ADA PROWAG 2023
Final Rule

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DISCLAIMER:

The teachings contained here within this presentation are derived from the Final Rule published by the United States of America Access Board in September of 2023, and can be found within the document title “Public Rights-of-Way Accessibilities Guidelines” (PROWAG) version 2023. As current, the proposed Final Rule now must be adopted by FHWA to become requirements for Federally Funded projects. All Civil Engineering offers this presentation as our view and understanding of the PROWAG, but disclaims any, and all, liability regarding the application of these thoughts. PROWAG is a federal publication, and as such, is generally created to express the ‘minimum’ for compliance. Agencies throughout the country may at any time chose to propose their own set of rules that meet, or exceed, those established by the federal government. The material, thoughts, and opinions contained here within are only thoughts and opinions of the presenters themselves, and in no way should be construed as legal absolutions.

Notice

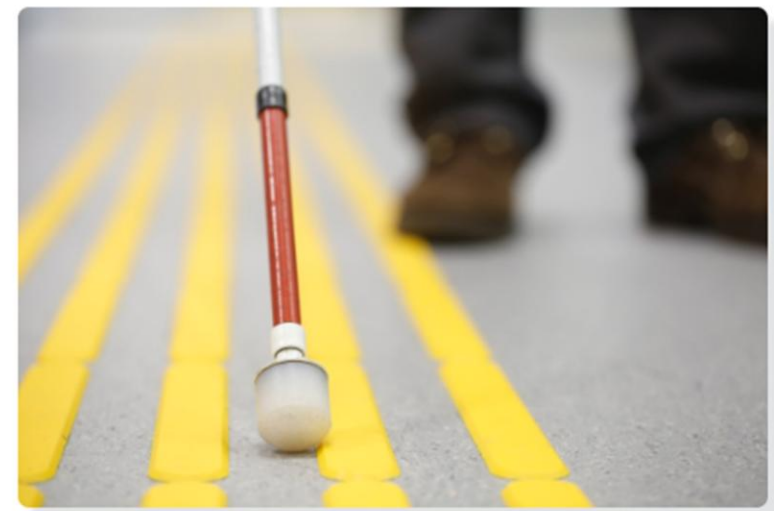
The Public Right-of-Way Accessibility Guidelines (PROWAG) rulemaking has concluded. The PROWAG final rule has been published in the Federal Register. Please visit the Access Board's PROWAG page for the guidelines.

Public Right-of-Way Accessibility Guidelines

PDF

About the ADA and ABA Accessibility Guidelines for the Public Right-of-Way

The Access Board has published new guidelines under the Americans with Disabilities Act (ADA) and the Architectural Barriers Act (ABA) that address access to sidewalks and streets, crosswalks, curb ramps, pedestrian signals, on-street parking, and other components of public right-of-way. These guidelines also review shared use paths, which are designed primarily for use by bicyclists and pedestrians for transportation and recreation purposes.



Background

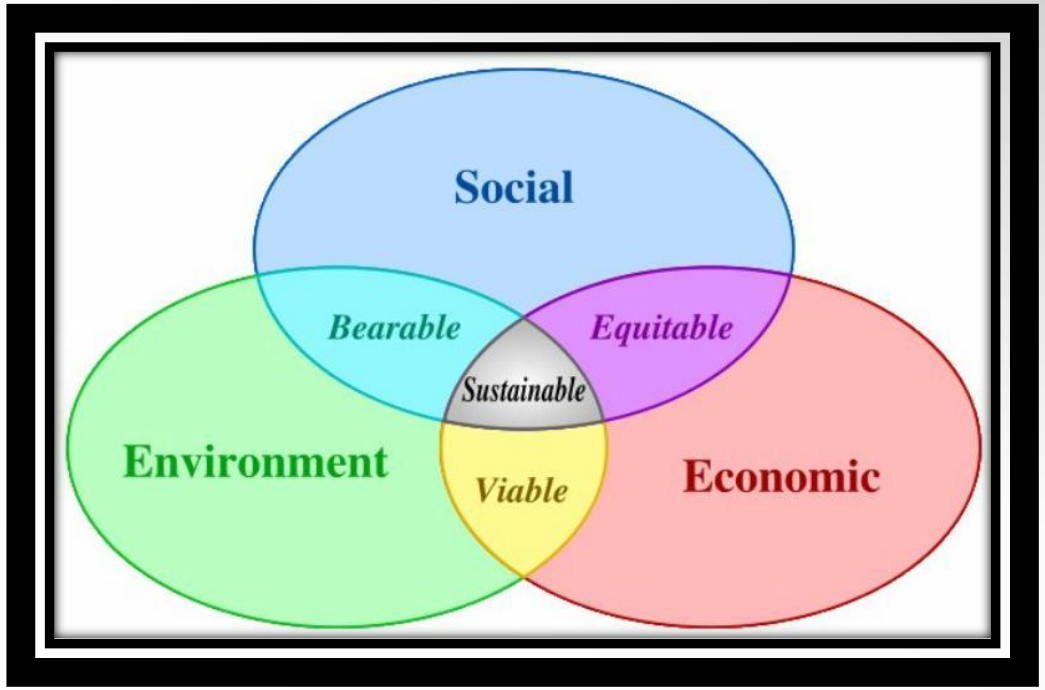
- August 8, 2023 – The Board publishes final rule in the Federal Register.
- February 13, 2013 – The Board publishes a Proposed Draft Accessibility Guidelines for the Public Right-of-Way in its rulemaking on public right-of-way.
- February 13, 2013 – The Board issues a supplemental notice to address shared use paths in its rulemaking on public right-of-way.
- December 5, 2011 – The Board issues notice reopening proposed rule for public comment.
- July 26, 2011 – The Board issues notice of proposed rulemaking on Accessibility

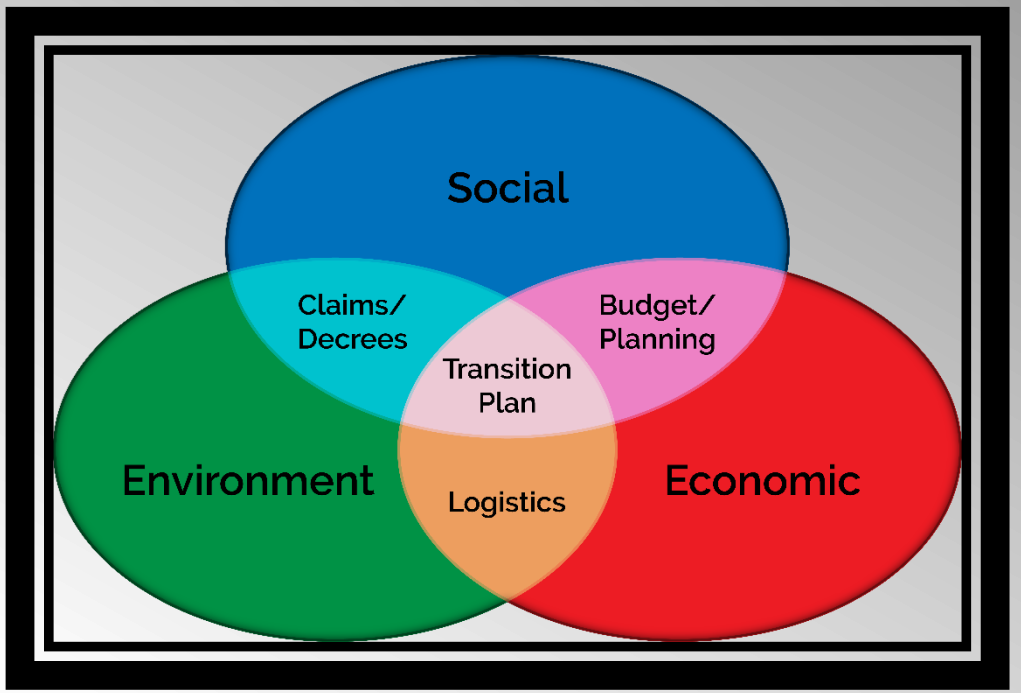
Why is ADA Compliance Important

- **The Human Factor:**
  - **1 of 5 Americans currently live with a Disability.**
  - **Barriers prevent the disabled from safe travel.**
    - ✓ **Barriers also decrease safety for various other users.**
  - **Excessive cross-slopes make travel exhausting to impossible.**
    - ✓ **3% cross-slope requires 50% more exertion on a wheelchair users countering arm. Think about pushing a wheel barrel overloaded on one side.**

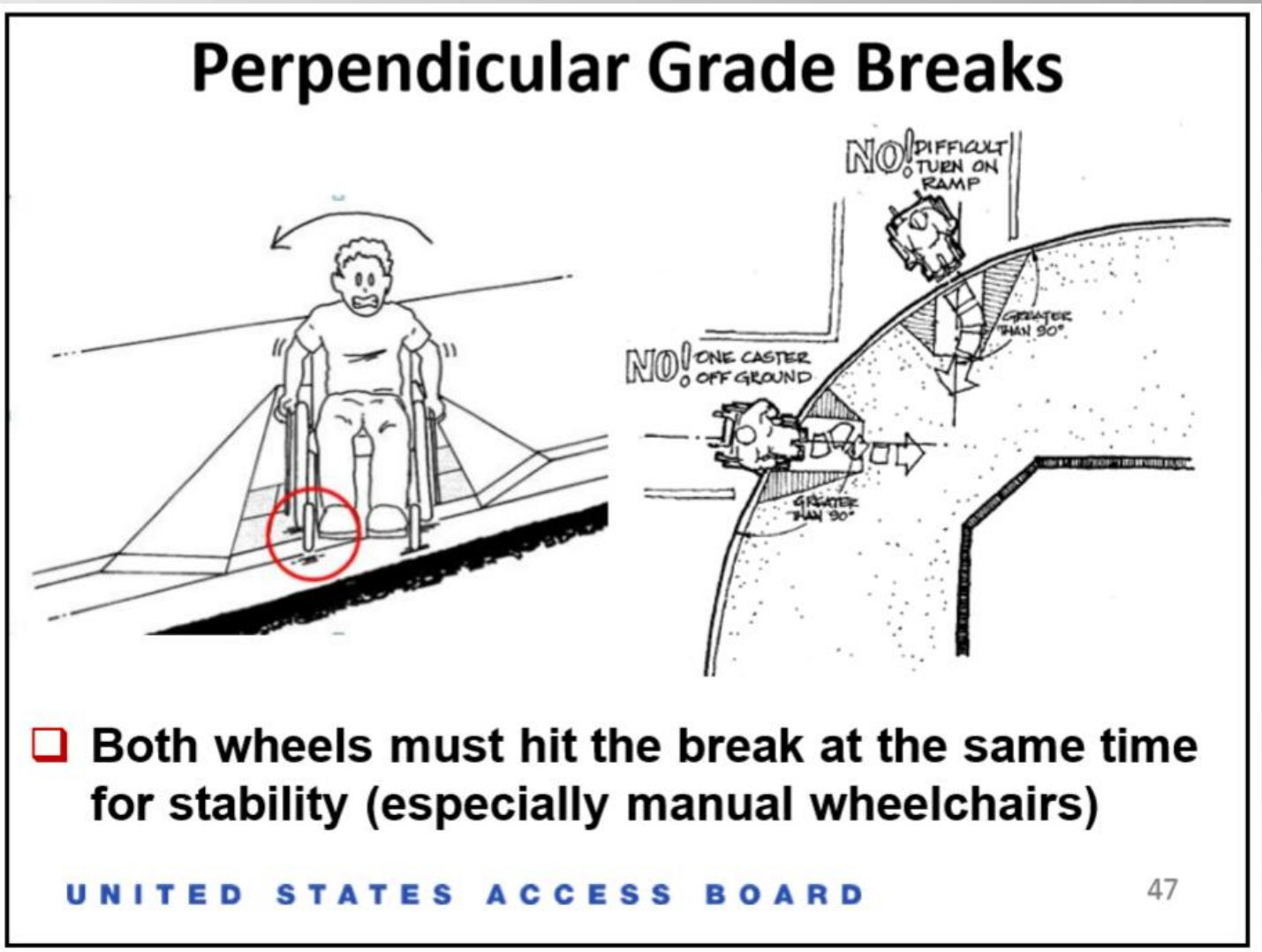
- The Legal Factor:
  - Failure to Comply has resulted in agencies nationwide receiving Court mandates to allocated up to 20% of their annual budgets to ADA improvements.

