

ADA - Maximum Extent Feasible (MEF) Evaluation

City of Bellingham Public Right-of-Way

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Maximum Extent Feasible (MEF) – Public Right of Way City of Bellingham

Summary

The City of Bellingham designs and constructs projects within the Public Right-of-Way (ROW) to be accessible to and usable by persons with disabilities, in accordance with the Americans with Disabilities Act (ADA). This document outlines the procedures for Maximum Extent Feasible (MEF) evaluations that occur with alteration projects located within the Public ROW. An alteration is a change to or an addition of a pedestrian facility in an existing developed Public ROW that affects or could affect pedestrian access, circulation or usability. If compliance with current accessibility standards is technically infeasible, the alteration shall provide accessibility to the Maximum Extent Feasible. Technically infeasible means that the alteration within the scope of the project has little likelihood of meeting full accessibility standards because existing physical or site constraints prohibit modifications or addition of elements, space or features, and all possible efforts have been made to comply with the applicable accessibility standards.

The MEF Evaluation process includes documentation, review and approval of Maximum Extent Feasible design decisions for the occasional case where a pedestrian facility in the Public Right-of-Way cannot be altered to fully comply with the accessibility standards. Requests for MEF evaluations shall not be approved where there is an attempt to justify acceptance of pedestrian facilities that were improperly designed or constructed.

Note: During post-construction inspection, a non-compliant sidewalk or ramp will not be allowed to remain in place without an approved MEF evaluation. If non-compliance is due to Contractor's performance or any reason that is not determined technically infeasible, structurally impracticable or a safety issue, the sidewalk or ramp will need to be made compliant before the project is considered substantially complete.

Resources

- [PROWAG Accessibility Guidelines](#) Accessibility Guidelines for pedestrians in the Public Right-of-Way
- <https://www.access-board.gov/prowag/proposed/planning-and-design-for-alterations/chapter1/> Planning and Design for Alterations – U.S. Access Board
- [Design Manual | Manuals | WSDOT](#) Washington State Department of Transportation (Division 15 – Pedestrian and Bicycle Facilities)
- [2010 ADA Standards for Accessible Design | ADA.gov](#) Department of Justice
- [Public Works Development Guidelines and Improvement Standards - City of Bellingham \(cob.org\)](#)
- [WSDOT ADA Post Construction Inspection Form \(224-020 PDF\)](#)

Responsibility for Compliance

Project Engineers who are responsible for overseeing projects within the Public Right-of-Way or designing pedestrian facilities to be altered in the Public Right-of-Way shall be responsible for:

1. Understanding and complying with accessibility standards and requirements.
2. Identifying during the design phase the pedestrian facilities located in the Public Right-of-Way within the scope of their projects that cannot be altered to fully comply with the applicable accessibility standards due to existing conditions and designing those facilities to comply with ADA standards to the Maximum Extent Feasible.
3. Submitting the MEF Form and Documentation to the MEF Review Team (Public Works ADA Coordinator, Transportation Engineer and Engineering Manager) for evaluation of the pedestrian facilities that cannot be altered to fully comply with the applicable accessibility standards before final construction plans are approved.
4. Ensuring that Construction Inspectors receive copies of the approved MEF and are aware of the pedestrian facilities that will not fully comply with applicable standards.
5. Obtaining approval from the MEF Review Team for field changes to approved pedestrian facility designs due to unforeseen field conditions before final inspection and project close.

Construction Manager and Construction Inspectors who inspect projects within the Public Right-of-Way shall be responsible for:

1. Understanding and complying with accessibility standards and requirements during construction inspections.
2. Ensuring that pedestrian facilities altered in the Public Right-of-Way are altered according to approved plans and notifying the Project Engineer and MEF Review Team when unforeseen field conditions necessitate changes to the approved plans.

Public Works Project Managers and Public Works Operations Supervisors who are responsible for overseeing projects within the Public Right-of-Way shall be responsible for:

1. Providing the MEF Evaluation guidelines and MEF Form to consultants and contractors who are designing alteration projects within the Public Right-of-Way.
2. Submitting a MEF Form and Documentation to the MEF Review Team (Public Works ADA Coordinator, Transportation Engineer and Engineering Manager) for evaluation of the pedestrian facilities that cannot be altered to fully comply with the applicable accessibility standards before final construction plans are approved.
3. Obtaining approval from the MEF Review Team for field changes to approved pedestrian facility designs due to unforeseen field conditions before final inspection and project close.

