

INDIANA DEPARTMENT OF TRANSPORTATION

Driving Indiana's Economic Growth

Design Memorandum No. 18-26

November 8, 2018

TO: All Design, Operations, and District Personnel, and Consultants

FROM: /s/Elizabeth W. Phillips

Elizabeth W. Phillips

Manager, Office of Standards and Policy

Bridge Design Division

SUBJECT: Pedestrian Pushbutton and ADA Plan Details

REVISES: Indiana Design Manual Section 51-1.06(03)

EFFECTIVE: Stage 3 Submittal on or after March 1, 2019

Pedestrian Pushbuttons

The INDOT ADA Technical Advisory Committee (TAC) has observed inconsistency in the design and evaluation of pedestrian pushbutton and associated plan details. Where a project involves a curb ramp, an evaluation of the existing pedestrian pushbutton is required. The evaluation includes checking all the pushbutton design elements and components as described in IDM Section 51-1.06, including

- Type (APS or non-APS)
- Pushbutton Clear Space
- Placement
- Grade Break
- Spacing

- Mounting Height and Side Reach
- Actuator
- Orientation
- Signage

The designer is responsible for detailing pushbutton design elements and components that require placement or modification. Non-compliant elements must have an approved technical inquiry or technical infeasibility determination.

Indiana Design Manual (IDM) Section 51-1.06(03) has been revised to include additional pedestrian pushbutton plan details for mounting height, side reach, and pushbutton orientation. New pushbutton installations and modifications to existing pushbuttons should be detailed in accordance with this section, as noted. Additional plan details are summarized below.

• Pushbutton Mounting Height. Where an existing pushbutton mounting height requires adjustment to meet ADA criteria, the required adjustment should be noted as a callout on the [P:\Structural Services\Design Memos\Signed\2018\18-26 ta Pushbutton and ADA details.docx]

plans. Otherwise, "No mounting height adjustment required" should be noted for the existing pushbutton. For new pushbutton installation, *Standard Drawing* series E 805-PBBA will govern and a mounting height note is not required on the plans.

- Pushbutton Side Reach. Where a new or existing pushbutton side reach requires an extension to meet ADA criteria, the extension length should be noted as a callout on the plans. Otherwise, "No side reach adjustment required" should be noted.
- Pushbutton Direction. The predominant direction of pedestrian traffic crossing serviced by the pushbutton should be noted (e.g. N-S or E-W).

<u>Pedestrian Pushbutton Effective Date</u>. For projects with a Stage 3 submittal date on or after March 1, 2019, pushbutton and pushbutton clear space notes should be included on the plans. For projects with a Stage 3 submittal prior to March 1, 2019, pushbutton and pushbutton clear space information should be provided to the district Area Engineer prior to the preconstruction meeting.

Curb Ramp Details

The TAC has observed many different detailing methods used for curb ramp design elements and components. Some detailing methods have been more effective than others. Examples on the following pages represent the preferred detailing for curb ramp design elements and components.

For retrofitted curb ramps, a general detail should not be used for multiple curb ramp locations. Each location should have a separate curb ramp detail. Individual details may have tabulated values; however, the table(s) should be placed on the same sheet as the respective detail.

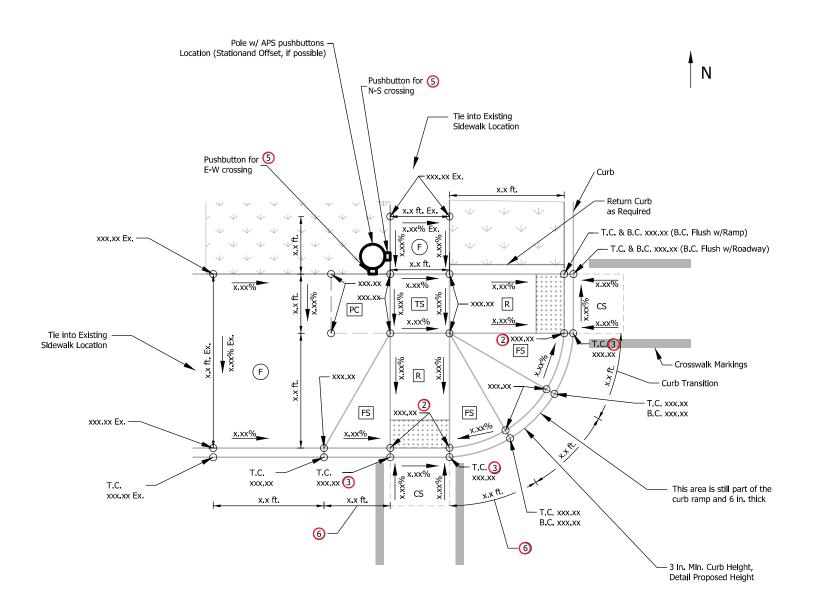
The type of curb ramp (perpendicular, parallel, etc.) should be noted in the title of each curb ramp location. This will promote consistent interpretation of the minimum and maximum requirements for each ramp type and quick reference to the Standard Drawings series E 604-SWCR, Sidewalk Curb Ramps.