Sustainability = Transition Plan
"The Sweet Spot"

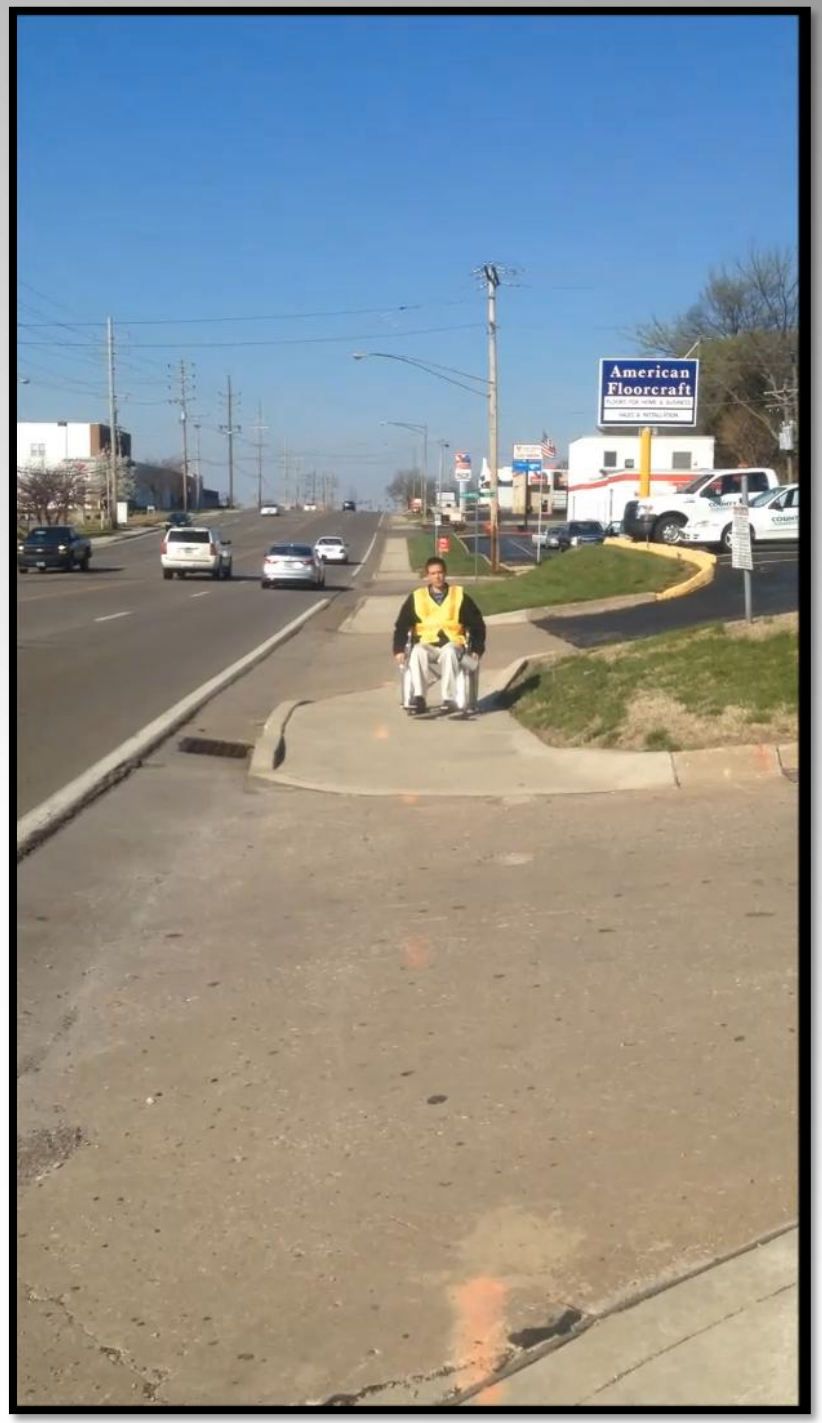




HERE IS WHY YOU DON'T SEE MORE WHEELCHAIR USERS ON THE SIDEWALK



Pretty Good – Just one Error – Who Can Find It……?


American
Floorcraft

GOOD ENGINEERING MUST:
FAVOR THE MOST VULNERABLE USER FIRST

ADAAG vs PROWAG

Two Books – Two Very Different Outcomes!!!

- **Americans with Disabilities Act Accessibility Guidelines (ADAAG)**
  - **First rules published and enforced for R/W construction but were largely designed for buildings and building access.**

- **Public Rights-of-Way Accessibility Guidelines (PROWAG)**
  - **Second set of rules/”guidance” published and was specific to R/W facilities and provided for terrain tolerances!**

I Know What You're Thinking
Job Security On The Left ☺

ADAAG

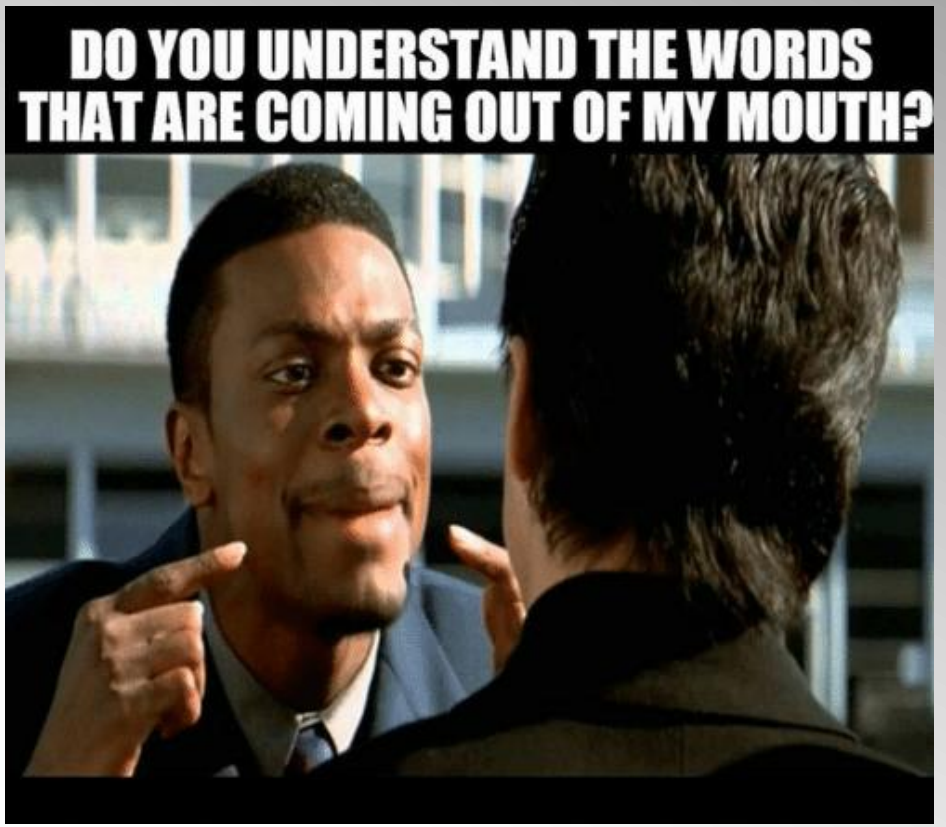
30' – FLAT – 30' FLAT – 30' – FLAT……

PROWAG

ROAD GRADE ALLOWANCE

"Learning To Speak the Language - Common Terminology

- Pedestrian Access Route (PAR)
- Curb Ramp
- Ramp
- Grade Break
- Running Slope
- Cross Slope
- Street Crossings
- Detectible Warning
- Turning Space
- Clear Space
- Tabled Roadway
- Transitional Segments



Pedestrian Access Route (PAR)

- Pedestrian Access Route is the pedestrians equivalent of a traffic lane.

- PAR is a 4 foot “MINIMUM” wide “CLEAR” path that is continuous through side streets, driveways, medians, curbs, grass, roadways, etc.

- Does This Make Sense?

- Then How Can This?

Running Slope

- **The slope or grade parallel to the direction of pedestrian travel**
- **When building in the R/W, Grade of Pedestrian Access Route can equal the Grade of the Adjacent Roadway**
- **On Ramps, the Running Slope is between 5% and 8.333% maximum, unless you are chasing grade, in which the ramp only needs to be 15+ Feet and the grade can then exceed 8.333%**

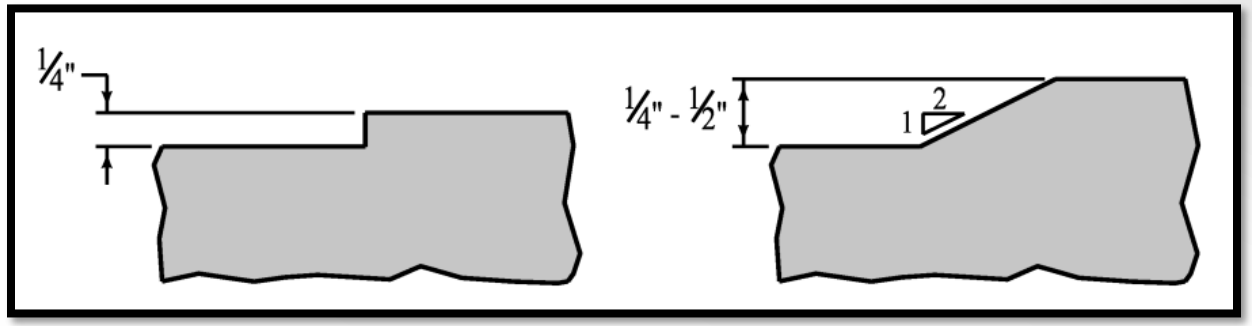
Cross Slope

The Slope or Grade perpendicular to pedestrian travel.

