Curb Ramp Working Group Meeting

Meeting Notes
May 16, 2016

Opening:
The meeting of the Specifications and Details Curb Ramp Working Group was called to order by chair Warren White on May 16, 2016, at 1:30 p.m. in the MAG Palo Verde Room.

1. Attendance
Bob Herz (MCDOT), Gordon Tyus (MAG), and Warren White (Chandler)

2. Update on FHWA Submission
Warren White said the draft details were submitted to the FHWA for comments. They recommended to include tolerances (which have been added since the submission), and to consult with Chris Cooper at ADOT.

3. Revisions to Specifications (Section 340.3.9 Tolerance)
Bob Herz had suggestions to update this subsection. In the 3rd paragraph he thought some tolerance should be included. Since ½ inch was too large Mr. White suggested ¼". Mr. Herz also suggested rewording the last paragraph to read, "Slopes of pedestrian facilities shall not exceed the maximum grades indicated in the ADA guidelines…" He also noted that there were exceptions to the 2% cross-slope requirement to match the slope of streets exceeding 2%.

4. Curb Ramp Draft Details (Details 236-1, 236-2, 237-1, 237-2)
Mr. Herz provided many of his comments on the draft details as Mr. White marked up the suggested changes. Items discussed included:

- Directional ramps details need to indicate ramp alignments. Mr. Herz suggested the alignment be defined by the ramp control point and the control point of the receiving ramp.
- Showing the 10% maximum slope for wings perpendicular to the ramp centerline.
- Reviewed details to ensure a 5' unobstructed clearance is maintained at the top of ramps.
- Locating the control point at the face of curb to be consistent with Detail 234.
- Location of push-buttons based on MUTCD requirements. It was determined that pedestrian push-button locations will not be shown on the curb ramp details.
- Checking with Tempe on whether to include the 7" curb option.
- Where to locate the transition between the 6" concrete thickness and the 4" sidewalk thickness. A taper transition is needed unless located at an expansion joint.
- Whether to remove the curb option adjacent to the ramp and only show wings. There were maintenance concerns about debris collecting along this curb.
- The call out for broom surface texturing on ramps and ramp wings.

5. MCDOT Draft Radial Ramp Details

Mr. Herz brought in some sample details that MCDOT is working on. They are planning to use radial rather than directional ramps. He showed options for dual ramps for residential intersections with attached sidewalks, and a detail for 30' and 35' curb return radius with detached sidewalks (8' offset). The group discussed how to incorporate elements of MCDOT details, and also how to encourage the use of the new MAG details by agencies to reduce supplements.

6. Adjournment

The meeting was adjourned at 3:20 p.m.

7. Written Comments:

After the meeting Mr. Herz provided these additional written comments:

