

**LARRY  
M  
SCHNEIDER  
AIA**

Architect  
Accessibility  
Consultant

4905 Midtown Lane  
Suite 2313  
Palm Beach Gardens  
Florida  
33418

561.799.6942  
fax: 561.799.6943

EMail Larry@LMSArch.net

June 28, 2012

Florida Building Commission  
1940 North Monroe Street  
Tallahassee Florida 32399

**DS 2012-051**

|                                                    |                  |
|----------------------------------------------------|------------------|
| <b>FILED</b>                                       |                  |
| Department of Business and Professional Regulation |                  |
| Deputy Agency Clerk                                |                  |
| CLERK                                              | Brandon Nichols  |
| Date                                               | <b>6/28/2012</b> |
| File #                                             |                  |

**DECLARATORY STATEMENT REQUEST  
FOR NORTH BROWARD HOSPITAL DISTRICT  
RE: BROWARD HEALTH CORAL SPRINGS (BHCS) ED EXPANSION PROJECT  
MASTER PERMIT NUMBER 09-00000727**

To Whom It May Concern:

The following is our request for an appeal to the decision of the building official of Coral Springs as it relates to their interpretation of section 11-4.7 curb ramps and more specifically 11-4.7.5 and 11-4.7.6 under the 2007 Florida Accessibility Code with the issuance of a declaratory statement regarding this matter. The issue is their interpretation that for parallel or corner curb ramps whether edge protection is required on these types of curb ramps.

At Coral Springs Medical Center an alteration was done to the emergency room area and associated parking areas. During that project the City of Coral Springs determined that edge protection is required on the curb ramps in question. It is our interpretation that the ramps in question are curb ramps and as curb ramps edge protection is not required.

It is the city's position that since section 11-4.7 does not show a design or detail for a parallel or corner curb ramp; that the only curb ramps that are allowed are ones with a flared side, a built up curb ramp or a sloped curb ramp cutting into a sidewalk [see figures 12(a) and 12(b)] or one that is a cut thru a curb ramp as per figure 13 with a built up curb on either side.

It is their interpretation that the curb ramps in question are a ramp with a flat area at the bottom and since it is a ramp it would be required to have either handrails or edge protection as outlined under section 11-4.8.5 and 11-4.8.7.

Pursuant to Florida State Statute 553.775(5) which states that the commission may render declaratory statements in accordance with s.120.565 relating to the provisions of the Florida Accessibility Code for Building Construction not attributable to the Americans with Disabilities Act Accessibility Guidelines. Notwithstanding the other provisions of this section, the Florida Accessibility Code for Building Construction and chapter 11 of the Florida Building Code may not be interpreted by, and are not subject to review under, any of the procedures specified in this section. This subsection has no effect upon the commission's authority to waive the Florida Accessibility Code for Building Construction as provided by s. 553.512.

AR 7443

Florida Building Commission  
Declaratory Statement Request  
for North Broward Hospital District  
re: Broward Health Coral Springs (BHCS) Ed Expansion Project  
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To address the design of these curb ramps, the curb ramps in question are similar in design to the FDOT curb ramps CR3 and CR23. As it relates to the CR3 parallel curb ramp, the design is one with the sloped portion being only on one side. The corner curb ramps in question are similar to the C23 in design. Within the US Access Boards Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of Way dated June 26, 2011 [of which the PROW committees reports were available for the public prior to this publication] it notes these design solutions without edge protection requirements. It states that curb ramps are ramps that cut through or are built up to the curb. Curb ramps can be perpendicular or parallel, or a combination of parallel and perpendicular ramps. It defines a parallel curb ramp as a curb ramp having a running slope that cuts through or is built up to the curb at right angles or meets the gutter grade at right angles where the curb is curved. Parallel curb ramps have a running slope that is in-line with the direction of sidewalk travel and lower the sidewalk to a level turning space where a turn is made to enter the pedestrian street crossing.

We brought this issue to the Broward Board of Rules and Appeals and it is their position that any issue doing with accessibility be forwarded to the Florida Building Commission. They do not hear any appeal of an interpretation as it relates to the Florida Accessibility Code.