- **2.1% or less everywhere except:**
  - **Allowable 5% cross slope at street crossings without yield or stop control.**
  - **At Midblock and Roundabouts Pedestrian Crossings Only – Cross slope of Ramp can equal Grade of road.**

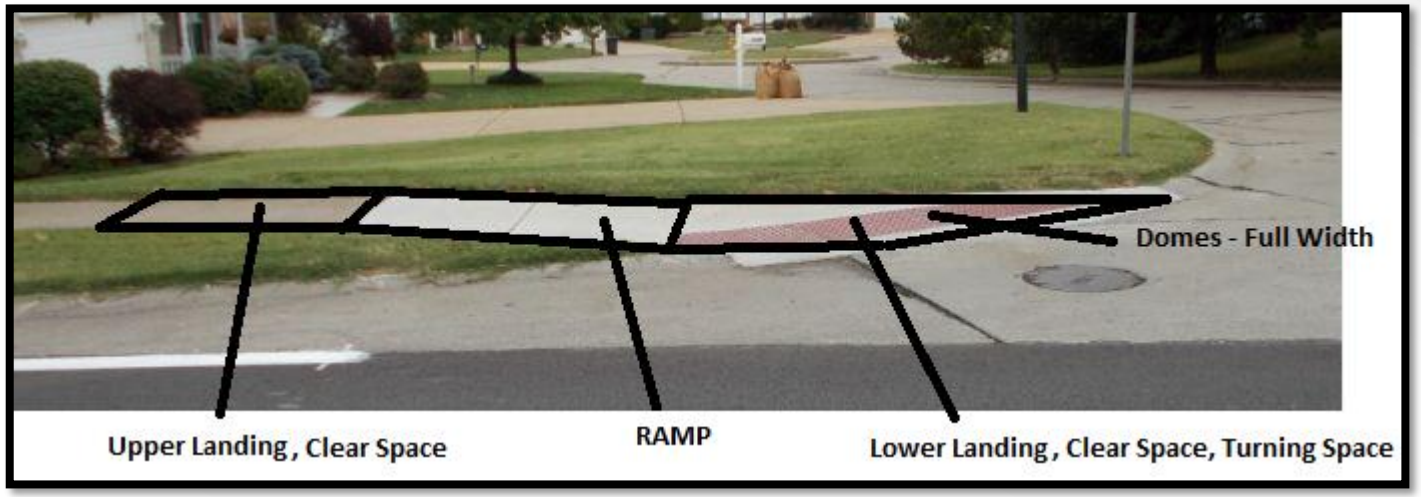
General Requirements

- **Surfacing:** The walking surfaces of pedestrian access routes, elements, and spaces that are required to be accessible shall be stable, firm, and slip resistant and shall comply with R302.6.
- **Changes in Level:** Changes in level of ¼ inch (6.4 mm) maximum shall be permitted to be vertical. Changes in level between ¼ inch (6.4 mm) and ½ inch (13 mm) shall be beveled with a slope not steeper than 1:2 (50.0%). Changes in level greater than ½ inch (13 mm) up to 6 inches shall have a 1:12 (8.3%) maximum slope. Changes in level greater than 6 inches (150 mm) shall comply with R407 (R302.6.2)



Curb Ramp Anatomy

- **Curb Ramps Include the Following Parts:**
  - Landings?
    - Perpendicular Ramps = Landing at Top
    - Parallel Ramps = Landing at Bottom
  - Clear Spaces (4’ X 4’ Minimum)
  - Domes (2’ Deep, Entire Width of the Opening)
  - Ramp (8.33% Maximum Running Slope “unless” greater than 15 feet)
- Grade Break (one at the top and one at the bottom of every ramp)
- Turning Spaces (2.1% X 2.1% at Stop Controlled Intersection, 5% X 5% at Signalized or Free Flow Intersections)
- Sometimes Flares (10% maximum – if needed)
- Sometimes Curbs (To Help with Direction or Hold Grade)



Curb Ramps – Perpendicular

R304.2.1 Running Slope

The running slope of a curb ramp shall be perpendicular to the curb or gutter grade break. The running slope of the curb ramp shall be 1:12 (8.3%) maximum.

EXCEPTION: Where the curb ramp length must exceed 15 feet (4.6 m) to achieve a 1:12 (8.3%) running slope, the curb ramp length shall extend at least 15 feet (4.6 m) and may have a running slope greater than 1:12 (8.3%).

R304.2.2 Cross Slope

The cross slope of a curb ramp run shall be 1:48 (2.1%) maximum.

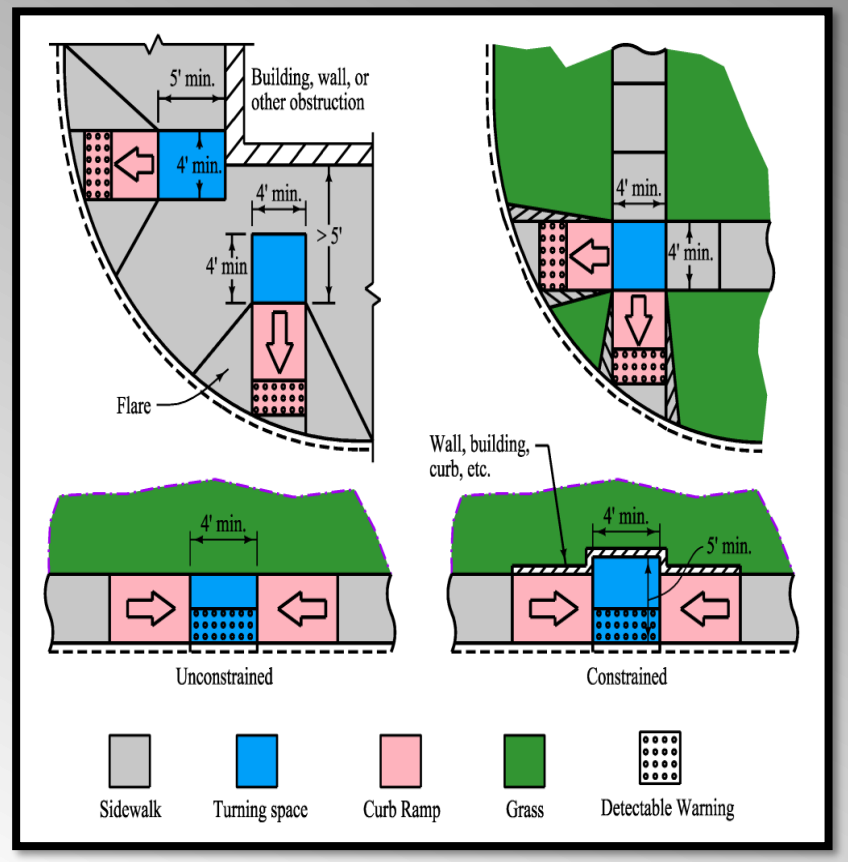
EXCEPTION: At crosswalks, the cross slope of the curb ramp run shall be permitted to be equal to or less than the cross slope of the crosswalk as specified by R302.5.

R304.2.3 Grade Breaks

Grade breaks at the top and bottom of a curb ramp run shall be perpendicular to the direction of the curb ramp run. Grade breaks shall not be permitted on the surfaces of curb ramp runs and landings. Surface slopes that meet at grade breaks shall be flush.

R304.2.4 Clear Area

A clear area 48 inches (1220 mm) wide minimum by 48 inches long (1220 mm) minimum shall be provided beyond the bottom grade break of the perpendicular curb ramp run and within the width of the crosswalk. At shared use paths, the clear area shall be as wide as the shared use path. The clear area shall be located wholly outside the vehicle travel lanes, including bicycle lanes, that run parallel to the crosswalk. The running slope of the clear area shall be 1:20 (5.0%) maximum. The cross slope of the clear area shall be as specified by R302.5.



Pedestrian Street Crossing – R302.5

Cross Slope:

The longitudinal grade of a street becomes the cross slope for a pedestrian street crossing. PROWAG has maximum limits for the cross slope of pedestrian street crossings.

1) Intersection Legs with Stop or Yield Control:

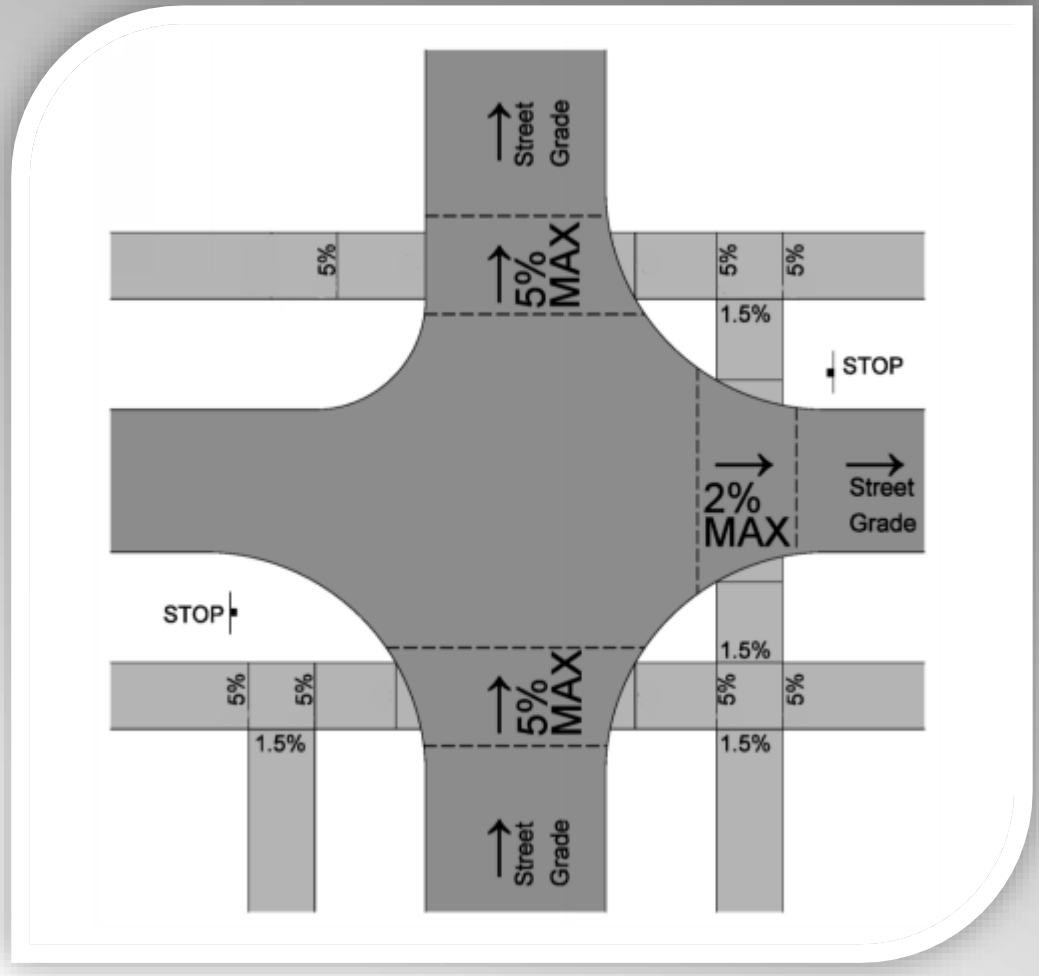
For pedestrian street crossings across an intersection leg with full stop or yield control (stop sign or yield sign), the maximum cross slope is 2.0% (maximum 2.0% street grade through the crossing).

2) Intersection Legs without Stop or Yield Control:

For pedestrian street crossings across an intersection leg where vehicles may proceed without slowing or stopping (uncontrolled or signalized), the maximum cross slope of the pedestrian street crossing is 5.0%.

3) Midblock Pedestrian Street Crossings:

At midblock crossings, the cross slope of the pedestrian street crossing is allowed to equal the street grade.




