

Curb Ramp Working Group Meeting

Meeting Notes
June 8, 2016

Opening:

The meeting of the Specifications and Details Curb Ramp Working Group was called to order by chair Warren White on June 8, 2016, at 9:00 p.m. in the MAG Palo Verde Room.

1. Attendance

Brian Gallimore (AGC), Greg Potter (Sunrise Engineering), Bob Herz (MCDOT), Craig Sharp (Buckeye), Gordon Tyus (MAG), and Warren White (Chandler)

2. MCDOT Curb Ramp Details

Bob Herz provided handouts of the county's radial curb ramp details. He said the County is using 4" thick Class "B" concrete because they have not had breakage problems as reported by cities, and the ramps would be less expensive to construct. Brian Gallimore said contractors have been picking the more stringent detail and using Class "A" concrete because the ramps are less likely to break during the construction of subdivision developments.

3. Curb Ramp Draft Details (Details 236-1, 236-2, 237-1, 237-2)

Greg Potter of Sunrise Engineering described the process they typically go through in determining ramp details. He said for agency projects, they typically work out all the specific dimensions and control points, but for subdivisions they typically just call out a MAG or agency detail.

For identifying the ramp locations, Craig Sharp said they can start with the control point and move forward from there in laying out the ramps. Mr. Tyus asked that if the length of ramp wings stated "varies" rather than giving a dimension, how the contractors could build them if the designer does not provide the dimensions. Mr. Potter thought there would need to be an education process for engineers to know they have to locate the control points and for inspectors as well. Mr. White passed out the ADOT ramp detail which was confirmed to be compliant. Everyone agreed that special details were needed for retrofits where right-of-way was limited or site specific conditions require may need a special design.

There was discussion about the construction process as far as staking points, setting the forms and adjusting them as necessary after checking slopes. Mr. Gallimore said they need some tolerance and leeway to make adjustments in the field. Mr. Sharp noted that concrete is heavy and placing it can shift the forms.

Mr. White asked for suggestions on revising the draft MAG details. Some discussion points are summarized below:

Radial Ramps

- Increase the length of the wing (C in the table) by half a foot. Not make this a minimum or TYP but a fixed distance. This length ensures compliance with the 10:1 maximum slope for ramp wings for all gutter slopes of 2% or less.

- Increase ramp lengths to compensate for the 1.5% sidewalk slope from top of curb. Mr. Herz suggested recalculating the ramp length values to ensure the additional 1.5% slope rise of the sidewalk is taken into account; the values shown are too low.
- Dimension the landing (in the section view) as 5' min. Also remove maximum slopes and replace with "See Note 2".
- Remove the cross-slope arrow notes from the landing area.
- Suggestions on how to best locate the control points of the ramps, whether or not show the angle lines like on the MCDOT details. Mr. Herz suggested the control point should be located by a hard dimension along the face of curb from the beginning, center, or end point of the curb return and not by a centerline station and offset distance and not by use of an angle. Locating control points by an angle or by station and offset can only be accomplished by surveyors. Dimensioning the control point location allows the contractor and inspector to verify the location was correctly staked.

Directional Ramps

- Dimension the landing (in the section view) as 5' min. Also remove maximum slopes and replace with "See Note 2".
- Remove the cross-slope arrow notes in the landing area.
- Decided to leave the curb option in the details, although the sidewalk up to it may still need adjustment.
- There was discussion on the need to have on the plan view both note 7 and the 10% max wing slope. Mr. Gallimore suggested keeping both, Mr. Herz agreed.
- For directional ramps, there was discussion about how to locate the control point from the center front of curb, and also the language of Note 8, regarding the use of the word "should."
- Removing the 1.5% slope note for the landing on the section view of the directional ramps. This may not be typical since the landing is shared by both ramps.

Radial & Directional Ramps

- May need to create a separate detail for 25' and smaller radius curb returns since compliant design will often impact areas beyond the PC/PT.
- Mr. Herz suggested labeling ramps A and B so the same detail could be used when only one ramp is needed, allowing it to be called out separately.
- Mr. Tyus suggested that if not used for new construction, we remove the 7" curb option from the tables. Many concurred with the suggestion.
- Where to change concrete thickness for the ramps and sidewalks was discussed. Keeping the 6" depth for the entire curb return seemed to have general concurrence.
- Existing payment requirements in Section 340 will need to be revised since curb ramp payment areas are currently defined by ramp curb limits and the details have no ramp curbs. Mr. Gallimore said Phoenix is paying per unit, but thought that it is difficult to bid without knowing what kind of ramps will be placed. Since dual ramps greatly impact the entire curb return, it was thought that the entire curb return should be a pay item and separate pay items be provided for each curb return radius and the number of curb ramps in the curb return.

4. Revisions to Specifications

Warren White asked about changes to the specifications. The group recommended adjusting the information on payment in Section 340. Mr. White said he would make the changes to the specs and details that were discussed, and plans to have them ready to go out in the next committee agenda packet.

5. Adjournment

The meeting was adjourned at 11:10 p.m.