Attached you will find copies of the FDOT curb ramp designs and as it specifically relates to the ones in question, they are not designed nor constructed with edge protection. We have taken the liberty to discuss this with Mr. Dean Perkins who is the ADA Coordinator for FDOT and he concurs that you would not construct these curb ramps with edge protection. He also noted that the addition of any type of edge protection would be considered a trip hazard at this area; you do not provide edge protection along sidewalks.

We are also including information from the PROW reports and the US Access Boards Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of Way dated June 26, 2011 as it relates to this issue. We also have taken the liberty to include photos of the constructed curb ramps for your evaluation and to help clarify the issue. Therefore the question before you is - does the 2007 Florida Accessibility Code under section 11-4.7 mandate that edge protection be provided on parallel and corner curb ramps.

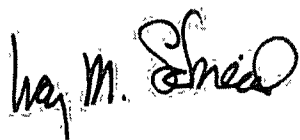
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Page 3

We will be in attendance at the first reading and review by the  
Accessibility TAC to answer any questions that you may have.

Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Larry M. Schneider". The signature is stylized with a large, looped "S" at the end.

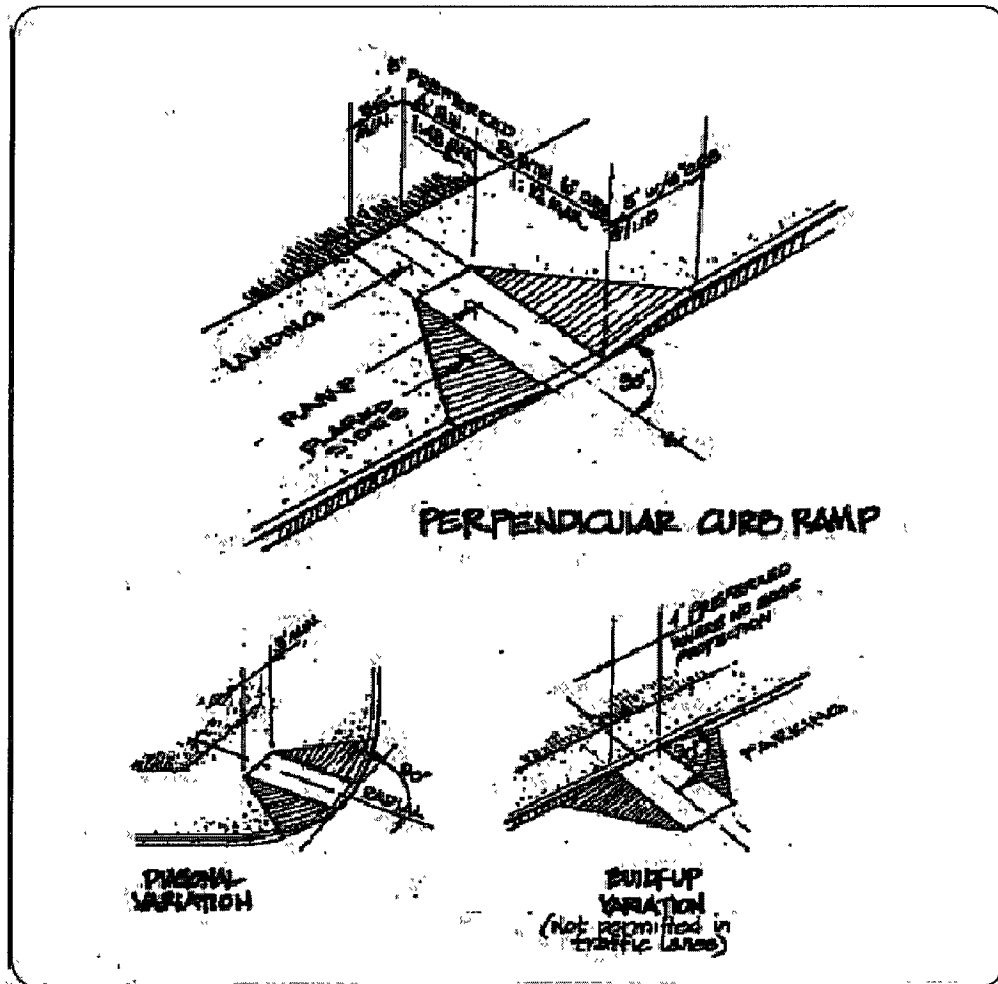
Larry M. Schneider, AIA  
Principal  
LMS/lis  
attachments

down to the adjacent road surface rather than up to the sidewalk surface.