ONE WAY
2nd Ave
University St
5
The BROOKLYN
Seafood
GARDEN OF REMEMBRANCE

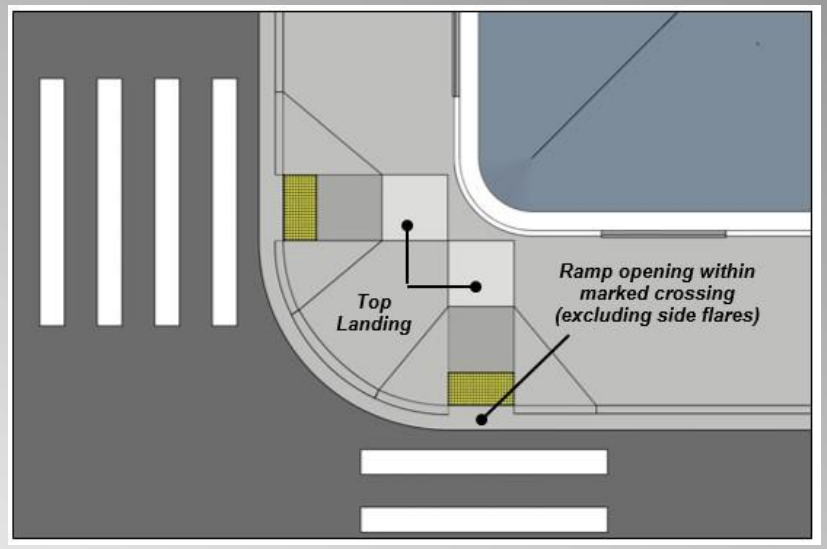
STRAIGHT FROM PROWAG – UNDER SECTION TITLED *"IMPACTS ON STATE AND LOCAL GOVERNMENTS"*

- **The requirements in the proposed guidelines in Table 2 will have no impacts on state and local transportation departments compared to the requirements in the DOJ 2010 Standards and industry practices, except for the 2 percent maximum cross slope requirement for pedestrian access routes contained within pedestrian street crossings with stop or yield control where vehicles slow or stop before proceeding through the intersection (see R204.3 and R302.6). This requirement will have more than minimal impacts on the design and construction of new tabled intersections in hilly urban areas that contain pedestrian street crossings with stop or yield control.**

CURB RAMPS – PERPENDICULAR

R304.2.5 Landing

When a change in direction is necessary to access a *curb ramp* from a *pedestrian access route*, a landing shall be provided at the top of the *curb ramp*. The landing shall be 48 inches (1220 mm) wide minimum by 48 inches (1220 mm) long minimum. At *shared use paths*, the landing shall be as wide as the *shared use path*. Where a landing serves only one *curb* ramp, the landing slope measured perpendicular to the *curb ramp* run shall be equal to or less than the *cross slope* of the *curb ramp* run, and the landing slope measured parallel to the *curb ramp* run shall be 1:48 (2.1%) maximum. Where a landing serves two *curb ramps*, the landing slope in either direction of travel shall not exceed the *cross slope* of the *crosswalk* parallel to the direction of travel as specified by R302.5.



R304.2.6 Side Treatments

Where a *pedestrian circulation path* crosses the side of a *curb ramp*, the side of the *curb ramp* shall be flared. The slope of the flared side shall be 1:10 (10.0%) maximum, measured parallel to the adjacent *curb line*.

R304.2.7 Connection to Pedestrian Facilities

Perpendicular curb ramps or their landings shall be connected to adjacent *pedestrian facilities* by *pedestrian access routes* complying with R302. A *transitional segment* may be used in the connection.

CURB RAMPS – PARALLEL REQUIREMENTS

R304.3.1 Running Slope

The *running slope* of the *curb ramp* run shall be parallel to the curb and shall be 1:12 (8.3%) maximum.

- EXCEPTION: Where the *curb ramp* run length must exceed 15 feet (4.6 m) to achieve a 1:12 (8.3%) *running slope*, the *curb ramp* run length shall extend at least 15 feet (4.6 m) and may have a *running slope* greater than 1:12 (8.3%).

R304.3.2 Cross Slope

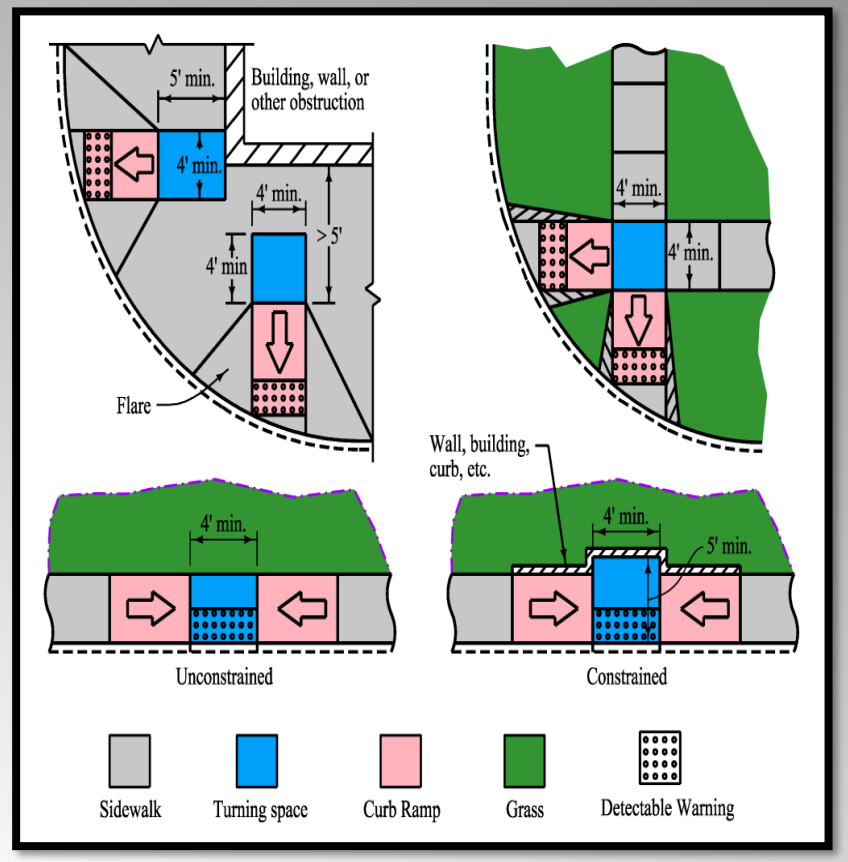
The *cross slope* of the *curb ramp* run shall be 1:48 (2.1%) maximum.

R304.3.3 Grade Breaks

Grade breaks at the top and bottom of a *curb ramp* run shall be perpendicular to the direction of the *curb ramp* run. *Grade breaks* shall not be permitted on the surfaces of *curb ramp* runs or landings. Surface slopes that meet at *grade breaks* shall be flush.

R304.3.4 Landings

Landings shall be provided at the bottom of *parallel curb ramps*. Landings shall be 48 inches (1220 mm) wide minimum by 48 inches (1220 mm) long minimum. The slope of the landing, measured parallel to the direction of travel on the *curb ramp* run, shall be permitted to be equal to or less than the slope of the *roadway* or the *cross slope* of the *crosswalk* as specified by R302.5. The *cross slope* of the landing shall be 1:48 (2.1%) maximum measured perpendicular to the direction of travel on the *curb ramp* run.



Curb Ramps – Parallel Requirements

R302.5.2 Contained Within a Crosswalk

- **The cross slope of a pedestrian access route contained within a crosswalk shall comply with R302.5.2.**

R302.5.2.1 Crosswalk with Yield or Stop Control Devices

- **Where a pedestrian access route is contained within a crosswalk at an intersection approach with yield or stop control devices, the cross slope of the pedestrian access route shall be 1:48 (2.1%) maximum.**

R302.5.2.2 Crosswalk at Uncontrolled Approach

- **Where a pedestrian access route is contained within a crosswalk at an uncontrolled approach, the cross slope of the pedestrian access route shall be 1:20 (5.0%) maximum.**

R302.5.2.3 Crosswalk with Traffic Control Signal or Pedestrian Hybrid Beacon

- **Where a pedestrian access route is contained within a crosswalk at an intersection approach controlled by a traffic control signal or pedestrian hybrid beacon, the cross slope of the pedestrian access route shall be 1:20 (5.0%) maximum.**

R302.5.2.4 Midblock and Roundabout Crosswalks

- **The cross slope of a pedestrian access route within a midblock crosswalk or a crosswalk at a roundabout shall not exceed the street grade.**

Width: The minimum width of a curb ramp is 4 feet, excluding curbs and flares. If the sidewalk facility is wider than 4 feet, the target value for the curb ramp is equal to the width of the sidewalk. (R304.5.1)

- **Grade Breaks: Grade breaks at the top and bottom of curb ramps must be perpendicular to the direction of the curb ramp run. Grade breaks are not allowed on the surface of curb ramp runs and turning spaces. (R304.5.2)**

BLENDED TRANSITION – REQUIREMENTS

R304.4.1 Running Slope

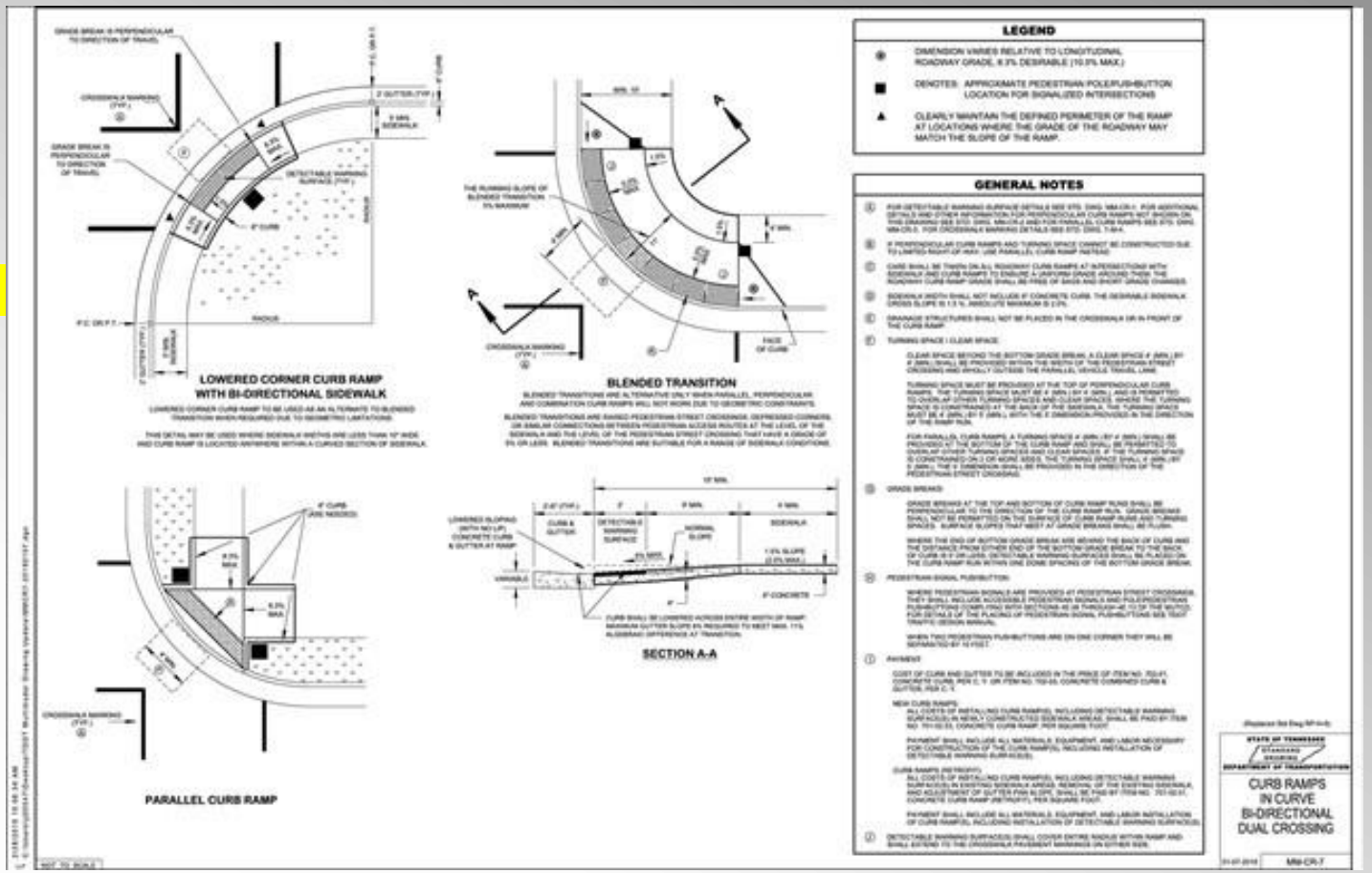
The *running slope* of *blended transitions* shall be 1:20 (5.0%) maximum.