MEF Review Team (Public Works ADA Coordinator, Transportation Engineer and Engineering Manager) is responsible for evaluating the MEF design and supporting documentation to ensure all applicable accessibility standards are met to the Maximum Extent Feasible. MEF evaluations are forwarded to the Assistant Director of Public Works – Engineering for final review.

MEF Documentation Requirements

- Project Engineers should submit one MEF Form and Documentation packet per project (to the extent practicable). The MEF Documentation can include multiple pedestrian facilities to be reviewed for the same project.
- MEF Documentation shall provide sufficient detail to clearly identify the location of each pedestrian facility to be evaluated, and:
 - Reference the applicable accessibility standard for each pedestrian facility where proposed alterations do not meet full compliance;
 - Describe the circumstances that make it technically infeasible to achieve full compliance;
 - Document design alternatives that were considered in an attempt to comply with accessibility standards;
 - Describe how accessibility standards are met to the Maximum Extent Feasible; and,
 - Attach the required documentation including pictures, drawings, engineering calculations, or other data to substantiate the request.
- The MEF Form must be stamped and signed by the City Engineer.

MEF Design Evaluation

The MEF Form and Documentation shall be submitted as early as possible to the MEF Review Team. Ample time must be given to evaluate the project and the MEF request. MEF evaluation and approval must be completed before project plans are approved for construction.

A change to one or more elements of an approved pedestrian facility design due to unforeseen field conditions requires additional evaluation by the MEF Review Team, if one or both of the following criteria are met:

1. A change will cause one or more elements of a pedestrian facility to be non-compliant with the applicable accessibility standards when the element, or elements, would have otherwise been compliant if altered according to the approved plans.
2. A change will cause a reduction in the required accessibility of one or more elements of a pedestrian facility beyond what was already approved during the MEF Evaluation process.

Approval is not required for changes that increase the accessibility of one or more elements of a pedestrian facility beyond what was already reviewed during the MEF Evaluation.

Approved MEF Documentation shall be revised and re-submitted to the MEF Review Team for field adjusted designs before final inspection and project close. Ensure the MEF Review Team is available to review the revisions and have enough time to respond prior to physical completion.

Pedestrian facilities altered in the Public Right-of-Way for which MEF Evaluation and Documentation *has not been approved* shall be altered/reconstructed to fully comply with applicable accessibility standards.

Pedestrian facilities in the Public Right-of-Way for which MEF Evaluation and Documentation *has been approved* shall only be altered/reconstructed as authorized.

Capital Projects & Public Works Operations Projects

When curb ramps within the project limits of a capital project or Public Works Operations project are touched/impacted by project design or construction, they will be altered to meet current accessibility standards. This includes all elements of impacted curb ramps (cross slope, running slope, street counter slope, etc.). When it is not possible to bring a curb ramp up to current accessibility standards, a MEF (Maximum Extent Feasible) Form and Documentation will be prepared by the Project Engineer or Project Manager. The MEF Form and Documentation must be evaluated by the MEF Review Team prior to project close. The final MEF evaluation will be included with the project file and submitted to WSDOT as necessary.

Curb ramps on capital projects and Public Works Operations projects must direct pedestrian traffic to land at a curb ramp that meets current accessibility standards. This means that when one curb ramp is affected at an intersection, the entire intersection will be brought up to compliance (i.e. ALL curb ramps will be reconstructed at an intersection). For budgeting purposes, Project Engineer's should assume that curb ramps at entire intersections will need to be reconstructed, unless the curb ramps are documented as meeting current accessibility standards (refer to the [City's Sidewalk and Curb Ramp Access Barrier Dashboard](#)).