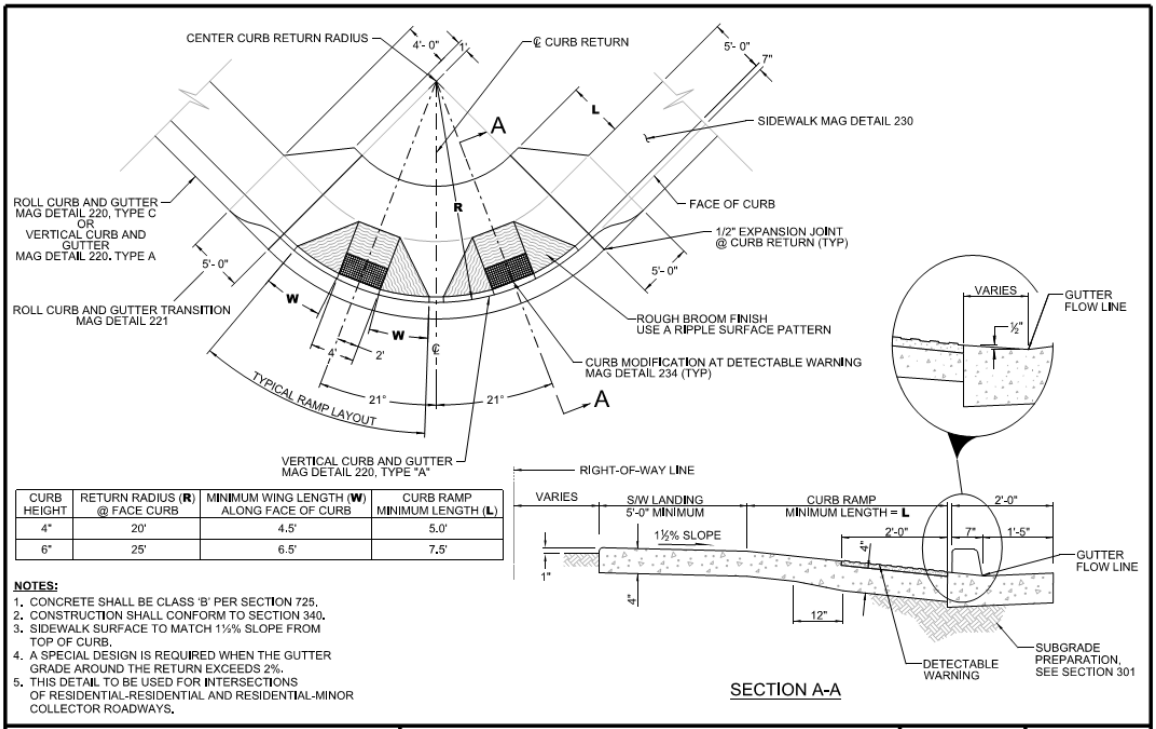
Identify the curbing within the curb return as VERTICAL CURB AND GUTTER DETAIL 220, TYPE A.

Section A-A Details Delete the maximum allowable slopes shown in parentheses: S/W LANDING (2% MAX) and CURB RAMP (8.33% MAX) – Section 340.3.9 Tolerance identifies the maximum values allowed. Placing those values on the standard details makes the desired slopes appear to be optional since they are allowed to vary up to the listed maximum values.

The gutter counter slope of 5.0% MAX is unnecessary and should be deleted since Detail 220 Vertical Curb and Gutter, Type A is referenced and the detail is compliant with the ADA requirement. How is the 5.0% MAX notation expected to change or impact the Contractor's work?

Section A-A Details for directional ramps: Delete at the bottom of the ramps both the 1.5% SLOPE and (2% MAX) – The slope between the detectable warnings and gutter flowline will not be constant and will vary across the entire width.

Plan View: Delete the ramp and landing cross slope call-out 1.5% CROSS SLOPE (2% MAX), the callout incorrectly suggests that the indicated areas should have 1.5% cross slope. No cross slope is required for the radial curb ramps and Section 340.3.9 Tolerance identifies the maximum allowed value as 2%.



