



UDOT Aesthetics Guidelines

UTAH DEPARTMENT OF TRANSPORTATION

November 5, 2014

Purpose

Highways are among the most visible components of our communities and they impact us every day of our lives. They influence our quality of life as we commute to work, run errands, visit family and friends, and travel for recreation. Once these facilities are built, they remain viable for generations. Because of their significance and permanence, highway projects should integrate sound principles of design that complement the surrounding landscape and remain functional and attractive for years to come. All elements incorporated into a highway project should be designed to harmonize with one another, rather than an assemblage of unrelated items. UDOT's Aesthetics Guidelines have been developed to help achieve these goals by providing a consistent approach to project aesthetics that can be applied statewide.

Project Aesthetics and Landscaping Plan Development and Review Policy (UDOT 08C-03)

This policy states that the Department will:

- Assess the need for project aesthetics and landscaping
- Set budget limit for project aesthetics and landscaping
- Use the UDOT Aesthetic Guidelines in the development of aesthetics and landscaping plans
- Establish a Project Aesthetics Committee to review plans
- Establish how project aesthetics and landscaping will be evaluated

Related Policies

Landscaping Maintenance Responsibility

As per UDOT policy 08A2-05, whenever landscaping, sprinkler/drip irrigation systems, or site amenities are installed on a UDOT right-of-way, it becomes the municipality's responsibility to maintain these items in perpetuity and requires an agreement. If the municipality will not agree to maintain landscapes, sprinkler systems, or other site amenities then the project will only receive baseline landscape treatments.

Bicycle/Pedestrian Trail Maintenance Responsibility

As per UDOT policy 08A2-06, whenever a bicycle/pedestrian trail is constructed in conjunction with a UDOT project, or when a local government or agency proposes to construct a bicycle/pedestrian structure within state right-of-way, it becomes the local government's or agency's responsibility to maintain the trail and any structures in perpetuity and requires an agreement. If the local government or agency will not agree to maintain the trail system, then a trail will not be constructed.

Project Aesthetics Process

Determine Project Aesthetics and Landscaping Level

- Projects are subject to aesthetics review if they fall under any of the following types: (1) capacity increase, (2) new structures, (3) intersection improvements, (4) reconstruction,

and (5) transportation enhancement projects within UDOT's right-of-way. Projects not occurring under one of these categories are typically exempt from the aesthetics review process and would not receive funds for aesthetics.

Determine Amount of Project Funds to be used on Aesthetics and Landscaping

- UDOT has developed baseline treatments for highway features that establish a minimum level of project aesthetics (see Appendix B). The Project Manager and Region Landscape Architect determine the percentage above the baseline that will be allocated to project aesthetics and landscaping up to a maximum of 0.75 percent of the estimated construction costs with the following exception: The maximum allowable amount allowed for an interchange reconstruction is \$100,000. If the interchange is a part of larger project, the estimated construction cost of the interchange must be subtracted from the total construction amount in order to determine the aesthetics allocation for the remaining elements of the project.
- The Project Manager and Region Landscape Architect meet with local government(s) to determine their interest in financial participation.
- The Project Manager and the Region Landscape Architect meet with the Region Director to present the budget recommendation for approval.
- Review and document commitments related to aesthetics and landscaping made in the environmental document.
- Complete the UDOT Preliminary Aesthetics and Landscaping Assessment Form and submit the form to the Project Aesthetics Committee and Design Leader (See Appendix A).

Coordinate with Local Municipality

- The Project Manager and Region Landscape Architect meet with the local municipality to clearly define the project baseline conditions and what constitutes a betterment that would need to be funded by the municipality.
- The Project Manager and Region Landscape Architect must clearly define to the municipality their long-term maintenance responsibility for various project aesthetic components and obtain necessary agreements before aesthetics plans are developed.
- If a municipality desires to have a free standing monument sign or a city logo sign attached to a UDOT structure, the Project Manager and Region Landscape Architect must review the Monument Feature Design Guidelines with the municipality and ensure they are followed.