R304.4.2 Cross Slope

The *cross slope* of *blended transitions* shall be equal to or less than the *cross slope* of the *crosswalk* as specified by R302.5.

R304.4.3 Bypass

Where a *blended transition* serving more than one *pedestrian circulation path* has a *running slope* greater than 1:48 (2.1%), a *pedestrian access route* shall be provided so that a *pedestrian* not crossing the *street* may bypass the *blended transition*.



Curb Ramps – Common Requirements

Curb ramps and blended transitions shall comply with R304.5.

R304.5.1 Width

The width of curb ramp runs (excluding any flared sides) and blended transitions shall comply with R304.5.1.1 or R304.5.1.2, as applicable.

R304.5.1.1 Curb Ramps and Blended Transitions Not on Shared Use Paths

The clear width of curb ramp runs (excluding any flared sides) and blended transitions not on shared use paths shall be 48 inches (1220 mm) minimum.

R304.5.1.2 Curb Ramps and Blended Transitions on Shared Use Paths

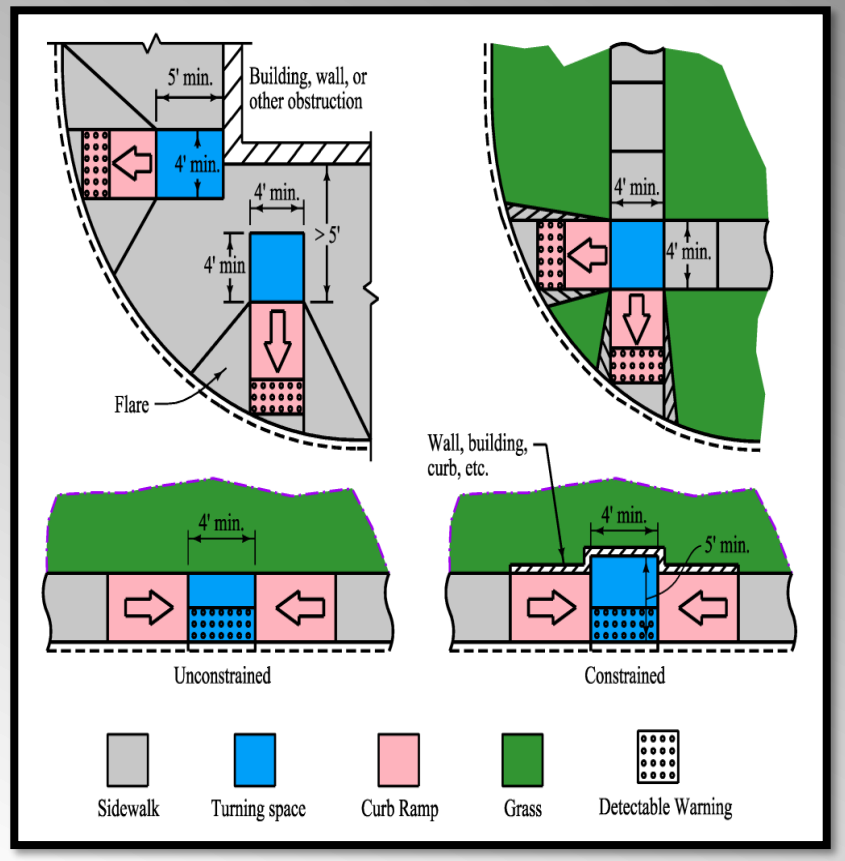
On shared use paths, the width of curb ramp runs (excluding any flared sides) and blended transitions shall be equal to the width of the shared use path.

R304.5.2 Change of Grade

At gutters and streets where a change of grade occurs adjacent to curb ramps and blended transitions, the change of grade shall comply with the requirements contained in (A) or (B) below:

A. The change of grade shall not exceed 13.3 percent, or

B. A transitional space shall be provided at the bottom of the running slope of the curb ramp run or blended transition. The transitional space shall extend 24 inches (610 mm) minimum in the direction of pedestrian travel and the full width of the curb ramp run or blended transition. Transitional spaces shall have running slopes of 1:48 (2.1%) maximum and cross slopes no greater than the cross slope of the crosswalk as specified by R302.5.



Domes on Ramp vs Radius

- Domes are placed on the lower landing Radius when the distance from Domes to Ramp is greater than 5 feet.
- When this is required, the bottom grade break starts behind the domes, and thus – the domes are on a flat plane (2% x 2% or 5% x 5% max)
- Domes are placed on the Ramp when the furthest distance from bottom of ramp to face of curb is less than 5 feet.
- Here, the bottom grade break starts in front of the domes.

- Domes on Radius

- Domes on Ramp

A Closer Look at Domes on the Radius

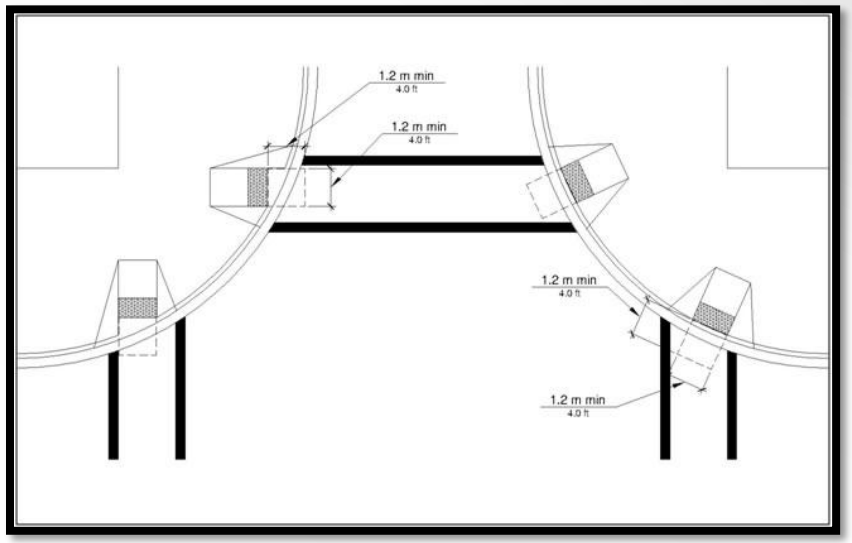
Grade Break(s)

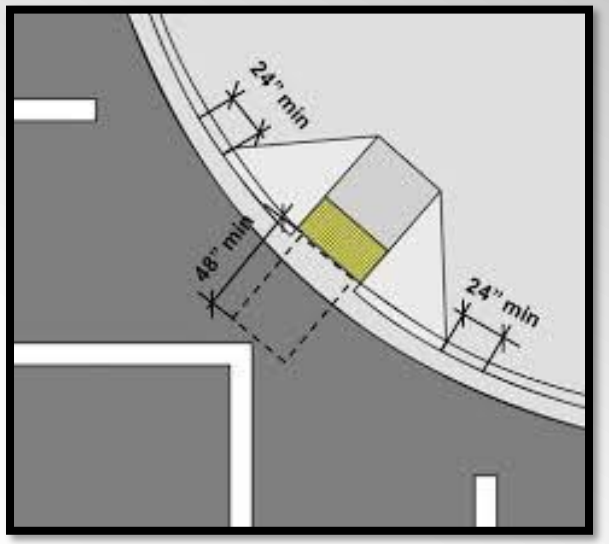
- **A Construction Joint, Perpendicular to the Pedestrian Path of Travel, that signifies the beginning and ending of the ramp slabs.**

CLEAR SPACE

R304.2.4 Clear Area

- A clear area 48 inches (1220 mm) wide minimum by 48 inches long (1220 mm) minimum shall be provided beyond the bottom *grade break* of the *perpendicular curb ramp* run and within the width of the *crosswalk*. At *shared use paths*, the clear area shall be as wide as *the shared use path*. The clear area shall be located wholly outside the vehicle travel lanes, including bicycle lanes, that run parallel to the *crosswalk*. The *running slope* of the clear area shall be 1:20 (5.0%) maximum. The *cross slope* of the clear area shall be as specified by R302.5.





DETECTABLE WARNING

R305.1.1 Dome Size

- The truncated domes shall have a base diameter of 0.9 inches (23 mm) minimum and 1.4 inches (36 mm) maximum, a top diameter of 50 percent of the base diameter minimum and 65 percent of the base diameter maximum, and a height of 0.2 inches (5.1 mm). When *detectable warning surface* tiles are cut to fit, partial domes are permitted along the cut edges.

R305.1.2 Dome Spacing

- The truncated domes shall have a center-to-center spacing of 1.6 inches (41 mm) minimum and 2.4 inches (61 mm) maximum, and a base-to-base spacing of 0.65 inches (17 mm) minimum, measured between the most adjacent domes.
- EXCEPTIONS: 1. When *detectable warning surfaces* are cut to fit, center-to-center spacing measured between domes adjacent to cut edges shall not exceed twice the normal spacing between domes not adjacent to cut edges.
- 2. Dome spacing requirements do not apply at a gap in a *detectable warning surface* at an expansion joint provided that the *detectable warning surface* aligns with both edges of the expansion joint.

DETECTABLE WARNING

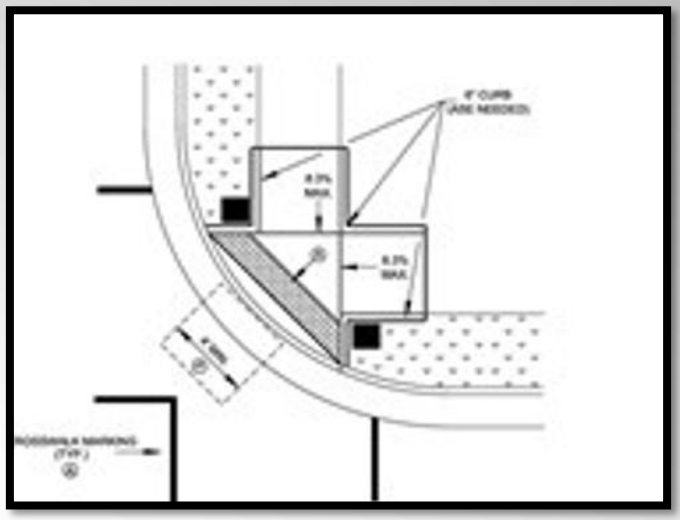
R305.1.3 Contrast

- *Detectable warning surfaces* shall contrast visually with adjacent walking surfaces, either light-on-dark or dark-on-light.

