinctive character to towns and cities when used appropriately. The continuation of a theme throughout a corridor provides interest and continuity.

The WSDOT Programs Offices administer a separate Enhancements Program described in Chapter 62 of the Local Agency Guidelines (LAG) Manual. The design enhancements described in this chapter are very appropriate for Scenic Byways described in the LAG Manual.

References

Design Manual, (M 22-01) WSDOT, Chapters 700, 1130, and 1140 and Instructional Letter IL 4053.00

Roadside Classification Plan, (M 25-31) WSDOT, Chapter 5

Traffic Manual, (M 51-02) WSDOT, Chapter 2

Local Agency Guidelines, WSDOT, Chapter 62

A Policy on Geometric Design of Highways and Streets (Green Book), 2001, AASHTO

Roadside Design Guide, 2002, AASHTO

Flexibility in Highway Design, FHWA

WSDOT/FHWA Agreement for Community Entrance Identification Plaques/Markers

Resources

State Bridge and Structures Architect, WSDOT Bridge and Structures Office, Olympia

Region's Landscape Architect or HQ Roadside & Site Development Unit (for regions without a Landscape Architect)

HQ Assistant State Design Engineers
Rural Community Partnership Office in HQ Highways and Local Programs (formerly the Heritage Corridors Program)
Region's Project Engineers
Region's Traffic Engineers for assistance with gateway markers and signs
Region's Local Programs Engineers for assistance with agreements or leases¹
Real Estate Services Office for assistance with leases.

Regulations

Jurisdiction

Within the limits of incorporated cities and towns, jurisdictional responsibility for Design Enhancements on the roadsides of state highways is consistent with Chapter 47.24.020 RCW and as clarified in Instructional Letter IL4053.00

Chapter 47.24 RCW

CITY STREETS AS PART OF STATE HIGHWAYS

47.24.020 Jurisdiction, control.

(2) The city or town shall exercise full responsibility for and control over any such street beyond the curbs and if no curb is installed, beyond that portion of the highway used for highway purposes. However, within incorporated cities and towns the title to a state limited access highway vests in the state, and, ... the department shall exercise full jurisdiction, responsibility, and control to and over such facility. The full text of the law can be found at:

<http://www.leg.wa.gov/RCW/index.cfm?fuseaction=section§ion=47.24.020>

Signs

All design enhancements are to be devoid of any advertising or other informative messages.

RCW 47.42.020(8) - Signs are defined in part as “any outdoor sign, display, device, figure, painting, drawing, message, placard, poster, billboard, or other thing which is designed, intended, or used to advertise or inform.”

RCW 47.42.080(5) - No signs may be permitted on the right of way contrary to law or department adopted regulations.

¹ WSDOT makes the determination whether the lease or agreement is needed.

WAC 468-66-010 (17) under Definitions, states "Sign" means any outdoor sign, display, device, figure, painting, drawing, message, placard, poster, billboard, or other thing which is designed, intended or used to advertise or inform, any part of the advertising or informative contents of which is visible from any place on the main-traveled way of the interstate system or other state highway.

WAC 468-66-030(10) under General Provisions states:

"Notwithstanding any other provision of the act or these regulations, no signs visible from the main-traveled way of the interstate system, primary system, or scenic system which have any of the following characteristics shall be erected or maintained:" (10) "Signs which are erected or maintained upon trees, power poles, or painted or drawn upon rocks or other natural features."

In other words, nothing that displays a trade name or product or other commercial type of content, will be allowed within state highway right of way.

Planning

When first considering a design enhancement, goals must be clearly stated and entered into the project Design Documentation Package if there is a state project. Define the purpose of the design enhancement and identify the agency requesting the enhancement.

Funding

Within the limits of incorporated cities and towns, funding responsibility for Design Enhancements on the roadsides of state highways is consistent with Chapter 47.24.020 RCW and as clarified in Instructional Letter IL4053.00. On managed access highways in incorporated cities and towns, the local jurisdiction has funding responsibility for roadside design enhancements unless amended by agreement.

On limited access highways, Washington State Department of Transportation (WSDOT) generally does not allocate special funding for enhanced designs or community gateways. WSDOT has incorporated additional design elements into proposed structures, at minimal cost, on a few select projects as visual mitigation for project impacts and where the location was highly visible. This has been done at the discretion of the Regional Administrator and the Project Engineer.

