1) Sidewalk Transitions

- a: Located adjacent to the top of ramp as needed
- b: 48" minimum width
- c: 1.5% (1:66) maximum cross slope
- d: 4.5% (1:22) maximum parallel slope

2) Landings

- a: Located above the ramp (as shown in details)
- b: 48" minimum clear space in all directions
- c: 1.5% (1:66) maximum parallel and cross slope

3) Perpendicular Curb Ramps

- a: Located above pan or below landing
- b: 48" minimum width
- c: 1.5% (1:66) maximum cross slope
- d: 7.5% (1:13) maximum slope
- e: All ramps shall have a Detectable Warning Surface(truncated domes) and shall be placed on the ramp unless the ramp is connected to a pan.
- f: Transition to gutter shall be flush and free of abrupt changes
- g: Grade breaks shall be perpendicular to direction of ramp run.

4) Parallel Curb Ramps

- a: Located below ramp (as shown in details)
- b: 60" minimum width at back of pan
- c: 54" minimum depth from back of pan to flow line
- d: 1.5% (1:66) maximum cross slope
- e: On corners, pan boundaries are to be radial
- f: Transitions to gutter shall be flush and free of abrupt charges.
- g: All pans shall have a Detectable Warning Surface (truncated domes).

5) <u>Flares</u>

- a: Located adjacent to ramp (as shown in details)
 - b: Required between ramps where there is no planter area
 - c: Required on the exterior of ramps where there is an adjacent concrete sidewalk, regardless of obstacles
 - d: Shall also have at least 24" long segment of straight curb located on each side of the curb ramp and within marked crossings.
 - e: Generally triangular in nature
 - f: 9% (1:11) maximum slope when not in the path of travel
 - g: 7.5% (1:13) maximum slope when flare is in the path of travel

6) Gutters

- a: Adjacent to ramp or pan
- b: 4.5% (1:22) maximum slope for 4' out from face of curb
- c: Transition to ramp or pan shall be flush and free of abrupt changes

7) Retaining Curbs

- a: Required adjacent to sidewalk transitions, landings, ramps and pans where the existing landscape (planter area) is 1" or higher at any point above the newly constructed curb ramp element
- b: Required for existing planter areas between ramps
- c: Retaining curbs are to have a 6" width and a vertical face
- d: Retaining curb foundations are to extend 8" below the adjacent ramp element surface
- e: Outside corners of retaining curbs must have a 6" radius

8) Detectable Warnings

- a: Placement of detectable warnings shall be per drawings AR 3.2
- b: 6" 8" from the face of curb
- c: 3' depth x full width
- d: Detectable Warning requirements, see AR 3.1

General Notes:

- 1. Directional curb ramps are required unless otherwise approved by the Engineer.
- 2. All elements, except gutters and retaining curbs, must be constructed planar in nature with weakened plane joints scored between each element.
- 3. Opposing curb ramps shall align unless otherwise approved by the Engineer.
- 4. These Elements, Definitions and Standards, General Details, and Standard Drawings shall apply to all curb and gutter types.
- 5. There are variations and adjustments that may be required upon the approval of the Engineer.
- 6. References to maximum cross slope of 1.5% are intended to allow for normal construction tolerances in an effort to keep the actual constructed cross slope to less than the required ADA standard of 2.0% maximum cross slope. Any installations of cross slopes greater than 2.0% will be unacceptable.

DATE: 09/22/2017		7	NOT TO SCALE		CITY OF ELK GROVE - PUBLIC WORKS	APPROVED BY: Rhut Mudder 1/16/2020	
REVISION	BY	APPROVED		DATE		CITY ENGINE	
		TV	N	07-18-2019	CURB RAMP ELEMENTS DEFINITIONS AND STANDARDS	CT ELK CONTRACTOR	DRAWING NUMBER