R305.1.4 Surface Size

- *Detectable warning surfaces* shall extend 24 inches (610 mm) minimum in the direction of *pedestrian* travel. The width of *detectable warning surfaces* shall be as follows:
- A. At *curb ramps* and *blended transitions*, *detectable warning surfaces* shall extend the full width of the *curb ramp* run (excluding any flared sides), *blended transition*, or landing.
- B. At cut-through *pedestrian refuge islands*, *detectable warning surfaces* shall extend the full width of the *pedestrian circulation path* opening.
- C. At *pedestrian* at-grade rail crossings not located within a *street*, *detectable warning surfaces* shall extend the full width of the *pedestrian circulation path*.
- D. Where required at *boarding platforms*, *detectable warning surfaces* shall extend the full length of the unprotected areas of the platform.
- E. At boarding and alighting areas at *sidewalk* or *street* level *transit stops* for rail vehicles, detectable warning surfaces shall extend the full length of the unprotected area of the *transit stop*.

DETECTABLE WARNING



R305.2 Location

- The location of *detectable warning surfaces* shall comply with R305.2. Where a concrete border is required for proper installation of a *detectable warning surface*, a concrete border not exceeding 2 inches (51 mm) shall be permitted on all sides of the *detectable warning surface* except between the *detectable warning surface* and the edge of pavement where a setback is already permitted.

R305.2.1 Perpendicular Curb Ramps

- On *perpendicular curb ramps*, *detectable warning surfaces* shall be located as follows:
- A. Where the ends of the bottom *grade break* are in front of the back of *curb* or at the edge of pavement where there is no *curb*, the *detectable warning surface* shall be placed at the back of *curb* or no greater than 6 inches (150 mm) from the edge of pavement where there is no *curb*.
- B. Where the ends of the bottom *grade break* are behind the back of *curb* or edge of pavement where there is no *curb* and the distance from both ends of the bottom *grade break* to the back of *curb* or edge of pavement where there is no *curb* is 60 inches (1525 mm) or less, the *detectable warning surface* shall be placed on the *ramp* run at the bottom *grade break*.
- C. Where the ends of the bottom *grade break* are behind the back of *curb* or edge of pavement where there is no *curb* and the distance from either end of the bottom *grade break* to the back of *curb* or edge of pavement where there is no *curb* is more than 60 inches (1525 mm), the *detectable warning surface* shall be placed on the clear area so that both front corners of the *detectable warning surfaces* are at the back of *curb* or no greater than 6 inches (150 mm) from the edge of pavement where there is no *curb*.

DETECTABLE WARNING

R305.2.2 Parallel Curb Ramps

- On parallel curb ramps, detectable warning surfaces shall be located on the landing at either the back of curb or the edge of pavement where there is no curb.

R305.2.3 Blended Transitions

- On blended transitions, detectable warning surfaces shall be located on the blended transition so that both front corners of the detectable warning surfaces are at the back of curb or no greater than 6 inches (150 mm) from the edge pavement where there is no curb.

R305.2.4 Pedestrian Refuge Islands

- At cut-through pedestrian refuge islands, detectable warning surfaces shall be located no greater than 6 inches (150 mm) from the edges of the pedestrian refuge island or at back of curb and shall be separated by a 24 inch (610 mm) minimum length of surface in the direction of travel without detectable warning surfaces.

R305.2.5 Pedestrian At-Grade Rail Crossings

- At pedestrian at-grade rail crossings not located within a street, detectable warning surfaces shall be located on each side of the rail crossing. The edge of the detectable warning surface nearest the rail crossing shall be 6 feet (1.8 m) minimum and 15 feet (4.6 m) maximum from the centerline of the nearest rail. Where pedestrian gates are provided, detectable warning surfaces shall be located on the side of the gate opposite the rail. Pedestrian gates shall not overlap detectable warning surfaces.

DETECTABLE WARNING

R307 Pedestrian Push Buttons and Passive Pedestrian Detection

R307.1 General

Pedestrian push buttons and passive *pedestrian* detection devices shall comply with R307. *Operable parts* of *pedestrian push buttons* shall comply with R403.

R307.2 Activation

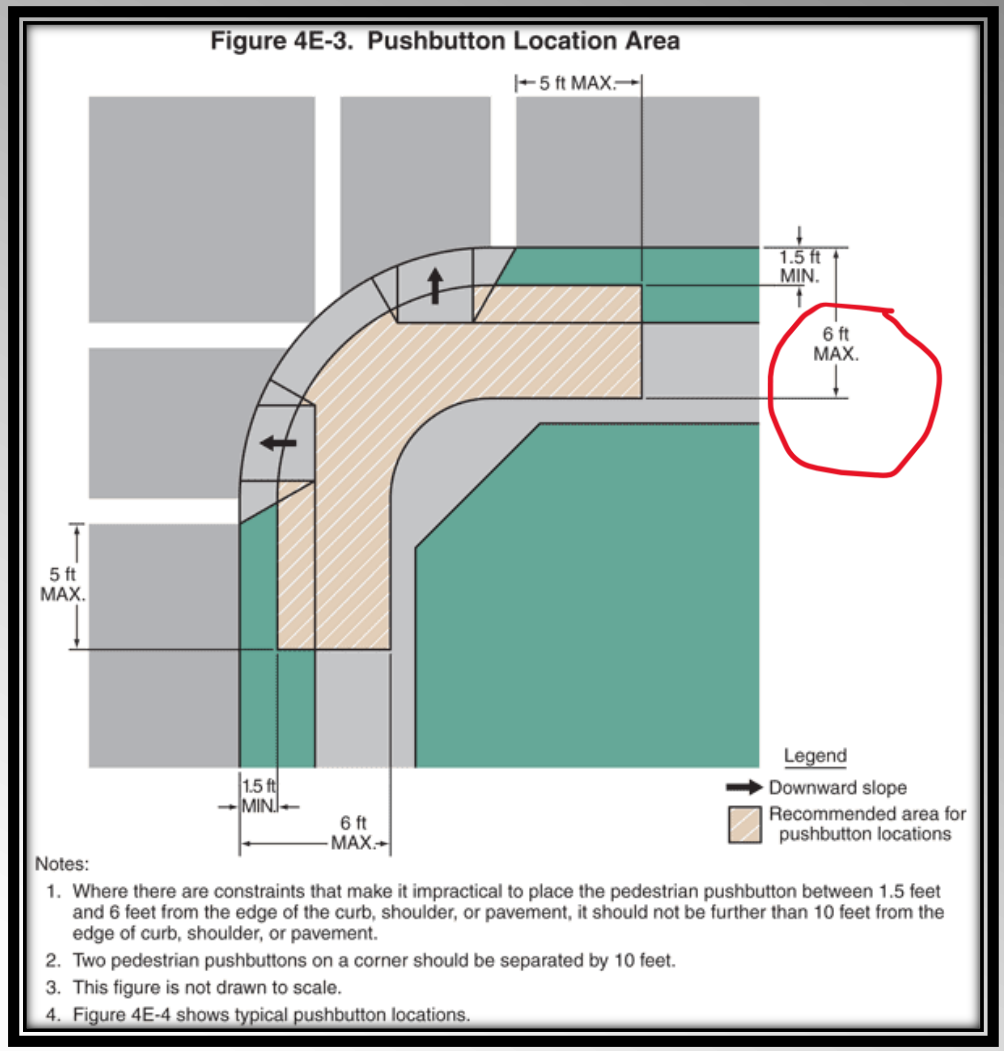
Pedestrian push buttons and passive detection devices shall activate the *accessible pedestrian signals* and, where applicable, the *walk interval*.

R307.3 Extended Push Button Press

Where an extended *push button* press is used to provide any additional features, a *push button* press of less than one second shall actuate only the *pedestrian* timing and any associated *accessible* walk indication, and a *push button* press of one second or more shall actuate the *pedestrian* timing, any associated *accessible* walk indication, and any additional features. If additional crossing time is provided by means of an extended pushbutton press, a sign so indicating shall be mounted adjacent to or integral with the pedestrian push button.

R307.4 Location

Pedestrian push buttons shall be located no greater than 5 feet from the side of a *curb ramp* run or the edge of the farthest associated *crosswalk* line from the center of the intersection. *Pedestrian push buttons* shall be located between 1.5 and 10 feet from the edge of the *curb* or pavement.



Transitional Segments

R202.3.2 Transitional Segments. Transitional segments of pedestrian access routes shall connect to existing unaltered segments of pedestrian circulation paths and shall comply with R302 to the extent practicable.

What about a Roundabout?

ROUNDABOUTS

- **R306.4 Roundabouts**
- Where *pedestrian circulation paths* are provided at *roundabouts*, they shall comply with R306.4.
- **R306.4.1 Edge Detection**
- The *street* side edge of the *pedestrian circulation path* at the approach and along the circulatory *roadway* of the *roundabout* shall comply with R306.4.1.1 where not attached to the *curb*, or R306.4.1.2 where attached to the *curb*. *Detectable warning surfaces* shall not be used for *roundabout* edge detection.
  - **R306.4.1.1 Separation**
  - Where *pedestrian* crossing is not intended, the *pedestrian circulation path* shall be separated from the *curb*, *crosswalk* to *crosswalk*, with landscaping or other nonprepared surface 24 inches (610 mm) wide minimum.
  - **R306.4.1.2 Vertical Edge Treatment**
  - Where *pedestrian* crossing is not intended, a *curb*-attached *pedestrian circulation path* shall have a continuous and detectable vertical edge treatment along the *street* side of the *pedestrian circulation path*, from *crosswalk* to *crosswalk*. The bottom edge of the vertical edge treatment shall be 15 inches (380 mm) maximum above the *pedestrian circulation path*.
- **R306.4.2 Crosswalk Treatments**
- Each multi-lane segment of the *roundabout* containing a *crosswalk* shall provide a *crosswalk* treatment consisting of one or more of the following: a traffic control signal with a *pedestrian signal head*; a *pedestrian hybrid beacon*; a *pedestrian* actuated rectangular rapid flashing beacon; or a raised crossing.
- **R306.5 Channelized Turn Lanes**
- *Crosswalks* at multi-lane channelized turn lanes shall provide treatments consisting of one or more of the following: a traffic control signal with a *pedestrian signal head*; a *pedestrian hybrid beacon*; a *pedestrian* actuated rectangular rapid flashing beacon; or a raised crossing.

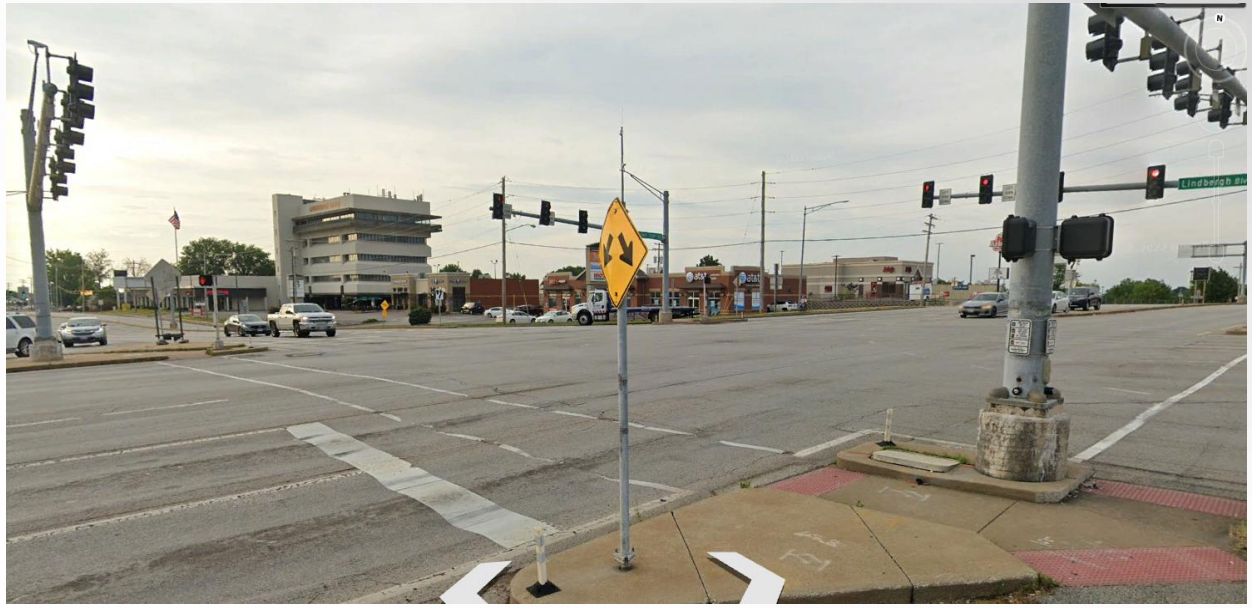
Edge Detection & Way Finding Option

WHAT ABOUT SUP'S/TRAILS……?