As WSDOT will not normally provide for design enhancements on limited access highways, funding must be clearly defined. For example, if a city is requesting and funding the design enhancement, either in whole or in part, this must be clearly stated and agreements must be signed in the planning stage of a project.

For example, WSDOT will pay for the cost for standard form liners for walls and a local jurisdiction will pay for the additional costs associated with an enhanced design. Some jurisdictions have funding available, such as “1% for the Arts” type funds, which might be used in this type of partnership project. Contact the region’s Landscape Architect for other possible grant sources early in the project-planning phase.

For stand-alone pieces, such as a gateway marker, funding will come from the community. The marker will have maintenance and repairs provided by the local community. A long-term agreement or lease will need to be negotiated with the local jurisdiction, community groups, etc. to cover these elements and outline responsibilities for maintenance and repairs.

Where agreements are needed, the Local Programs, Utilities Office, or Real Estate Services Office can assist in determining the type of agreement or lease required. Include WSDOT early in the project to avoid conflicts in negotiations. (The appropriate office varies by region.)

Figure 910.1 is an example of the type of project that can be funded by a combination of state and local funds. If testing determines that a noise wall is necessary, WSDOT will cover the cost of a standard noise wall. A local government can, through an agreement, fund the additional cost of form liners to create the enhanced design on the noise wall. This is also true for median elements or enhanced barrier designs.



Figure 910.1 Noise wall enhancement in Mill Creek

Design

On managed access highways inside incorporated cities and towns, design responsibilities for community gateways or other design enhancements are divided at the curb line, with the cities having design responsibility outside the curb and WSDOT having design responsibility between the curbs. Where no curb exists, the cities have design responsibility for the area outside the paved shoulder, and WSDOT has design responsibility for the paved area.

Regardless of who is designing the element, safety for roadway users and for those viewing the design is critical. Nothing placed on the roadside is to be a distraction for the driver, or a hazard to vehicle occupants. Design enhancements must not violate the clear zone policy, or create sight distance problems. The photos in this chapter illustrate the types of designs that have been safe and effective on our highways. Designs that “grab the eye” or slow traffic are not appropriate. When any type of structure is involved, such as a wall, the Bridge and Structures Office must be consulted and their approval is required.

Design enhancements can be a part of the visual, functional, or architectural character of a facility. This can include the incorporation of impressions into a wall, barrier, or bridge structure.



Figure 910.2 Leaf Pattern on retaining wall at I-90 Sunset Interchange

Figure 910.2 shows a pattern done on retaining walls as visual mitigation for highway improvements within limited right of way. Designs should be easily comprehended so that drivers are not distracted. Design enhancements can also be a stand-alone piece such as a landform,

waterform, or sculpture in a community entrance, roadside park, safety rest area, or park and ride lot.

Process

Follow Context Sensitive Design principles when incorporating enhanced design elements into a transportation facility. Information on these principles can be found at: <http://www.fhwa.dot.gov/csd/index.htm>

For projects planning the use of state right-of-way, the early inclusion of all stakeholders in the project will ensure a better product. To facilitate the approval process, the State Bridge and Structures Architect and the region's Landscape Architect will serve on the design team, along with community representatives and their contracted artists. WSDOT has the final approval on all design elements on WSDOT right of way.

As a first step, the stakeholders and WSDOT should determine the goals of the enhanced design elements. The theme should be consistent with highway's and the local area's character. The statement of goals and objectives will guide development and help keep the project on track.

When planning the location of design enhancements on state right-of way, the region's Landscape Architect and the State Bridge and Structures Architect, along with other stakeholders, will do a visual assessment to determine placement.

The following questions, and their answers, can help guide design:

Question
• What is the purpose of design enhancement?
• What is the community character?
• What is the historical significance?
• What is the cultural significance?
• How does enhancement contribute to corridor continuity?
• Who is the audience?
• Driver & passengers
• Transit and rail users
• Pedestrian or recreational users
• Community/neighborhood residents
• How long will the design enhancement be viewed?
• Is it on a bridge portal that is seen for long moments on approach?
• Is it on the side of the road and seen only briefly?
• Is it at an intersection where drivers will be stopped at a light?
• Is it at a park and ride lot or safety rest area?
• Is the design enhancement in a publicly accessible area (such as a viewpoint, park, or plaza)?
• How great is the potential for vandalism on the site?
• Will the design enhancement create a distraction or act as a fixed object that can be a hazard?
• Will the design enhancement block sight lines (to signs, merging traffic, etc.) or infringe on safety?
• Will the design enhancement be lighted?
• Will lighting create a distraction or glare problem?
• Can the lighting be developed to enhance visibility for both road users and pedestrians?
• How high is the chance that the design could become an attractive nuisance?
• What are the dimensions of the design enhancement?
• Does its scale relate to its context?

