

LAND USE & TRANSPORTATION MEMORANDUM

Engineering, Traffic and Survey

To: Holders of Washington County Uniform Road Improvement Design Standards

(WCURIDS)

From: Stacy Shetler, PE, County Engineer

Date: May 26, 2022

Subject: Clarification of Americans with Disabilities Act (ADA) Design Standards

Designers need to be familiar with ODOT ADA and Washington County Road Standards for design.

Refer to https://www.oregon.gov/odot/Engineering/Pages/Accessibility.aspx for ODOT ADA guidance and

https://www.co.washington.or.us/LUT/Divisions/Engineering/ConsultantResources/roaddesign-standards.cfm for Washington County design standards.

Washington County generally follows ODOT ADA standards with the following exceptions:

- 1. Constraint at Back of Ramp Turning Space:
 - a. When there is an obstruction at the back of a turning space, the length of the turning space, perpendicular to the obstruction, shall be a minimum of 5.0 ft. See Washington County Standard Detail 2130

2. Crosswalk Closures:

- a. Crosswalk closures require a design exception (DE). Designers should use the template developed by Washington County that will be posted under Appendix F.1 on the Road Standards web page.
- b. If a project or development is proposed at a crosswalk closed by an approved DE, each time the crosswalk is affected, the engineer must submit a new design exception, if the crosswalk is to remain closed. The previous DE can be provided upon request.
- c. Additional guidance has been provided on the Washington County Road standards page in a memorandum titled: Crosswalk Accessibility Requirements and Closure Process.
- d. Driveways on Local Road (LR) or Neighborhood Routes (NR) will not require a DE when it is impractical to construct the ramp or shift the driveway. A note on the plan set as well as a memo to the review file will be required for documentation. The County Engineer may require a DE when the impracticality is in question.

3. Crosswalk Running & Cross Slopes:

a. If the running and/or cross slope of the crosswalk does not meet ADA standards, and the project does not include rebuilding the entire roadway (e.g.: ADA retrofits), a design exception should be written to document the condition. All new construction shall meet all Washington County ADA crosswalk requirements for running slope and cross slope unless a DE is approved.

4. Curb Radius Design Exception:

a. Retrofit projects (projects that are upgrades to ADA ramps only) will not require the curb radius to be constructed to current standards, but a design exception will be required to document why the curb radius is not brought to current standards. All the non-standard corners within a project can be included in one design exception document and presented in a table that shows location, existing curb radius, and required curb radius. Designers should use the DE template developed by Washington County that is available to County project managers.

5. Curb Ramp Grade Breaks

- a. The algebraic difference in grade between two adjacent sidewalk panels shall not exceed 11% (design 10%).
- b. When an 11% grade break can't be achieved, intermediate panels at least 2-ft in length may be constructed to transition between the two profile grades. These intermediate panels shall be considered as part of the sidewalk ramp.

6. Curb Running Slope:

- a. A maximum of 8.3% will be allowed for a curb running slope.
- b. To address drainage issues, some curb running slope is desirable.

7. Diagonal Ramps:

- a. At intersections, the standard for the higher classification road shall apply.
 - i. E.g.: when a local road intersects with an arterial, the arterial standard shall apply.
- b. Arterial and collector intersections shall have dual ramps. If conditions are such that dual ramps cannot be attained or are undesirable, then use of diagonal ramps will require a design exception. Design exceptions need to discuss the cross slope and running slope of the crosswalk adjacent to the proposed diagonal ramp. If the crosswalk running slope is greater than 5%, approval may include a condition to include a 2′ gutter for the width of the ramp to create a turning area. Design exceptions shall show the grades within the 4 ft by 4 ft turning area in the roadway in front of the proposed ramp and label grades

within this area. The design shall meet 2% max slope in both directions for the turning area or include justification for the proposed slopes in the DE.

c. Neighborhood routes (NR) and local roads (LR) intersections may have diagonal ramps. On retrofit projects, a 2' wide gutter will be required in front of diagonal ramps if the turning area grades are not less than 2% in both directions. Transition from 12" to 24" gutter width should be a minimum 5:1 taper. On new construction, the grades in the turning area shall be maximum 2% in both directions, otherwise a DE will be required.

