Use curb ramps with flared sides at locations with wide sidewalks.

Place on streets having wide turning radius and where sidewalks are narrow.

Curb ramp placement where streets have wide turning radius and sufficient sidewalks width.

Use curb ramps with returned curbs where buffer is wide enough to accommodate ramp slope.

Acceptable design only for existing walks, and when site constraints prohibit other designs. The diagonal Type D ramp may be constructed as either a Perpendicular, Parallel or Combination curb ramp type. Avoid using a preferred layout.

Acceptable design on corners with wide turning radius where user is able to maneuver within crosswalk limits so as not to encroach into adjacent traveled lanes.

Acceptable design for retrofit only where utilities prevent using a preferred layout.

Perpendicular Curb Ramps

Parallel Curb Ramps

Combination Curb Ramps

NOTES

GENERAL: This drawing shows curb ramp types details and placement examples for curb ramp construction, including the installation of detectable warnings.

Curb ramp types are shown on Sheet 2 and include Perpendicular, Parallel, and Combined types as specified to be constructed in the locations shown on the project plans.

Curb ramps added to an existing intersection or walk should be individually detailed on the project plans to ensure that the design is appropriate for site constraints and all items can be constructed to ADA standards. The contractor may adjust the placement of curb ramps if existing field conditions warrant with the approval of the Engineer.

PAYMENT: Measure and pay for the ramp area within the shaded limits of this drawing as per Item 608 Curb Ramp, Square Foot. This includes the cost of any curb or curb and gutter, detectable warnings, landing areas and any additional materials, installation, grading, forming, and finishing required within the shaded area.

Work beyond the shaded ramp/landing area is paid for as curb (609) and walk (608). Removal of existing curbs, walk or existing curb ramps are paid under Item 202.

For at-grade crossing locations where only detectable warnings are required in order to achieve ADA compliance, measure and pay for the cost of detectable warning as per Item 609 Detectable Warning, Square Foot. The work to cast the tiles in place will also achieve ADA compliance, measure and pay for the strip of detectable warnings as per Item 608 Detectable Warning, Square Foot.

Use this design only for existing walks, and when site constraints prohibit other designs. The diagonal Type D ramp may be constructed as either a Perpendicular, Parallel or Combination curb ramp type. Avoid using where curb radii are less than 20'-0".

For at-grade crossings where only detectable warnings are required in order to achieve ADA compliance, measure and pay for the cost of detectable warning as per Item 609 Detectable Warning, Square Foot. The work to cast the tiles in place will also require removal of existing pavement (Item 203) to the nearest joint, or if no joint exists, a minimum of 4 feet.

For at-grade crossings where only detectable warnings are required in order to achieve ADA compliance, measure and pay for the cost of detectable warning as per Item 609 Detectable Warning, Square Foot. The work to cast the tiles in place will also achieve ADA compliance, measure and pay for the strip of detectable warnings as per Item 608 Detectable Warning, Square Foot. The work to cast the tiles in place will also achieve ADA compliance, measure and pay for the strip of detectable warnings as per Item 608 Detectable Warning, Square Foot.

At-grade crossings where only detectable warnings are required in order to achieve ADA compliance, measure and pay for the cost of detectable warning as per Item 609 Detectable Warning, Square Foot. The work to cast the tiles in place will also achieve ADA compliance, measure and pay for the strip of detectable warnings as per Item 608 Detectable Warning, Square Foot. The work to cast the tiles in place will also achieve ADA compliance, measure and pay for the strip of detectable warnings as per Item 608 Detectable Warning, Square Foot.
PERPENDICULAR CURB RAMP DETAILS

Type A1 (Perpendicular with flared sides)

Type A2 (Perpendicular with returned curb)

COMBINED CURB RAMP DETAILS

Type C1 (Combined with flared sides)

Type C2 (Combined with returned curb)

PARALLEL CURB RAMP DETAILS

Type B1 (Single sided Parallel)

Type B2 (Double sided Parallel)

Type B3 (Single sided Parallel)
SECTION A-A
NORMAL DETAIL

SECTION A-A
EXISTING WALK DETAIL

SECTION B-B

SECTION C-C

SECTION D-D

DETECTABLE WARNINGS NOTES
GENERAL: Detectable Warnings are a distinctive surface pattern of truncated domes which are detectable by cane or underfoot to alert people with vision impairments of their approach to streets and hazardous drop-offs.

PLACEMENT: Detectable warnings are to be installed at any location where pedestrians might cross paths with vehicular traffic lanes, such as the base of curb ramps or at blended edges. A 24" strip of domes is to be installed for the full width of the ramp or walk. Typical street corner placement locations are shown on Sheet 1.

Some detectable warning products require a concrete border for proper installation. The concrete border should not exceed 2". Where the back of the curb existing or gutter is tooled to provide a radius, the border dimension should be measured from the end of the radius.

The concrete depth underneath detectable warning products shall be measured from the end of the radius.

DETAIL A

HEIGHT AND DIAMETER

SQUARE PATTERN, PARALLEL ALIGNMENT

RADIAL ALIGNMENT

TRUNCATED DOMES DETAILS

DOME ALIGNMENT ON RADIUS CURB