Figure 910.3 Questions to be answered for 30% review

Location

Incorporation of art into the design of a facility is an option for some projects. For a corridor project, a repeating element or pattern can be designed to be incorporated throughout its length. This might include wall textures, luminaire design, railing design, site furnishings, etc.



Figure 910.4 Site furnishings in Palouse

Site furnishings include such things as bicycle racks, street tree grates, trashcans, or benches.

Community Gateways

The WSDOT *Traffic Manual* Chapter 2, “Signs” has a section on “City/Community Entrance Markers” (under “Miscellaneous Signing”) that provides guidelines on these areas. It can be found at the following website:

<http://www.wsdot.wa.gov/fasc/EngineeringPublications/Manuals/Traffic.pdf>

Where community gateway markers are within WSDOT rights-of-way, an agreement or lease is necessary. Approval by FHWA is required on the Interstate System. Maintenance of the gateway will be defined in the lease or agreement. Anything placed in these areas must meet clear zone and all other safety requirements described in the *Design Manual*.

Figure 910.5 shows an example of a subtle and effective gateway into Seattle. The text above the portal reads “SEATTLE – PORTAL TO THE PACIFIC.”



Figure 910.5 Tunnel portals can be an ideal location for a statement of community identity

Figure 910.6 shows another type of community gateway marker that meets the requirements found in the *Traffic Manual*.



Figure 910.6 Stand-alone community gateway marker

Cost Estimating

Costs for enhanced designs on structures can be determined by checking bid tabs for similar projects at:

<http://www.wsdot.wa.gov/biz/contaa/BIDTAB/default.htm>

The State Bridge and Structures Architect is available to assist designers in determining additional costs of unique form liners for these elements. Each project is unique so there is no standard formula for determining the cost of a special form liner – it depends upon the design complexity.

The use of standard-size panels will minimize costs.

Coordination

Is the design acceptable to the community?

- City, arts commissioner, or jurisdictional agency involvement.
- Stand-alone art pieces, such as community gateways, might require a city building permit.

Approvals

For use of state right-of-way:

- Materials approval, including primer, paints, and sealers, from HQ Materials Laboratory
- Design approval for Bridges and Structures from WSDOT, as stated in the *Design Manual* Chapter 1130.04(5) and 1140.04
- Design approval for signs and illumination from the region's Traffic Engineer.
- Design approval for stand-alone elements, vegetation, or earth forms from the region's Landscape Architect
- Project design approval from the Regional Administrator and Project Engineer
- Final project design approval from the Assistant State Design Engineer
- Approval by FHWA for all community gateway (entrance) markers or other enhancements located within the Interstate right-of-way

At no time will any design enhancement be placed on, or incorporated into, WSDOT property without approval as stated above.

Maintenance

When a design enhancement is part of a WSDOT facility, such as a portal, wall, or bridge, then WSDOT maintains the structure.

The group proposing any physically separate design enhancement is responsible for its maintenance. Designs are to require no additional work for WSDOT maintenance crews.

Removal

The local authority is responsible for relocating or removing any city/community sponsored entrance markers or other enhancements displaced because of highway improvement projects, such as roadway widening. City/community markers or enhancements not relocated by the local authority will be removed and disposed of by WSDOT, with removal and disposal costs billed to the local authority.²

The local authority is also responsible for relocating and/or removing any stand-alone structures that are repeated targets of vandalism, such as graffiti or damage to property. Structures not relocated or removed by the local authority will be removed and disposed of by WSDOT, with removal and disposal costs billed to the local authority.

² WSDOT *Traffic Manual*. March 2002, p 2-32,
<http://www.wsdot.wa.gov/fasc/EngineeringPublications/Manuals/Traffic.pdf>