<u>Curb Ramp Effective Date</u>. For projects with a Stage 3 submittal date on or after March 1, 2019, curb ramp design element and component details should comply with the above guidance.

Technical inquiry and infeasibility determinations and general ADA questions should be sent to the ADA Technical Advisory a Committee at <u>ADA@indot.in.gov</u>.

Examples for detailing curb ramp and pushbutton design elements and components are included for reference on the following pages.

Design Memo 18-26 2 | P a g e



PAIRED PERPENDICULAR 49 CURB RAMPS AT SR 32 AND 5TH ST.

SAMPLE PLAN DETAIL FOR CURB RAMP DESIGN ELEMENTS

All Elevations and Slopes may be tabulated. Tables should be located on the same sheet as the curb ramp detail.

NOTES:

- 1 Required where the pedestrian clear space does not overlap a turning space, level ramp, or a well defined and level sidewalk.
- (2) Elevation to be flush with ramp.
- (3) Elevation to be flush with roadway.
- (4) The curb ramp should be labeled to include the curb ramp type.
- (5) Pushbutton note should call for crossing direction and any adjustments to mounting height and side reach. If an extension is required for side reach the length should be noted. If no adjustments are required for mounting height or side reach, this should also be included in the note.
- (6) Dimension the length of the curb transition, in addition to all other lengths.

LEGEND:

Buffer or Other Non-Walkable Surface

Ramp

Detectable Warning Surface

TS CS PC FS **Turning Space**

Clear Space

Pedestrian Clear Space¹

Flared Side

(F)Sidewalk

Proposed Slopes or Existing Slopes

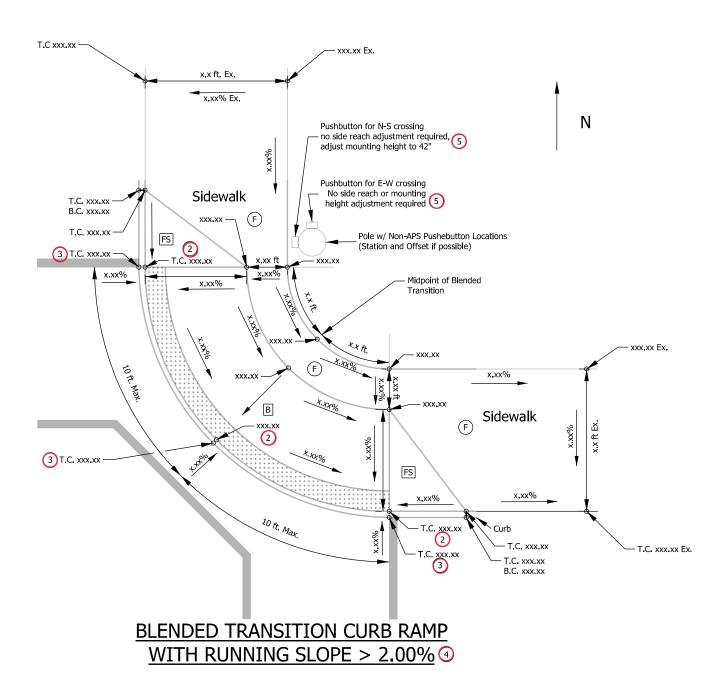
Proposed Elevations or Existing Elevations

Length and Widths of all Elements and other lenghts and widths for constructability. (All may not be shown on this detail)

Ex. **Existing Slope or Elevation**

T.C. Top of Curb

Bottom of Curb



SAMPLE PLAN DETAIL FOR CURB RAMP DESIGN ELEMENTS

All Elevations and Slopes may be tabulated. Tables should be located on the same sheet as the curb ramp detail.

NOTES:

- 1 Required where the pedestrian clear space does not overlap a turning space, level ramp, or a well defined and level sidewalk.
- 2 Elevation to be flush with ramp.
- (3) Elevation to be flush with roadway.
- (4) The curb ramp should be labeled to include the curb ramp type.
- (5) Pushbutton note should call for crossing direction and any adjustments to mounting height and side reach. If an extension is required for side reach the length should be noted. If no adjustments are required for mounting height or side reach, this should also be included in the note.
- (6) Dimension the length of the curb transition, in addition to all other lengths.

LEGEND:

- Buffer or Other Non-Walkable Surface
- **Blended Transition**
- **Detectable Warning Surface**
- **Turning Space**
- Clear Space
- TS CS PC FS Pedestrian Clear Space (1)
- Flared Side
- Sidewalk
- Proposed Slopes or Existing Slopes
- Proposed Elevations or Existing Elevations
- Length and Widths of all Elements and other lenghts and widths for constructability. (All may not be shown on this detail)
- Ex. **Existing Slope or Elevation**
- T.C. Top of Curb
- **Bottom of Curb**