There are many variations of these curb ramp types. In addition, most public works plans add several other curb ramp types, including the following:

- the **parallel** or in-line curb ramp in which all or part of the sidewalk ramps down to a street crossing. Where a turn is required to make a perpendicular crossing, a landing at street level but within the sidewalk width is provided (SEE FIGURE 1-6)
- the **combined** (parallel and perpendicular) ramp, in which the sidewalk ramps down to a landing at a lesser curb height, thus allowing a shorter perpendicular run to connect to the street. These are useful in narrow borders (SEE FIGURE 1-7).
- the **semi-projected** curb ramp, a perpendicular curb ramp that extends over the gutter width, much like a built-up ramp, to gain additional run distance and height up the roadway crown (SEE FIGURE 1-8).

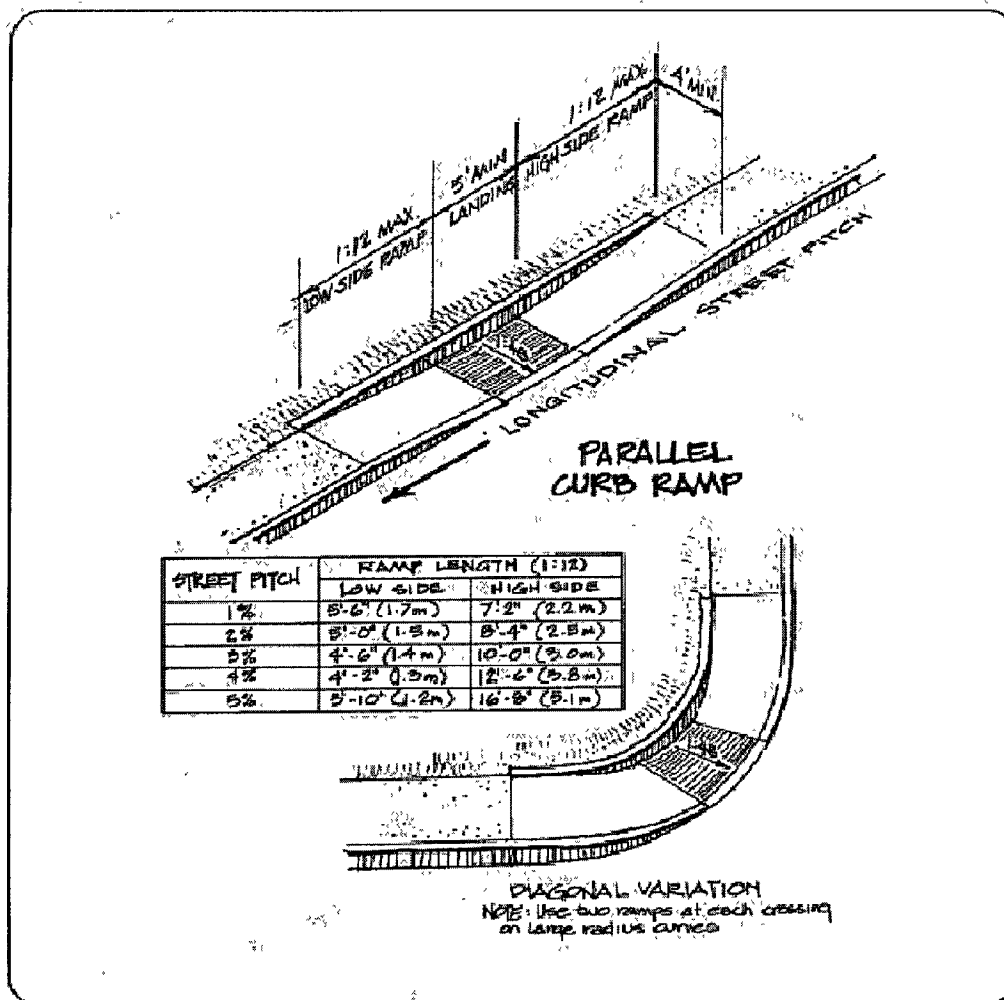
In Ho, HI, curb ramps retrofitted along an existing sidewalk are projected through the gutter width, mitigating the effects of an excessive gutter counterslope and minimizing the rise and therefore the run of the ramp. This is a useful technique when adding curb ramps in an existing developed environment. Exposed edges of the ramp extension are flared back to the curb face. European variants of this type often include a vertical drainage grate in the face of the flared return.