R302.2.2 Shared Use Paths
On *shared use paths*, the clear width of the *pedestrian access route* shall extend the full width provided for *pedestrian* circulation on the path. Obstructions, such as bollards, shall not reduce the clear width of the *pedestrian access route* to less than 48 inches (1220 mm) measured from the edge of the obstruction.

Yup! ADA Compliance Matters Here Too

Concrete Inlaid Intersections & Roads



Raised Pedestrian Crossing

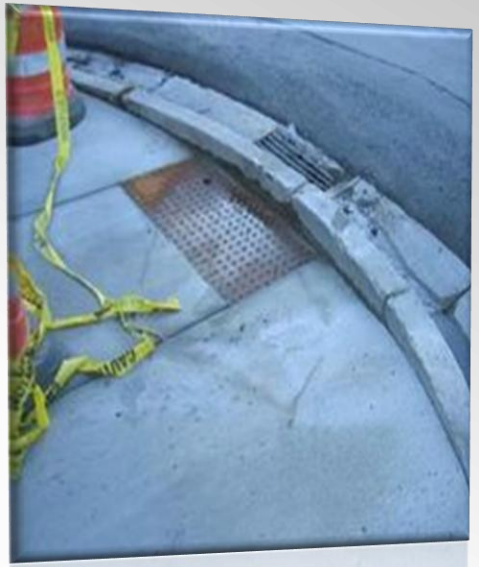
Helpful Tools and Lessons Learned

- **Always double check the setting on your smart level – some default to degrees instead of percent……..expensive mistake. MUST BE SET TO “PERCENT”**

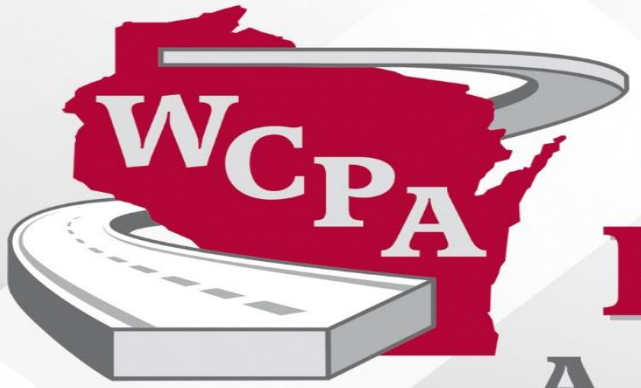
Good

Bad

And Now to Jackie for ADA Compliant Pathways During Construction

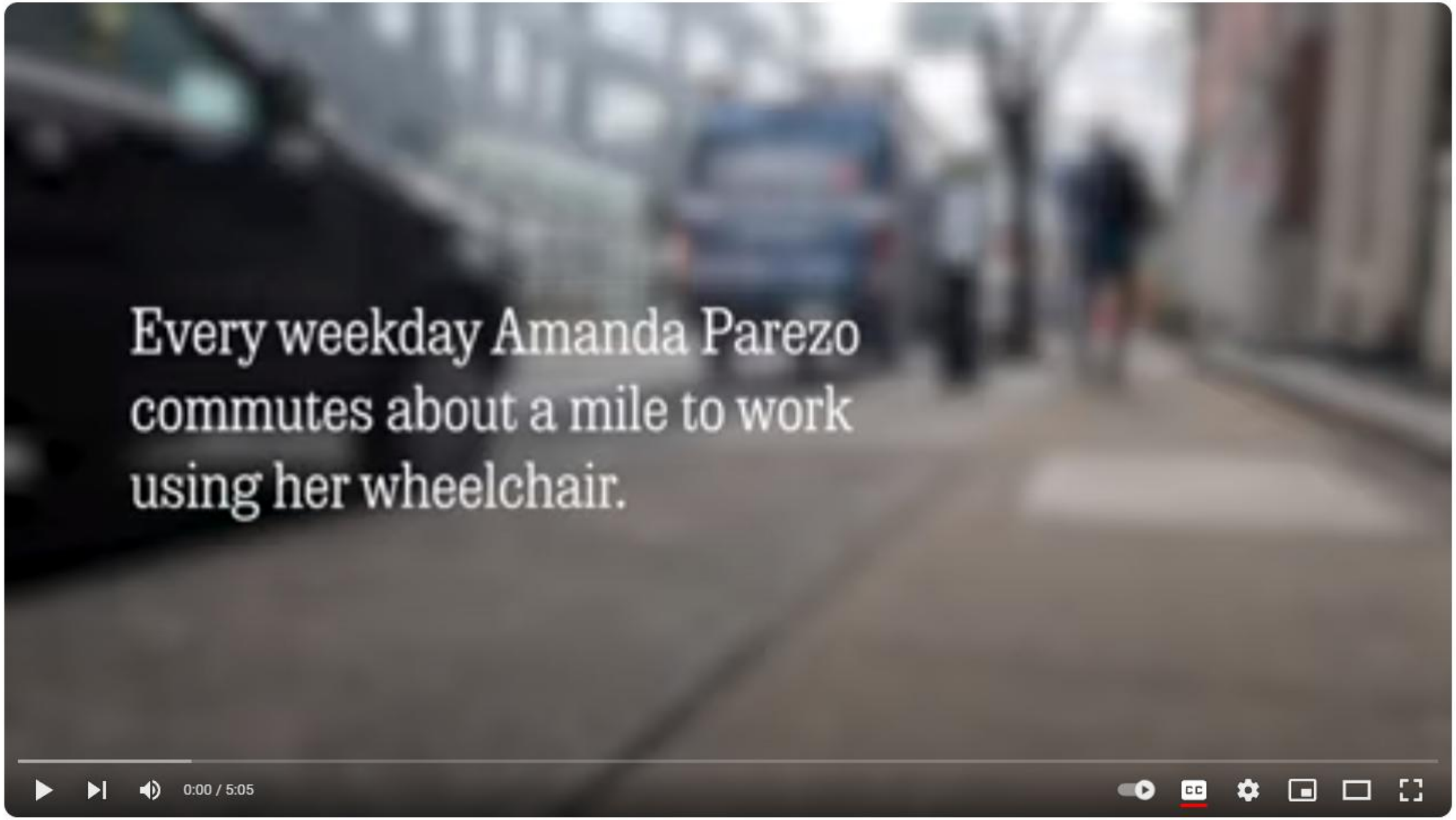


2025 ADA CONFORMANCE



WISCONSIN
CONCRETE
PAVEMENT
ASSOCIATION

Moving forward with concrete results



Follow along as one commuter navigates Philly sidewalks using her wheelchair

Manual of Uniform Traffic Control Devices for Streets and Highways (MUTCD)

Manual of Uniform Traffic Control Devices for Streets and Highways (MUTCD)

There are three major changes with the way alterations are treated in the final rule.

- **In the final rule, MUTCD provisions are not incorporated by reference. Any portion of a pedestrian facility that is altered must be altered to comply with these.**
- **The Board has stated all required technical provisions directly in the rule text, many of which were taken from the MUTCD.**

Pedestrian Access During Construction

Why is it important?

- It's the Law
  - ADA standards
  - MUTCD
- Transportation benefits
- Economic benefits
- Safety benefits

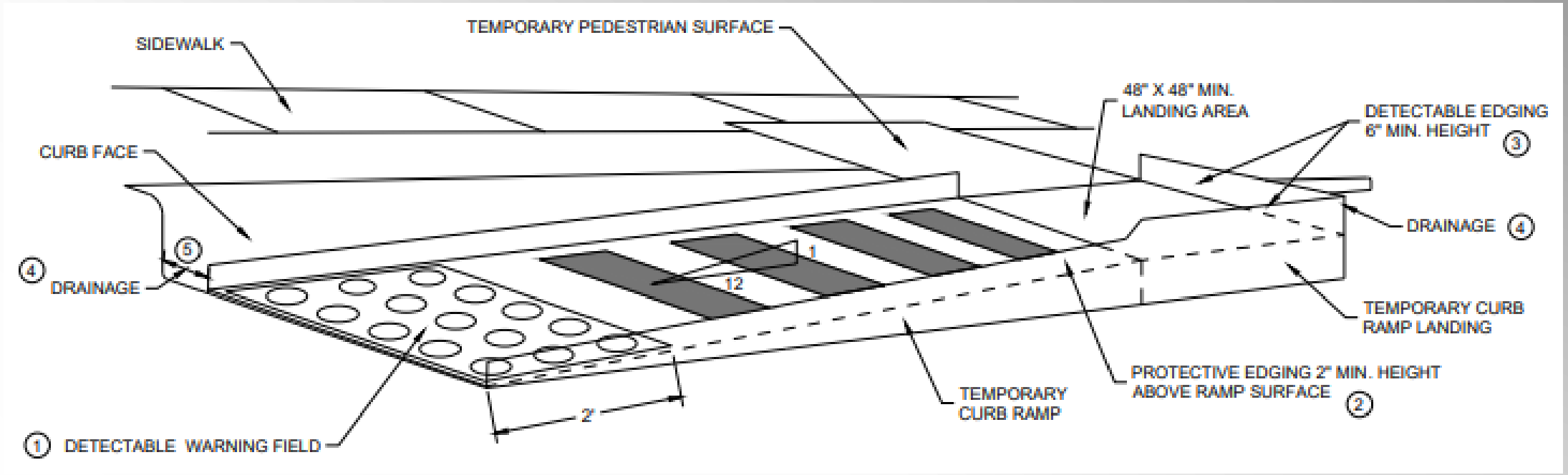
Not Acceptable

Pedestrian Planning Considerations and Accommodation Options

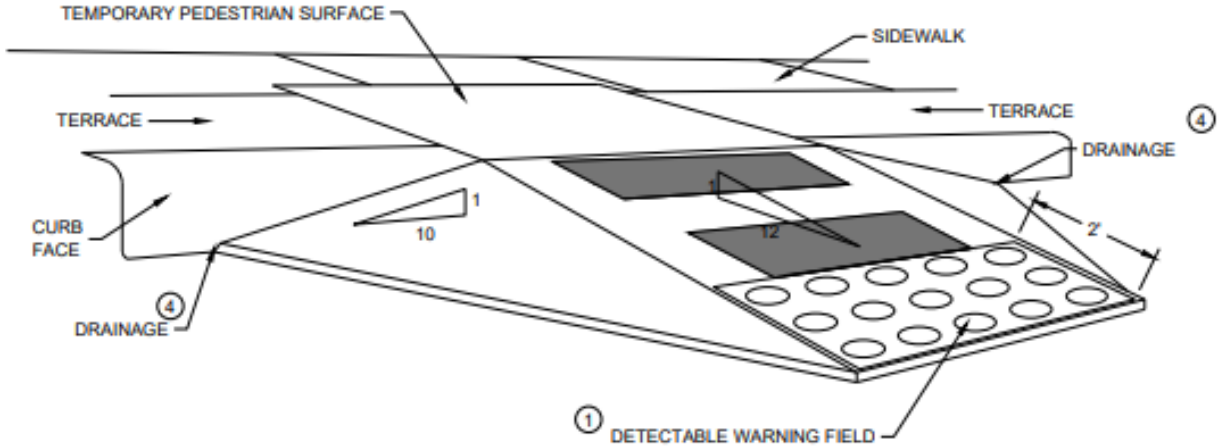
- Affected sidewalks maintain characteristics of existing sidewalks
  - Alternate route if necessary
- Avoid conflicts with construction operations
- Avoid conflicts with mainline traffic
- **SDD 15D30**
  - **Staged sidewalk repair with sidewalk detour**
  - **Sidewalk detour on parallel route**
  - **Sidewalk diversion**
  - **Construct temporary ramps and surfaces**