Develop a Project Conceptual Aesthetics and Landscape Design Package

- The project team develops a theme(s) or design concept(s) that will visually unify all project components.
- The project team will coordinate with the Region Landscape Architect to determine if the local government has suggested possible themes and their interest in funding to the project betterments.
- Using the Conceptual Aesthetics and Landscape Design Checklist, the project team ensures the package is complete (See Appendix C). Incomplete packages will be returned for correction.
- The project team submits completed Aesthetics and Landscape Conceptual Design Package(s) to the Region Landscape Architect for review.

- When the Region Landscape Architect is satisfied the Aesthetics and Landscape Conceptual Design Package(s) is complete, the package will be submitted to the Aesthetics Committee for their review.

Review of Aesthetics and Landscaping Conceptual Package

- The Aesthetics Committee meets on a monthly basis to review submitted plans.
- The committee will review the conceptual package and either approve them as submitted or request modifications be made.
- If modifications are required the design team will be asked to address the issues and resubmit the package.

Obtain Municipality input

- Once the Aesthetics Committee has approved the conceptual package(s), the project team can approach the local municipality for their input regarding which concept they prefer to proceed with final plans. In some cases, there may be only one conceptual plan – in this instance, options may only include choosing between approved color palettes.

Develop and Obtain Approval of Final Aesthetics and Landscaping Plan

- Using the Final Aesthetics and Landscaping Plan Checklist (see Appendix D), the project team prepares a plan that incorporates these requirements.
- Submit the plan to the Region Landscape Architect for approval before it is presented to the Aesthetics Committee.
- The Aesthetics Committee will review the Final Aesthetics and Landscaping Plan and either approve it as submitted or request modifications be made.
- If modifications are required the project team will be asked to address the issues and resubmit the plans.

Design-Build Projects

Design-build projects will also use UDOT's Baseline Aesthetics Treatments to establish a minimum level of project aesthetics (see Appendix B). Any changes or additions to the baseline treatments will be derived from the project's maximum aesthetics budget allocation.

Local Government Funded Projects

To ensure the proper allocation of federal funding, local government projects with UDOT oversight will be subject to these aesthetic guidelines.

Aesthetic Design Criteria

The criteria the Aesthetics Committee will use to determine a successful aesthetics plan is based on the following:

- **Adherence to a design theme:** A design theme is a concept that unifies all visual elements of a project or project corridor. Plans will be evaluated on how well the design

theme fits the context of the project location and evokes a timeless quality. Themes that implement figurative and symbolic representations rather than literally portraying an object or idea are encouraged.

- **Integration of the design theme:** Incorporate a design theme that is simple, pronounced, and easy to distinguish at highway speeds. Aesthetic treatments are typically applied to bridge elements, sound walls, and retaining walls and include items such as surface finishes (textures and patterns) and colors derived from hues seen in the surrounding environment. Detailed murals or appliqués and components that require excessive maintenance are not permitted.
- **Incorporation of good bridge design:** Though not typically viewed as aesthetic elements, the consideration of line, form, scale, and proportion as they relate to vertical and horizontal geometry, superstructure type, bent placement, abutment placement and height, and superstructure shape is essential to good bridge aesthetics. Aesthetic plans must address these fundamental components of good bridge design.

Guidance Resources

Bridge Aesthetics Sourcebook (AASHTO) November 2010

Appendix A

UDOT Preliminary Aesthetics and Landscaping Assessment Form

UDOT Preliminary Aesthetics and Landscaping Assessment Form

Project #: _____ PIN #: _____
Project Location: _____ Project Type: _____

Note: This form is required to be completed and submitted to the Aesthetics Committee for the following types of projects: capacity increase, new structures, intersection improvements, reconstruction, and transportation enhancement projects within UDOT's right-of-way. Projects not falling under one of these categories are typically exempt from the aesthetics review process.

