

MINIMUM DESIGN EXPECTATIONS for the W&OD Trail Bridge over Lee Highway

The intent of these guidelines is to raise the level of awareness regarding visual, architectural, and aesthetic values that influence the appearance and function of the bridge, trails, and the public realm surrounding the proposed new bike/pedestrian bridge in East Falls Church. The County seeks to ensure a design which is of a high quality, composed of durable materials, and thoughtfully planned to maximize the cyclist and pedestrian experience. Some of these comments also respond to images provided to the County on 3.27.17

BRIDGE

- **Railing/Fence:** No chain link fencing should be used anywhere on the site. Generally, the design of the fence and railing should be one in the same. Where a higher barrier is needed, a taller version of the railing design should be used. The transition between the higher and lower portions of the barrier should be seamless and intentional in design.
- **Abutment Walls:** Of the three abutment wall designs shown in the materials provided by VDOT, the board formed concrete design is the least artificial looking (as it's not trying to look like stone or louvers, as the other two design are) and is the preferred option.
- **Pier Type:** Of the three pier designs shown in the materials provided by VDOT, the all-concrete "Y" design is preferred. This design maintains fairly unobstructed views beneath the bridge, and is far more graceful than the other concrete and steel "Y" pier option. In general, the piers should be fully integrated with the overall bridge design, rather than appearing as merely a support structure for the bridge above.
- **Underside of Bridge:** The design and materials of the underside of the bridge should be an integral part of the overall design, with exposed girders and structural members obscured from view of pedestrians. The enclosure of the bridge underside will also negate the need for bird mitigation measures.
- **Color:** All exposed concrete should be stained, using earth tones. Railings, light fixtures, steel girders, and additional elements of the bridge design should all match each other in color, and also use a subtle earth tone.
- **Lighting:** Lighting along the bridge should focus downward on illuminating the path of travel, with fixtures mounted low or in-ground as part of the decking, as opposed to using light posts. Where posts are used, they should be an integral part of the overall bridge design. Confining light posts to each end above the piers would help to mark the bridge as a gateway, and minimize the visual clutter going over the bridge itself.
- **Signage/Signals:** Signing and signal structures should be kept off the bridge if at all possible to reduce visual clutter, particularly large traffic signs for I-66. If signs are required, they should be integrated with the entire bridge design.

GROUND PLANE

- **Landscaping:** Use native plantings that are hardy to the environment and promote biodiversity in the landscape. Respect natural drainage patterns and minimize impervious surfaces. Create bio-retention areas with plantings to intercept stormwater from bridge and paved areas. Preserve existing vegetation and trees to the greatest extent possible. Maximize tree canopy plantings to provide shade for bicyclists and pedestrians. Use evergreen plantings strategically to reduce the visual scale of bridge abutment or sound walls, and provide year-round interest in the landscape. Remove invasive species and restore natural edges with native vegetation. Landscaping should be

explored in the refuge island if feasible for protection and traffic calming. Maintenance should be considered early in the design process.

