

ACCESS DUE-DILIGENCE CHECKLIST: PUBLIC RIGHTS-OF-WAY

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ACCESSOLOGY



Due Diligence Checklist

ACCESSIBILITY COMPLIANCE

Overview

This checklist is intended for field personnel to use as a guide during project inspections to verify accessibility compliance. This checklist is <u>NOT</u> intended to be an all-inclusive manual for designing or evaluating pedestrian facilities. There is no assurance that this checklist is sufficient in a given situation. The inspector must also use experience and knowledge of the Americans with Disabilities Act and the accompanying Federal Regulations to determine whether a project is in compliance with the legal requirements of the Act itself rather than this checklist.

Applicable Standard

- U.S. Access Board's 2010 ADA Standards
- U.S. Access Board's 2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (PROWAG)
- Federal Highway Administration's Manual on Uniform Traffic Control Devices (MUTCD), 2009 edition
- Tennessee Department of Transportation (TDOT) Pedestrian Accessibility Standards for Facilities in the Public Right-of-Way (TDOT Ped Standards), October 2017 Draft

On-site Review

The following items are required to be in place for pedestrian facilities in the public rights-of-way:

Curb Ramps

- □ A turning space 4 ft. x 4 ft. minimum is provided at the top of each perpendicular curb ramp or the bottom of each parallel curb ramp if unconstrained by back of sidewalk (see **Figures 1A** and **1B**). *PROWAG R304.2.1 & R304.3.1*
- □ For a perpendicular curb ramp, a turning space 4 ft. x 5 ft. minimum is provided at the top of each perpendicular curb ramp if constrained by back of sidewalk. The 5 ft. dimension is provided in the direction of the curb ramp run. *PROWAG R304.2.1*
- □ For a parallel curb ramp, a turning space 4 ft. x 5 ft. minimum is provided at the bottom of each parallel curb ramp if constrained by on two or more sides. The 5 ft. dimension is provided in the direction of the curb ramp run. *PROWAG R304.3.1*
- □ Turning space cross slopes do not exceed 1.5%. *PROWAG R304.5.3; TDOT Ped Standards*
- □ Turning space running slopes do not exceed 2%. *PROWAG R304.2.2*
- □ Perpendicular curb ramp running slopes are between 5% 6% (see **Figure 2**). *PROWAG R304.2.2; TDOT Ped Standards*
- Parallel curb ramp running slopes are between 5% 8.3%. *PROWAG R304.2.2*
- □ Curb ramp running slope is cut-through or built up to curb at rights angles or meets gutter grade break at right angles where curb is curved (e.g. Curbed curb ramp sides are constructed at 90 degrees). *PROWAG R304.2.2*