Is this project exempt from the aesthetics review process? Yes No (If no, complete the form. If yes, sign and date the form and include in the project file, no further action is required)

Using direction provided in the Aesthetics Guidelines, determine the amount of the total project construction cost to be used for aesthetics and landscaping:

1. If the project includes an interchange reconstruction, complete the information below:
 - a. The agreed aesthetics amount up to \$100,000 for each interchange is \$ _____
 - b. Select which option will be used for the rest of the project outside the interchange and complete the information below:
 - Aesthetic funds will be used. The estimated construction cost minus the cost interchange is \$ _____
What is the percentage of construction cost above that will be used for aesthetics (up to a maximum of 0.75%)? _____ which equates to \$ _____
 - Baseline aesthetic treatments are sufficient for the rest of the project
2. If the project does not include an interchange reconstruction, select which option will be used and complete the information below:
 - Aesthetic funds will be used. The estimated construction cost are \$ _____
What is the percentage of construction cost that will be used for aesthetics (up to a maximum of 0.75%)? _____ which equates to \$ _____
 - Baseline aesthetic treatments are sufficient for the project

Has the local government expressed an interest in participating financially to project aesthetics or landscaping? Yes No Indicate amount if available \$ _____

Are there aesthetic or landscaping related commitments made in the environmental document that will need to be addressed on the project? Yes No (If yes, please list) Typically, funds necessary to implement environmental commitments required by regulatory agencies would come from the project costs and not be deducted from the aesthetics budget.

This form has been reviewed by: _____ date _____
Region Landscape Architect

Project Manager _____ date _____

Appendix B

Baseline Aesthetic Treatments for UDOT Projects

UDOT Baseline Aesthetic Treatments

Aesthetic Element	Baseline Condition	Possible Enhancements
Structure Elements	<u>Bents</u> : natural concrete <u>Abutments</u> : 1" textural relief, natural concrete with non-tinted sealer <u>Parapets</u> : UDOT standard, natural concrete <u>Girders</u> : color treatments <u>Railing</u> : chain-link fencing <u>Slope Paving</u> : UDOT standard	<u>Piers</u> : custom-designed, modified to include textural and color treatments <u>Abutments</u> : heavier textural relief, color treatments, bridge monuments, stone or manufactured stone accents, custom made form liners <u>Parapets</u> : caps, windows, reveals, textural relief, color treatments <u>Railing</u> : custom-designed <u>Slope Paving</u> : heavier broom finish, project specific arrangement of expansion joints
Retaining Walls	Form Liners: 1" textural relief, natural concrete with non-tinted sealer	Form Liners: deeper relief to provide more shadow line, color treatments, custom made form liners
Noise Walls	Per UDOT Standard Drawings	Deeper relief in form liner to provide more shadow line, color treatments, custom made form liners
Barriers	Precast natural concrete with non-tinted sealer	Textural or color treatments, cast-in-place, designed to relate with piers, walls, abutments, etc. they are protecting
Park Strip, Median & Island Treatments (urban areas)	Stamped colored concrete	Tree grates, concrete pavers, landscaping, planter boxes*
Park Strip Treatments (residential areas)	Stamped colored concrete, turf sod and irrigation*, xeriscape treatments, rock mulch	Trees*
Landscaping	Topsoil, seeding, and mulch.	Plants (Trees/shrubs/groundcovers), irrigation (sprinkler/drip), ornamental walls, rock mulch, boulders, or mow strips*
Lighting and Traffic Signal Poles	UDOT standard: Cobra type (lighting), galvanized finish	Ornamental lighting or powder-coated poles*
Sidewalks	UDOT standard: natural concrete that is 5' wide with park strip and 6' wide at back of curb	Wider sidewalks; textural, material, or color contrast; pedestrian underpasses or overpasses
Site amenities	None	Benches, trash receptacles, sculptures, kiosks, plant containers, etc.*

* For these items, any enhancement above baseline will require an agreement with the local government signifying that they are responsible for all maintenance after installation. Where an irrigation system is installed, it will need to be a single system maintained by the local government, where they provide the water and power operate the system in perpetuity.