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**Perpendicular curb ramps**

A perpendicular curb ramp is so named because the run of the ramp cuts the curb it crosses at a 90-degree angle. A perpendicular curb ramp may be located within the radius of a curbline. A diagonal curb ramp is a perpendicular curb ramp located at the apex of the curbline curve; a built-up curb ramp is a variant that is projected from the sidewalk rather than let into it.



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**Parallel curb ramp**

A parallel curb ramp slopes in the direction of sidewalk travel. Such ramps are useful in narrow sidewalks along the curb. The landing must be 60 inches (1525 mm) long to permit a turn into and out of the crosswalk. Like the sidewalk, the landing should not slope more than 1:48 (2%) to the street.

# **Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way**

**July 26, 2011**

**UNITED STATES ACCESS BOARD**  
**A FEDERAL AGENCY COMMITTED TO ACCESSIBLE DESIGN**

## **R304 Curb Ramps and Blended Transitions**

### **General (R304.1)**

Curb ramps are ramps that are cut through or built up to the curb (see R105.5). Curb ramps can be perpendicular or parallel, or a combination of parallel and perpendicular ramps. Blended transitions are raised pedestrian street crossings, depressed corners, or similar connections between the pedestrian access route at the level of the sidewalk and the level of the pedestrian street crossing that have a grade of 5 percent or less (see R105.5).

The technical requirements for curb ramps and blended transitions are contained in R304 and adapt the technical requirements for curb ramps in the 2004 ADA and ABA Accessibility Guidelines to the public right-of-way. In alterations where existing physical constraints make it impractical to fully comply with the technical requirements, compliance is required to the extent practicable within the scope of the project (see R202.3.1).

### **Perpendicular Curb Ramps (R304.2)**

Perpendicular curb ramps have a running slope that cuts through or is built up to the curb at right angles or meets the gutter grade break at right angles where the curb is curved. On corners with a large curb radius, it will be necessary to indent the gutter grade break on one side of the curb ramp in order for the curb ramp to meet the gutter grade break at right angles