Not Acceptable

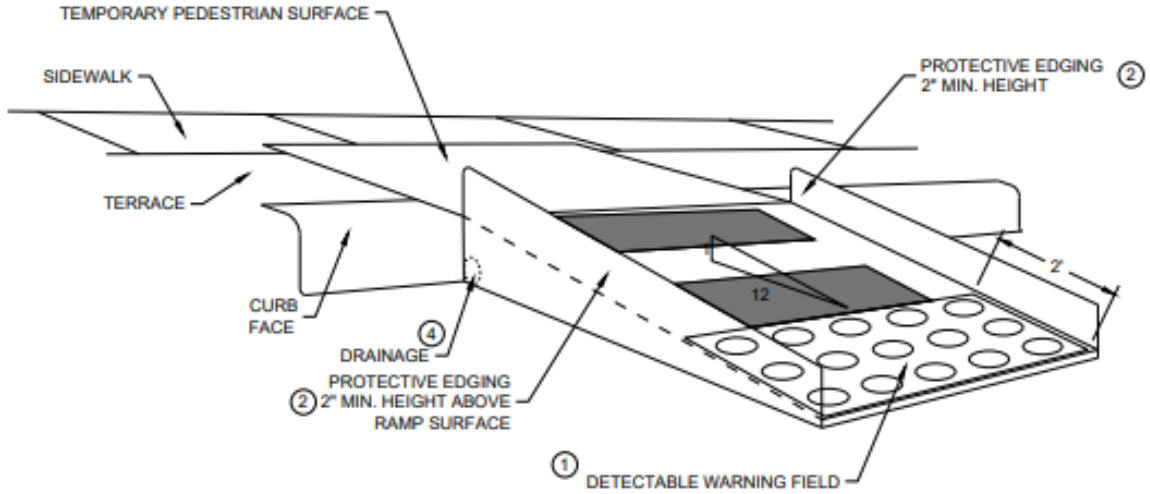
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION



Traffic Control, Pedestrian Accommodation

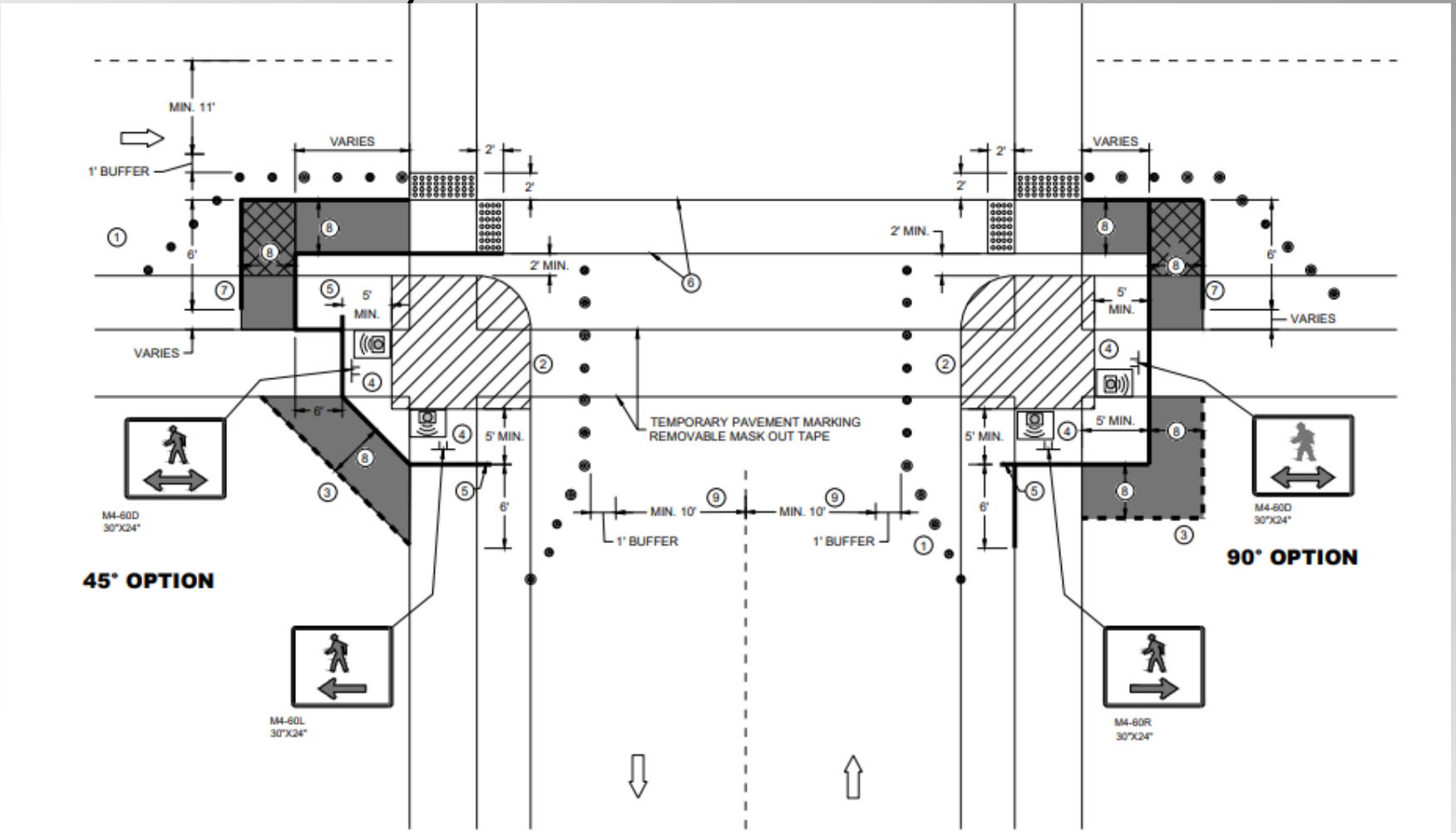


WITH SIDE APRON 5



WITH PROTECTIVE EDGE

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION



CURB RAMP PEDESTRIAN TRAFFIC CONTROL

MAINTAINING ACCESSIBILITY

Not acceptable

Acceptable – If proper width is achieved

Avoiding Conflicts with Construction

Not Acceptable

Acceptable

Avoiding Conflict with Traffic

Not Acceptable

Acceptable

Pedestrian Channelizing

- Provide continuous positive guidance
- Detectable bottom 2” max above walkway, top surface 48” min
- Smooth top surface for hand-trailing
- Close entire width of sidewalk

Not Acceptable

Acceptable

Temporary Curb Ramps

- Provide continuous positive guidance
- Detectable bottom 2” max above walkway, top surface 48” min
- Stable and slip resistant surface
- Changes between surface heights shall not exceed ½”. Lateral Edges may be vertical up to ¼” high and shall be beveled at 1:2 between ¼” and ½”

Detectable Warning Field

Acceptable

Acceptable

Temporary Surfaces

Not Acceptable

Not Acceptable

TEMPORARY SURFACE

Improve Edge - backfill

Temporary Pedestrian Crosswalk

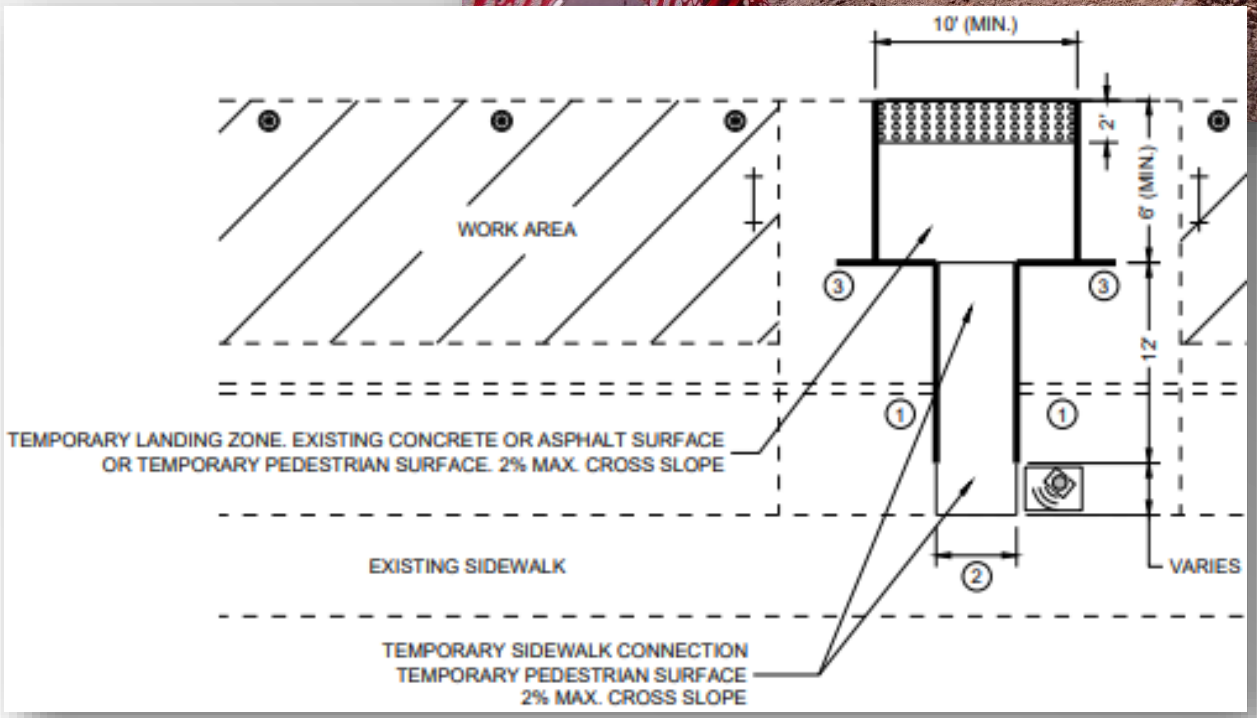
Acceptable

Drop-offs

- Greater than 6”
  - A barrier should be put up
  - Pedestrian Safety Fence
- Curb Ramps
  - Protective edging with a 2" min. height shall be installed when a curb ramp or landing platform has a vertical drop of 6"
  - Protective edging should be considered when curb ramps or landing platforms have a vertical drop of 3" or more
- Backfill material may be used to slope from the sidewalk

Bus Stops

- Relocating
- Signed
- Access
  - Temporary crosswalk
- Clean



Other Safety Considerations

- Impacts to properties fronting the work zone
- Consider the needs of children, particularly if schools or play areas are nearby
- Arrangements for those with restricted mobility and other special needs
- **Consider those who undergo surgery or those who lose their mobility.**

Thank you!