- Blended transition running slopes do not exceed 5% (see **Figure 3**). *PROWAG R304.4.1*
- Curb ramp lengths do not exceed 15 ft. *PROWAG R304.2.2*
- □ Curb ramp run clear widths (excluding flared sides) are 5 ft. minimum (see **Figure 4**). *PROWAG R304.5.1; TDOT Ped Standards*
- □ Grade breaks are perpendicular to direction of curb ramp run at top and bottom of curb ramps. *PROWAG R304.5.2*
- Grade breaks are not located on surface of curb ramp run or turning space. *PROWAG R304.5.2*
- □ Curb ramp surface slopes that meet at grade breaks are flush (< 0.25 in. elevation change) (see **Figure 6**). *PROWAG R304.5.2*
- □ Curb ramp and blended transition cross slopes do not exceed 1.5% (see **Figures 7A** and **7B**). *PROWAG R304.5.3; TDOT Ped Standards*
- □ The algebraic difference between the crosswalk slope and the curb ramp running slope does not exceed 11% (see **Figure 8**). *PROWAG R304.5.4; TDOT Ped Standards*
- □ Clear spaces 4 ft. x 4 ft. minimum are provided beyond the grade break, wholly outside parallel vehicle travel lane (see **Figure 9**). *PROWAG R304.5 and 2010 ADA 406.6*
- □ Where a pedestrian circulation path crosses a curb ramp, flared curb ramp sides are installed (see **Figure 11**). *PROWAG R304.2.3*
- Where a non-walking surface is adjacent to a curb ramp, flared curb ramp sides are not installed (see Figure 11). *TDOT Ped Standards*
- □ Curbed curb ramp sides are protected from cross travel (e.g. grass or other landscaping is adjacent to all curbed sides) (see **Figure 11**). *PROWAG R304.2.3 Advisory*
- □ Flared curb ramp sides (measured parallel to the curb) do not exceed 10% (see Figure 10). *PROWAG R304.2.3*
- □ Vertical surface discontinuities in the curb ramp, curb ramp turning space, or curb ramp flares do not exceed 0.25 in. (see **Figure 12**). *PROWAG R302.7.2*
- Detectable warning surfaces are provided on all intersection curb ramps, blended transitions, and pedestrian refuge islands along the entire length of curb removal (see **Figure 13A**). PROWAG R208.1
- □ Detectable warning surfaces are provided on all COMMERCIAL driveway curb ramps along the entire length of curb removal (RESIDENTIAL driveways should <u>not</u> have detectable warnings). PROWAG R208.1
- □ Detectable warning surfaces are a TDOT approved product that meet all PROWAG R305.1.1 & R305.2 requirements. *PROWAG R305.1.1 & R305.1.2; TDOT Ped Standards*
- Detectable warning surfaces are yellow. *PROWAG R305.1.3; TDOT Ped Standards*
- Detectable warning surfaces are 2 ft. in the direction of pedestrian travel (see **Figure 13A**). *PROWAG R305.1.4; TDOT Ped Standards*
- □ Detectable warning surfaces extend the full width of the curb ramps (excluding flares), turning space, or blended transition (see **Figures 13A** and **13B**). *PROAWG R305.1.4*

Curb Ramps (cont.)

- □ Detectable warning surfaces are installed perpendicular to the grade break between the curb ramp run and the street. *PROWAG R305.2.1 Advisory*
- Detectable warnings at cut-through pedestrian refuge islands are separated by a 2 ft. minimum length of surface without detectable warnings (see **Figure 5**). *PROWAG R305.2.4*

Pedestrian Street Crossings

- Grades (running slopes) do not exceed 5%. *PROWAG R302.5*
- Cross slopes do not exceed 2% at crossings with yield or stop control. *PROWAG R302.6*
- Cross slopes do not exceed 5% at crossings <u>without</u> yield or stop control. *PROWAG R302.6*
- Cross slopes are equal the street or highway grade at midblock crossings. *PROWAG R302.6*
- Crosswalk lines are solid white, between 6 in. 24 in. wide (if installed). *MUTCD 3B.18*
- □ If transverse crosswalk lines are installed, the gap between lines is 6 ft. or greater. *MUTCD 3B.18*
- □ If diagonal or longitudinal crosswalk lines are installed, the crosswalk is 6 ft. wide or greater. *MUTCD 3B.18*

Driveways

- Driveways are "sidewalk ready", even if no sidewalk is currently in the ROW. *TDOT Ped Standards*
- Driveways meet requirements in TDOT RP-D-15 and/or RP-D-16. *TDOT Ped Standards*

Accessible Pedestrian Signals

- □ When unconstrained or only constrained on all or part of one (1) or two (2) sides, a clear space 2.5 ft. x 4.0 ft. minimum is provided adjacent to each push button (see **Figure 14**). *PROWAG R404.3*
- □ When constrained on all or part of three (3) sides and the constrained depth exceeds 1.5 ft., a clear space 2.5 ft. x 5.0 ft. minimum is provided adjacent to each push button. *PROWAG R404.7.2.*
- □ Clear space cross slopes do not exceed 2%. *PROWAG R404.2*
- Clear space running slopes match grade of adjacent pedestrian access route. *PROWAG R404.2*
- Clear space is positions for a parallel approach to push button. *PROWAG R404.5*
- □ One full unobstructed side of clear spaces adjoin adjacent pedestrian access routes or another clear space. *PROWAG R404.6*
- □ Horizontal distances from the push button face to the edge of the clear space extension do not exceed 10 in (see **Figure 15**). *PROWAG R406.3*
- □ Vertical surface discontinuities in the clear space do not exceed 0.25 in (see Figure 12). *PROWAG R302.7.2*
- □ Push button diameters are at least 2 in. 2005 PROWAG R306.3.3

Accessible Pedestrian Signals (cont.)