8. Expansion Joints:

- a. Expansion joints within the limits of an ADA ramp are discouraged. Expansion joints will only be allowed if requested by the design engineer and approved by the County inspector.
 - i. Expansion joints shall not be wider than 3/8".

9. Gutters in front of ADA ramps:

a. Gutters are required on the street side of all ADA ramps, even if existing curb does not have a gutter. A minimum 5:1 taper should be used to transition back to the existing curb face. A 12" gutter will be allowed unless other conditions require a wider gutter (for example, the 2' wide gutter requirement for diagonal ramps).

10. Horizontal Gap:

a. A maximum ½" horizontal gap will be allowed.

11. Private Streets:

- a. Private road entrances that are signalized will be treated the same as a public crossing requiring ADA ramps for all legs. Non-signalized private road entrances shall be considered, on a case-by-case basis, whether ADA ramps are required.
 - Considerations may include adjacent land use, travel patterns and pedestrian activity, such as near schools, shopping centers, hospitals, and sites that have significant, large vehicles over-tracking.

12. Receiving Ramps:

- a. Receiving ramps across the street from a corner at a "T" intersection, on the straight section of sidewalk at the top of the "T" shall be required when there is an existing sidewalk on the straight section.
- b. When there is not a sidewalk or curb on the other side of the street, at minimum a 4' by 4' landing area out of the traveled way and bicycle lane must be provided. The landing must meet ADA criteria for a landing area, including an all-weather surface type and turning space slopes.
- c. Curbs or wheel stops around landings at signalized intersections should be

installed when needed to keep vehicles off the landing areas.

- d. Developers may apply for TDT credit(s) when adding receiving ramps across the street from their proposed development. This would occur when the improvement is non-contiguous to the development property, is part of the development's Conditions of Approval, and is not temporary.
- e. If the circumstances of the intersection appear that it would be safer to have a single crossing, a design exception will be required to request approval for a single crossing and to close the other crossing.
- f. Crosswalk closure signs will not be required for local roads and neighborhood routes but will be required for collector and arterial roadways.

13. Separation Between Adjacent Curb Ramps

a. A minimum 5-ft panel is not required between adjacent curb ramps. Instead, the grade difference between adjacent curb ramps will control design and construction. See Curb Ramp Grade Breaks item in this document.

14. Signalized Pedestrian Crossings:

a. Whenever ADA ramps at signalized crossings are upgraded, the push buttons will be upgraded to audible APS buttons, and must meet ADA standards for button location, height and reach. Extensions and special brackets can be used to meet ADA criteria. ADA improvements are eligible for TDT credit for permanent installations, when identified as a land use condition.

15. Transition Panels

a. Transition panels may be less than 6-ft, but cross-slope rate must stay below
0.5% per foot. Ensure that transition panel joint location coincides with existing concrete joint.

16. Truncated Domes:

- a. The curb in front of truncated domes should either be poured monolithically with the ramp or hand-placed and finished in a manner that removes the curb joint at the back of the curb. Designers shall add notes to plans instructing contractors of this item.
- b. When the required width of truncated domes exceeds 5 feet or the ramp is radial, an unjointed minimum 4-ft wide panel shall be placed in the center of the ramp to provide proper spacing for wheelchair wheels to pass through the truncated dome area. The street-side corners of the full truncated dome panel shall be in contact with the back of curb.
- c. When the required truncated domes do not exceed 5 feet, they shall be placed as a single panel. There shall be no joints in the panel. The panel shall be

placed in the center of the ramp and perpendicular to the traveled path to provide proper spacing for wheelchair wheels to pass through the truncated dome area.

17. Turning Space Dimensions

a. Ramp turning space dimensions shall be a minimum of 4.0 ft x 4.0 ft.