Private Development Projects

When sidewalks and curb ramps are part of a private development project, the development is expected to bring any pedestrian circulation path along the frontage of the project up to current accessibility standards. This includes all elements of impacted sidewalks and curb ramps (cross slope, running slope, street counter slope, etc.). When it is not possible to bring a curb ramp up to current accessibility standards, a MEF (Maximum Extent Feasible) document will be prepared by the applicant's civil engineer in the design phase. The City Project Engineer assigned to the project will inform the applicant of any MEF requirements and provide the MEF Form. The MEF request must be evaluated by the MEF Review Team prior to final project acceptance.

If an existing curb ramp is touched/impacted during the course of private development construction, it will be brought up to current accessibility standards. Curb ramps on private development projects must direct pedestrian traffic to land at a curb ramp. If the existing curb ramp across the street/intersection (landing area) does not meet current accessibility standards, the private development will NOT be expected to construct a companion ramp. However, if there is no landing area (e.g. existing vertical curb), then the private development will be required to construct a companion ramp for the frontage improvements to direct pedestrian traffic to a receiving ramp. When two curb ramps exist at a corner/intersection, only the curb ramp that is part of the development project frontage is required to be brought up to compliance. The entire corner is not required to be brought up to current standards unless both existing curb ramps at the corner are physically touched/impacted during the course of construction or full-width paving of the road is included in the project. When full-width paving of the road is included in a private development project, then the entire intersection will need to be brought up to current accessibility standards.

New Construction Projects

For new construction projects (capital projects, Public Works Operations projects and private development), pedestrian facilities must be designed to fully meet accessibility standards when built. Pedestrian access routes should be constructed in a way that provides the best user experience possible.

Reconstruction/Alteration Projects

For reconstruction/alteration projects, if compliance with current accessibility standards is technically infeasible, the alteration shall provide accessibility to the Maximum Extent Feasible. Consider the existing pedestrian network, the existing infrastructure intended for pedestrian use, and potential gaps in desired routes when evaluating alterations to the pedestrian facilities.

The following apply to reconstruction and alteration projects:

- All new pedestrian facilities included in an alteration project that are put in place within an existing developed right of way must meet applicable accessibility requirements to the Maximum Extent Feasible.
- All existing pedestrian facilities disturbed by construction of an alteration project must be replaced. The replacement facilities must meet applicable accessibility requirements to the Maximum Extent Feasible.
- Any existing connection from a pedestrian access route to a crosswalk (marked or unmarked) that is missing a required curb ramp must have a curb ramp installed that meets applicable accessibility requirements to the Maximum Extent Feasible.
- A crosswalk served by a curb ramp must also have an existing curb ramp in place on the receiving end unless there is no curb or sidewalk on that end of the crosswalk. If there is no existing curb ramp in place on the receiving end, an accessible curb ramp must be provided. This requirement must be met regardless of whether the receiving end of the crosswalk is located within the project's limits.
- Alterations that include reconstruction, realignment, or widening of the roadway must evaluate the existing pedestrian circulation path and all existing crosswalks (marked or unmarked) to determine whether current elements meet current accessibility standards. Include improvements to sidewalks, curb ramps and crosswalk slopes as needed to meet the applicable accessibility requirements to the Maximum Extent Feasible.

Additional Considerations

According to WSDOT, there are common issues identified during project close and final inspection that should be addressed in design, construction or as part of a MEF Evaluation.

Common issues identified during inspection:

- Junction box, manhole, or other utility lid located in a curb ramp or landing without an associated MEF.
- Detectable Warning System is not fully encapsulated by the crosswalk bars.
- Non-conforming slopes are not identified in design or construction.
- Issues with reach range or placement of the Pedestrian Push Buttons or Accessible Push Buttons at an intersection.
- ADA curb ramps - if it cannot feasibly meet the slope standards then it needs to be included in the MEF Form and Documentation.

Pedestrian Crossings and Closed Crossing Justification

Sidewalks provide mobility along a linear path; however, at some point people need to cross the road at an intersection. These intersections, where the paths of people and vehicles come together, can be the most challenging part of negotiating a pedestrian network. If pedestrians cannot cross the street safely, then mobility is severely limited, access is denied, and pedestrian travel is discouraged.