- □ Distances from the outside edge of the crosswalk line farthest from the center of the intersection and the face of the push buttons do not exceed 5ft (see **Figure 16**). *MUTCD 4E.08*
- Push buttons are located between 1.5 ft. 10.0 ft. from the face-of-curb, shoulder, or pavement (see Figure 16).
 MUTCD 4E.08
- □ Push buttons are oriented parallel to the crosswalks the push button serves.
- □ Push button mounting heights do not exceed 4 ft. above the finish surface (3.5 ft. above the finish surface preferred) (see **Figure 15**). *PROWAG R406.3; MUTCD 4E.08*
- □ If two APS push buttons are located on the same corner, the push buttons are separated by at least 10 ft. (unless physical constraints make this impractical). *MUTCD 4E.10*
- □ If two APS push buttons are not separated by 10 ft., the following features are provided: A) A pushbutton locator tone; B) A tactile arrow; C) A speech walk message for the WALKING PERSON (symbolizing WALK) indication; and D) A speech pushbutton information message. *MUTCD 4E.10*
- Pedestrian push button signs matches one of the designs in Figure 17. *MUTCD 2B.51*

Accessible Routes

- □ Continuous widths are 5.0 ft. minimum, exclusive of the curb (see **Figure 18A**). If curb and sidewalk are monolithic, continuous widths are 5.5 ft. minimum. *PROWAG R302.3; TDOT Ped Standards*
- □ Clear width of pedestrian access routes within median and pedestrian refuge islands is 5 ft. minimum. *PROWAG R302.3.1*
- □ Clear widths (around obstructions) are 36 in. minimum, exclusive of the curb, and 24 in. maximum in the direction of pedestrian travel (see **Figure 18B**). *2010 ADA 403.5.1; TDOT Ped Standards*
- □ Where the continuous widths are less than 5 ft., passing spaces are provided at intervals of 200 ft. maximum. *PROWAG R302.4*
- □ Passing spaces are 5 ft. x 5 ft. minimum (where installed) (see **Figure 19**). *PROWAG R302.4*
- □ Passing spaces are 1.5% cross slope maximum (where installed). *TDOT Ped Standards*
- Grades (running slopes) equal the general grade established for the adjacent street or highway for access routes within the ROW and serving the ROW (see **Figure 20**). *PROWAG R302.5; TDOP Ped Standards*
- □ Grades (running slopes) are 5% maximum for access routes within the ROW but <u>not</u> serving the adjacent street or highway (see **Figure 20**). *PROWAG R302.5; TDOP Ped Standards*
- Grades (running slopes) do not exceed 5% for access routes <u>outside</u> the ROW (see Figure 20). *PROWAG R302.5*
- Cross slopes do no exceed 1.5% (see Figure 21). PROWAG R302.6; TDOT Ped Standards
- □ Only one cross slope is provided (e.g., no compound cross slopes). *TDOT Ped Standards*
- □ All pedestrian access route surfaces are firm, stable, and slip resistant (e.g., concrete, bituminous concrete asphalt, or other TDOT approved materials). *PROWAG R302.7*

Accessible Routes (cont.)