Appendix C

Conceptual Aesthetics and Landscape Design Checklist

Conceptual Aesthetics and Landscape Design Checklist

Provide written descriptions, conceptual drawings, renderings, elevations, or perspectives that adequately represent the project's aesthetics and landscaping design.

General Conceptual Drawing Requirements

- Drawings are to scale and large enough to visually depict project aesthetics
- Drawing package is complete and shows all conceptual aesthetic treatments for all project components including: bridge structures, including piers and abutment walls; retaining walls; sound walls; bridge railings/pedestrian fencing and ROW fencing; barriers; roadway and pedestrian lighting; paving; signage; gateway features; and landscape integration
- Drawings show “complete picture” of combined structural elements and how they visually relate to each other rather than showing individual items
- Drawings indicate proposed textures applied to various surfaces and details of textural pattern and relief depths
- Drawings indicate colors being applied to various surfaces using federal standard 595

Application of a Theme or Unifying Concept

- A design theme is identified and consistently applied to all project components
- The developed theme fits the context/surroundings

Bridge/Structure Design

- Bridge/structure design meets the following basic criteria:
 - Simplicity,
 - Good proportions with an emphasis on thinness,
 - Clear demonstration of how the structure works, and
 - Fitting its context/surrounding
- When a project has multiple bridge/structure types (i.e., an overpass, a pedestrian bridge, and a railroad overpass), the drawings show the aesthetics treatments applied to all structure types

Landscape Treatments Plan

- Plan indicates generalized levels of landscape treatments being used on the project.
- Plan graphically distinguishes the different landscape treatments of high, medium, and low and what treatments would be included in each level
- Plan distinguishes between hardscape and softscape items
- Plan includes general information about the plant palette with emphasis on drought and soil tolerance

Appendix D

Final Aesthetics and Landscape Design Checklist

Final Aesthetics and Landscape Design Checklist

Final drawings showing the aesthetic treatments applied to all project structural elements.

- Construction drawings and details for all structural elements incorporated into the project and show aesthetic treatments. Include the following items:
 - Abutments
 - Parapets
 - Bridge monuments
 - Bents and caps
 - Girders
 - Retaining walls
 - Wing walls
 - Noise walls
 - Lighting and foundations*
 - Railings/Fences*
 - Barriers
 - Slope paving
- Drawings indicate the surface treatments (texture and color) applied to all structural elements with details that indicate textural patterns and relief depths and use federal standard 595 colors
- Drawings show transitions or connections between various elements (e.g., parapets to barriers, piers to caps, girders to abutments, retaining walls to abutments, etc.)

Final schematic landscape drawings showing the following items* (if included on the project):

- Plant layout, types, sizes
- Decorative rock mulch: size and color
- Bark mulch areas
- Landscape boulders
- Mow strips
- Contour grading

Final schematic of streetscape design or site layout (i.e., rest areas, welcome centers) and their amenities including the following items* (if included on the project):

- Sidewalk/Hardscape treatments (include: materials, textures, colors, joint layout, and dimensions)
- Park strip treatments (include: materials, textures, colors, joint layout, and dimensions)
- Planters and benches
- Trash receptacles (type and placement)
- Transportation buildings (e.g., restrooms, port of entry, visitor's center)
- Parking layout (e.g., handicap stalls, striping, signage, lighting, islands, and curbing)
- Picnic pavilions and tables
- Out-buildings (e.g., pump stations, maintenance sheds)
- Kiosks, monuments
- Trails, trail signage, interpretive signage

* If landscape improvements, ornamental lighting, or powder coated poles are incorporated into the project, include a copy of the maintenance agreement between UDOT and the local government that commits the local government to long-term maintenance of these features.