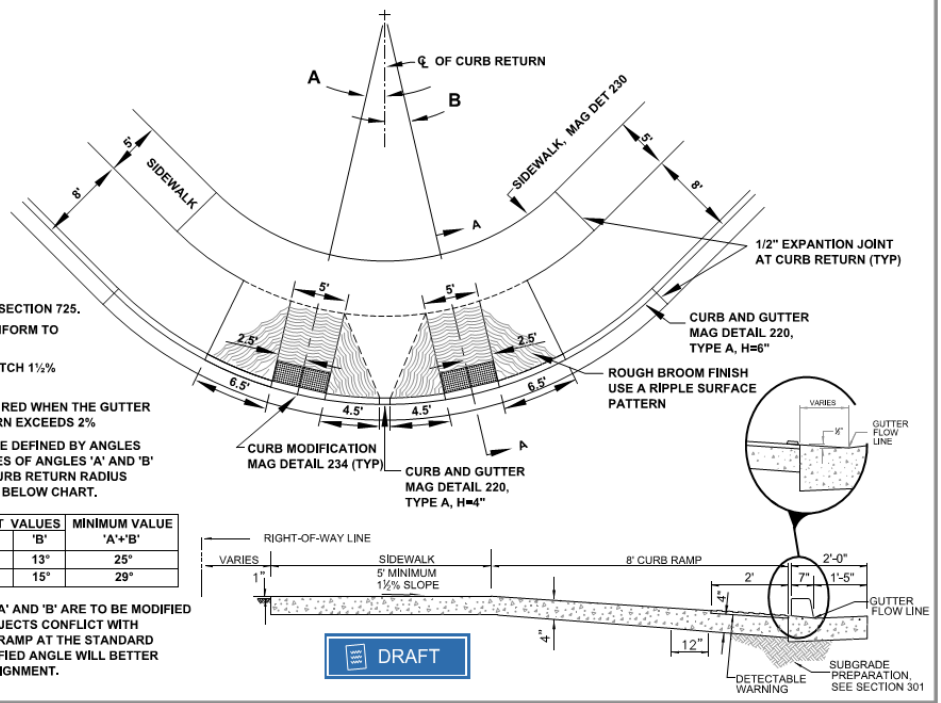
CURB HEIGHT	RETURN RADIUS (R) @ FACE CURB	MINIMUM WING LENGTH (W) ALONG FACE OF CURB	CURB RAMP MINIMUM LENGTH (L)
4"	20'	4.5'	5.0'
6"	25'	6.5'	7.5'

SECTION A-A

NOTES:

1. CONCRETE SHALL BE CLASS 'B' PER SECTION 725.
2. CONSTRUCTION SHALL CONFORM TO SECTION 340.
3. SIDEWALK SURFACE TO MATCH 1⅛% SLOPE FROM TOP OF CURB.
4. A SPECIAL DESIGN IS REQUIRED WHEN THE GUTTER GRADE AROUND THE RETURN EXCEEDS 2%.
5. THIS DETAIL TO BE USED FOR INTERSECTIONS OF RESIDENTIAL-RESIDENTIAL AND RESIDENTIAL-MINOR COLLECTOR ROADWAYS.

MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION	DUAL CURB RAMPS FOR RESIDENTIAL INTERSECTIONS	DATE:	DETAIL NO.
STANDARD DETAIL		05/02/2016	2032



NOTES:

1. CLASS "B" CONCRETE PER SECTION 725.
2. CONSTRUCTION SHALL CONFORM TO SECTION 340.
3. SIDEWALK SURFACE TO MATCH 1⅛% SLOPE FROM TOP OF CURB.
4. A SPECIAL DESIGN IS REQUIRED WHEN THE GUTTER GRADE AROUND THE RETURN EXCEEDS 2%
5. CURB RAMP LOCATIONS ARE DEFINED BY ANGLES 'A' AND 'B'. DEFAULT VALUES OF ANGLES 'A' AND 'B' ARE DEPENDENT ON THE CURB RETURN RADIUS AND ARE AS SHOWN IN THE BELOW CHART.

RADIUS @ FACE OF CURB	DEFAULT VALUES 'A'	'B'	MINIMUM VALUE 'A'+'B'
35'	13°	13°	25°
30'	15°	15°	29°

THE DEFAULT VALUES FOR 'A' AND 'B' ARE TO BE MODIFIED BY THE ENGINEER WHEN OBJECTS CONFLICT WITH CONSTRUCTION OF A CURB RAMP AT THE STANDARD LOCATION OR WHEN A MODIFIED ANGLE WILL BETTER MATCH THE CROSSWALK ALIGNMENT.

DRAFT

MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION	DUAL CURB RAMPS (RADIAL) DETACHED SIDEWALK	DATE:	DETAIL NO.
STANDARD DETAIL		05/18/2016	2031