□ Tie-in transition length consistent with **Table 1** is provided (where installed). *TDOT Ped Standards*

Proposed Pedestrian Access Route Cross Slope	Existing Pedestrian Access Route Cross Slope					
	1%	2%	3%	4%	5%	6%
1.0%		5'	5'	10'	10'	10'
1.5%	5'	5'	5'	5'	10'	10'
2.0%	5'		5'	5'	10'	10'

Table 1. Minimum Pedestrian Access Route Tie-In Lengths

- □ Vertical alignment is generally planar (i.e. easy rollability). *PROWAG R302.7.1*
- Grade breaks are flush. *PROWAG R302.7.1*
- □ Vertical surface discontinuities do not exceed 0.25 in. (see Figure 12). *PROWAG R302.7.2*
- □ Horizontal openings in gratings and joints do not permit passage of a sphere more than 0.5 in. diameter (see **Figure 22**). *PROWAG R302.7.3*
- □ Elongated openings in grates and joints are placed so that the long dimension is perpendicular to the dominant direction of travel (see **Figure 22**). Where no dominant flow pattern, openings do not permit passage of a sphere more than 0.5 in diameter in both directions. *PROWAG R302.7.3; TDOT Ped Standards*
- □ Flangeway gaps at railroad crossings do not exceed 2.5 in. for non-freight rail track or 3 in. for freight rail track. *PROWAG R302.7*
- Dending does not exist in the pedestrian facility. *TDOT Ped Standards*
- □ No site run-off passes over the pedestrian facility. *TDOT Ped Standards*
- □ Objects with leading edges between 2.25 ft. 6.7 ft. above finish surface do not protrude more than 4 in. maximum into the pedestrian circulation path (see **Figure 23**). *PROWAG R402.2*
- Dest-mounted object overhangs do not exceed allowable dimensions in **Figure 24.** *PROWAG 402.3*
- Regulatory, warning, or guide signs are mounted 84 in. minimum above the finish surface. *MUTCD 2A.18*
- □ Guardrails or other barriers to pedestrian travel are provided where the vertical clearance is less than 80 in. high (see **Figure 23**). *PROWAG R402.4*
- Leading edge of guardrails or barriers are located 27 in. maximum above the finish surface. *PROWAG R402.4*

Shared Use Paths

- Continuous widths are the full width of the shared use path. 2013 PROWAG Supplement, R302.3
- Grades (running slopes) follow the general grade established for the adjacent street or highway to the extent practical (see **Figure 20**). *2013 PROWAG Supplement, R302.5*
- □ Grades (running slopes) do not exceed 5% when within a pedestrian street crossing. *2013 PROWAG Supplement, R302.5*
- □ Objects do not overhang or protrude into any portion of a shared use path at or below 8.0 ft. measured from the finished surface. *2013 PROWAG Supplement*, *R210*
- □ Width of curb ramp runs and blended transition s are equal to the width of the shared use path. *2013 PROWAG Supplement, R304*
- Curb ramp turning space is 4 ft. minimum. 2013 PROWAG Supplement, R304



Figure 1A - Perpendicular Curb Ramps



Figure 1B – Parallel Curb Ramps



Figure 2 – Curb Ramp Running Slope



Figure 3 – Blended Transition Running Slope



Figure 4 – Curb Ramp Run Clear Width



Figure 5 -Pedestrian Refuge Island



Figure 6 – Curb Ramp Grade Breaks



Figure 7A – Parallel Curb Ramp Cross Slopes



Figure 7B – Perpendicular Curb Ramp Cross Slope



Figure 8 - Gutter Counter Slope



Figure 9 - Curb Ramp Clear Space



Figure 10 – Flare Slopes



Figure 11 - Protected Curbed Curb Ramp Sides



Figure 12 - Vertical Discontinuities



Figure 13A - Detectable Warning Surface Placement (Perpendicular Curb Ramps)



Figure 13B - Detectable Warning Surface Placement (Parallel Curb Ramps)



Figure 14 - Push Button Clear Space



Figure 15 - Push Button Horizontal Reach and Mounting Height



Figure 16 - Push Button Placement



Figure 17 – Push Button Signs



Figure 18A - Accessible Route Continuous Width



Figure 18B - Clear Width with Obstructions



Figure 19 – Accessible Route Passing Spaces



Figure 20 - Accessible Route Running Slope



Figure 21 – Accessible Route Cross Slope



Figure 22 - Openings in Grates and Joints



Figure 23 - Reduced Vertical Clearance



Figure 24 – Post-mounted Object Overhang Allowable Dimensions