- **Lighting:** Use dark-sky compliant light fixtures to minimize light pollution along paths, sidewalks, and public areas. Consider using in-ground surface lighting or bollard style lights to illuminate the path of travel. All site lighting in the public right-of-way must comply with Arlington County DES standards. Consider using solar power and LED light fixtures where possible to save energy and improve efficiency. Accent or decorative lighting is encouraged in public areas, particularly below the bridge to animate the ground plane at night and to provide a welcoming, safe environment.
- **At-grade sidewalk and trail connections:** Pedestrian and bicyclist safety improvements should be explored and implemented as part of this project. The refuge island on Lee Hwy beneath the bridge should be improved to protect pedestrians and make crossing safer. Consider raising the curb and expanding the geometry of the island to provide more refuge or space for landscaping.
- **Public Space:** Any hardscape, plaza or decorative paving treatments should be ADA compliant and complement materials used on the bridge design and transition to adjacent paving. Landscaping in public areas should be designed to reinforce circulation, frame views and define space for activities or site amenities such as seating, bike racks, or other elements. Fire access should remain on Fairfax Drive. Use of special paving or landscape treatments is encouraged to help define space and allow for emergency vehicular access. Maintenance should be considered early in the design process to ensure that the space remains attractive for future users.
- **Signage:** Use of directional or wayfinding signage is encouraged and should be a coordinated effort with the WO&D trail system, NVRPA, and Arlington DES staff. Location and design of historical markers or displays will need to be approved by Arlington Historical Affairs and Landmarks Review Board (HALRB).
- **Signals:** Traffic signal upgrades and pedestrian/bicyclist crossing signals should be installed at intersections to improve safety for all users. Above grade traffic control structures/boxes should not be located in the clear sidewalk or path of travel, and should be consolidated to reduce clutter.

Principles of Civic Design for the W&OD Trail Bridge over Lee Highway

These principles are intended to inform the design of the W&OD bicycle and pedestrian bridge over Route 29 (Lee Highway) near the Fairfax Dr. and Washington Blvd. intersection in Arlington to ensure it meets community goals for attractiveness, durability, functionality and recognition as a regional gateway between Arlington and the City of Falls Church. The principles reinforce and supplement existing County planning documents and policies, and are meant to promote compliance with certain basic principles and site-specific constraints, but not to inhibit creativity in design.

Civic Values

- Take advantage of the prominence of the site to create bold design.
- Respect neighborhood context and important historically designated structures.
- Emphasize leadership in energy conservation and environmental sustainability through architectural and landscape design, materials, and construction methods.
- Utilize universal design to ensure open and welcoming accessibility for all citizens.
- Optimize open space for public relaxation and recreation, and minimize bridge footprint and areas used for grading.
- Create an exciting, appealing and harmonious gateway public place by integrating public art into the bridge infrastructure at the earliest design stage.
- Educate and engage the public in a transparent, meaningful and inspiring design process.

Siting and Orientation

- Emphasize pedestrian, bicycle, and mass transit facilities over automobiles in bridge placement, access, and design.
- Ensure bridge and site are functionally and spatially coherent, facilitating the flow of people to, from, and within the site.
- Create “positive” outdoor spaces and overlooks for pedestrians and cyclists both at grade and along bridge deck with an emphasis on views to the surrounding area and historic features.
- Reflect neighborhood context including the potential development sites adjacent to the trail ROW.
- Orient access to the bridge from the adjacent buildings and public spaces, including adjacent street connections to create natural and intuitive accessibility and movement.
- Consider the entirety of the bridge structure including but not limited to the piers, entrances, fencing, railing, landscaping, lighting and wayfinding to achieve a cohesive design.
- Minimize impact on the ground plane in areas used for pedestrian access and maintain visibility to/from open spaces and existing and planned storefronts.

Bridge Form

- Develop an overall design and bridge details that are appropriately scaled to the site and neighborhood.
- Develop a sense of hierarchy in the design, emphasizing and leading to the important functions above Lee Highway and spaces under the bridge, including the at-grade pedestrian crossings.
- Enhance the overhead pedestrian and cyclist experience through innovative bridge design while considering the surrounding at grade pedestrian and bicycle environment.

- Develop an iconic gateway design, and features, emphasizing its prominent location spanning a major street in the Route 29 corridor between Arlington and the City of Falls Church.
- Use design and urban design best practices to emphasize a pedestrian, human scale to the bridge while considering the larger urban design context of the public realm.

Bridge Details and Materials

- Use design details related to pedestrian scale and provide interest, discovery, and character.
- Celebrate the civic nature of the project with public art and iconic architectural elements.
- Use durable and permanent materials to assure longevity of, and civic pride in, the project.
- Appropriately plan budgets to reduce negative design impact of value engineering.