In Washington, it is legal for pedestrians to cross at all intersections of two public roadways whether marked or unmarked except where crossing the street is expressly prohibited. Providing or maintaining existing access at intersections is required by law. The appropriate treatment of a crossing is unique and should be made based on the specific context of each location.

With alteration projects or new construction, ensure t-intersections provide pedestrian crossings and curb ramps. There are normally three crossings at a “T” intersection and four crossings at a “four-leg” intersection. For pedestrian route continuity, the minimum number of crossings is two at “T” intersections and three at “four-leg” intersections. One example where crossings might not be provided on all intersection legs is a diamond interchange with heavy left-turn movements. The City Transportation Engineer will determine appropriate signing and delineation.

Open but not Accessible Crossings

On rare occasions, uncontrolled/unimproved crossings that do not have linkage to known pedestrian attractions/generators or are determined to not be necessary for the pedestrian network may remain unimproved with approval from the City Transportation Engineer. These crossings that are intentionally not improved nor made fully accessible, do not need to be formally closed.

Closing Crossings

This section outlines the process for proposing a closed pedestrian crossing as part of a capital project or private development project. Generally this applies to existing pedestrian facilities that are altered and modify the pedestrian network.

Closing crossings is generally discouraged on all projects. The decision to close a crossing must be approved by the MEF Review Team.

The Public Right-of-Way Accessibility Guidelines outlines pedestrian crossing requirements **(PROWAG R203.6.1.1)** - <https://www.access-board.gov/prowag/complete.html#r203611-crosswalks-at-an-intersection>:

At an intersection corner, one curb ramp or blended transition shall be provided for each crosswalk, or a single blended transition that spans all crosswalks at the intersection corner may be provided. Where pedestrian crossing is prohibited, curb ramps or blended transitions shall not be provided, and the pedestrian circulation path shall be either (a) separated from the roadway with landscaping or other non-prepared surface or (b) separated from the roadway by a detectable vertical edge treatment with a bottom edge 15 inches maximum above the pedestrian circulation path.

EXCEPTION: In alterations, where existing physical constraints make compliance technically infeasible, a single curb ramp shall be permitted at the apex of the intersection corner.

When requesting to close a crossing, provide the following information to the MEF Review Team in addition to the MEF Form and Documentation. Non-visual indicators are suggested as wayfinding cues to non-visual users in addition to directional curb ramps or other design elements that naturally channel pedestrians to the open crossings.

- **Location** – Intersecting street names
- **Photos of the intersection**
 - Highlight the crossings that will meet accessibility standards
 - Identify crossings that are open but not accessible, if applicable
 - Identify proposed closed crossings
 - Highlight the accessible path that an individual with a disability will need to take to get around the proposed closed crossing
 - Identify the length of the accessible path in feet
 - Provide an aerial photo to show the entire accessible route
- **Describe the intersection and surrounding area**
 - What is in the area – businesses, residential, commercial, etc
 - Indicate the distance to public transit, to schools and medical facilities
 - Describe the demand for pedestrian usage
- **Discuss the crossing(s) at this location**
 - For each crossing, provide details about the route the individual must take to cross the street giving the distance of the route

- If proposing to close the crossing, indicate why you need to close the crossing
- If the location is open but not accessible, indicate why you cannot build the location to be an accessible crossing

Generally, the City standard for closed crossing signage will be R9-3 with a supplemental sign R9-3bP underneath. Please refer to the [MUTCD 11th Edition - 2023](#) Figure 2B-27 Pedestrian Signs and Plaques. Final signage and location will be approved by the Transportation Engineer.

<i>Sign/Plaque</i>	<i>Sign Designation</i>	<i>Section</i>	<i>Single Lane Road</i>	<i>Multi-Lane Road</i>	<i>Expressway</i>	<i>Freeway/Oversized</i>
No Pedestrian Crossing (symbol)	R9-3	2B.57	18x18	18x18	24x24	30x30
Use Crosswalk (plaque)	R9-3bP	2B.57	12x12	18x12		



R9-3



R9-3bP

The MEF Evaluation process aligns with the [City of Bellingham ADA Transition Plan](#) for Pedestrian Facilities in the Public Right-of-Way and will be reassessed and modified as needed.