ADA Design

ACEC/DPW Designer Workshop
Andrew Wolf, PE and Curtis Holcom, PE
August 31, 2023
Agenda

• Common Issues Department is Encountering
• PROWAG Final Rule
• Q&A
Slopes

• **Running slopes are in direction of pedestrian travel**
  – Desirable Running slope – Roadway Profile (follow PROWAG for maximums)

• **Cross slopes are perpendicular to direction of pedestrian travel**
  – Desirable cross slope – 1.5% (follow PROWAG for maximums)

• **Ramps are sloped walking surfaces with running slopes steeper than 5% that accomplish a change in level**
  – Desirable ramp slope – 7.8% (follow PROWAG for maximums)

• **Ramps and walks that serve multiple directions may have running slopes for one direction that are cross slopes for the other**
Minimum Clear Width

The minimum clear width is 4 feet. A 3-ft pinch point is not acceptable.

Potential Solutions

- Add sidewalk around
- Utility relocation
- Additional R/W
- Site infeasibility – consult your PM
Use of Flares

• Flares are needed when you are within the “walkable” sidewalk area.

• Avoid concrete flares adjacent to grass.

• Flares (grass or concrete) are preferred instead of return curbs. Only use return curbs if absolutely necessary.
Use of Setback DWS

- Setback DWS are not allowed when adjacent to a walkable surface
Use of Grooves

Please consult Design Memo 2017.04 for use of grooves.
Pedestrian Signals

CROSSWALK ACCESSIBILITY MAP

Accessible location and clearance requirements for accessible pedestrian signals (APS).

Key:
- M 2009 Manual on Uniform Traffic Control Devices (MUTCD)
- P 2023 Public Right-of-Way Accessibility Guidelines (PROWAG)

Wheelchair-accessible route from button to ramp

At least 10 ft from other button, when feasible.

Center of intersection

Minimum clear path: 48 in.

Minimum clear space: 30x48 in. Forward or parallel approach to button. One full side of clear space adjoins access route or another clear space.
Forward approach: min. 30 in. wide clear space at button. Min. 36 in. wide if depth is more than 24 in. and confined on three sides.
Parallel approach: min. 48 in. wide clear space at button. Min. 60 in. wide if depth is more than 15 in. and confined on three sides.
(Diagram not to scale)


Button height above sidewalk:
- M approx. 3.5 ft; 4 ft max.
- P 15 in min., 48 in max.

Button to curb face, shoulder, or pavement:
- M 1.5-6 ft preferred; 10 ft. max.
- P

Button to crosswalk edge farthest from intersection center:
- M 0-5 ft; as close as possible.
- P

Between side of curb ramp and edge of crosswalk farthest from intersection center; as close as possible to curb ramp.
- M No more than 5 ft from side of curb ramp.
- P

Unobstructed and adjacent to a level all-weather surface to provide access from a wheelchair.
Cross slope 2.1% max. Surfaces shall be firm, stable, and slip resistant, with no vertical changes of level of more than 0.25 in.
Changes of level between 0.25 and 6 in. permitted if beveled:
0.25-0.5 in = 50% max slope; 0.5-6 in = 8.3% max slope.
Plan Review Common Issues

- Do not extend DWS up the ramp beyond the grade break
- Survey tooled joints and remove/reconstruct to them
Plan Review Common Issues

• For ramp and sidewalk quantities follow IDM Ch. 17 and INDOT SS E-604-SWCR series
Construction Common Issues

- Simplify grade break and spot elevations as much as possible. Contractors will straight grade and form long sections at a time.
- Plan clarity is critical to understanding improvements.
Construction Common Issues

- Extend construction limits to nearest inlet if drainage structures are nearby
- Grades too flat or low points at bottom of ramp

Too Flat

Low Points at Ramps
Recap

• ADA compliance and universal accessibility is the law!
• Make sure slope requirements are met.
• Make sure that widths and turning spaces are compliant.
• Direct water away from ramps with resurface if possible or add inlets.
• We did not touch on MOT, but accessibility is also required. Make sure that MOT is practical and makes sense.

• Take ownership of your project!!
PROWAG Final Rule

- Published 8/8/2023
- Effective 9/7/2023
- Becomes law when DOJ and DOT adopts (expected Spring 2024)
- DOT expects MUTCD 11th Edition in 2023
  - PROWAG changes are likely to be in Revision 1
- DPW will be reviewing updates and impacts/changes to current policy
Questions?