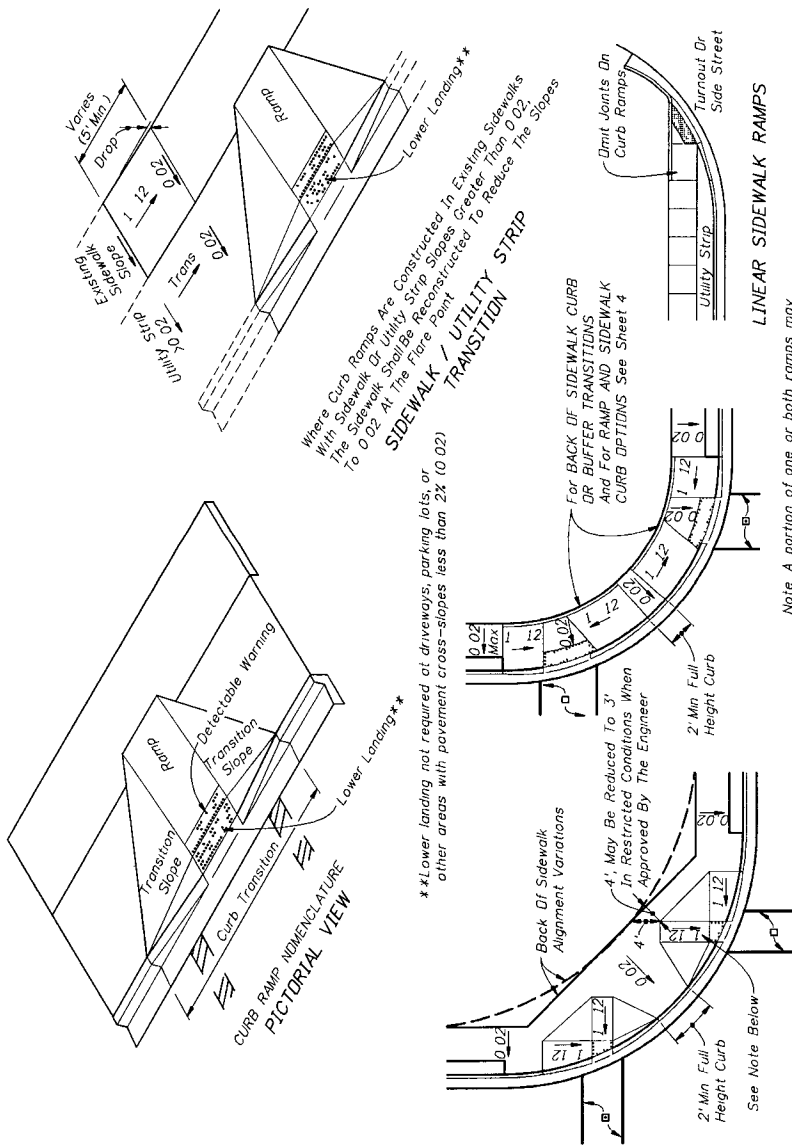
### **Parallel Curb Ramps (R304.3)**

Parallel curb ramps have a running slope that is in-line with the direction of sidewalk travel and lower the sidewalk to a level turning space where a turn is made to enter the pedestrian street crossing.

**Curb Ramp.** A ramp that cuts through or is built up to the curb. Curb ramps can be perpendicular or parallel, or a combination of parallel and perpendicular ramps

# GENERAL NOTES

- Public sidewalk curb ramps shall be constructed in the public right of way at locations that will provide continuous unobstructed pedestrian circulation paths to pedestrian areas, elements and facilities in the public right of way and to accessible pedestrian routes on adjacent sites. Curbed facilities with sidewalks and those without sidewalks are to have curbed ramps constructed at all street intersections and at turnouts that have curbed returns. Partial curb returns shall extend to the limit prescribed by Index No. 315 to accommodate curb ramps. Ramps constructed at locations without sidewalks shall have a landing constructed at the top of each ramp, see Sheet 5.
- The location and orientation of curb ramps shall be as shown in the plans.
- Curb ramp running slopes at unrestrained sites shall not be steeper than 1:12 and cross slope shall be 0:02 or flatter. Transition slopes shall not be steeper than 1:12.
- When altering existing pedestrian facilities where existing site development precludes the accommodation of a ramp slope of 1:12, a running slope between 1:12 and 1:10 is permitted for a rise of 6" maximum and a running slope of between 1:10 and 1:8 is permitted for a rise of 3" maximum. Where compliance with the requirements for cross slope cannot be fully met, the minimum feasible cross slope shall be provided.
- Ramp running slope is not required to exceed 8' in length, except at sites where the plans specify a greater length.
- If a curb ramp is located where pedestrians must walk across the ramp, then the walk shall have transition slopes to the ramp; the maximum slope of the transitions shall be 1:12. Ramps with curb returns may be used at locations where other improvements provide guidance away from that portion of curb perpendicular to the sidewalk; improvements for guidance are not required at curb ramps for linear pedestrian traffic.
- Curb ramp detectable warning surfaces shall extend the full width of the ramp and 24" deep. Detectable warning surfaces shall be constructed in accordance with Specification 527. See Sheet 6 of 6 for detectable warning layouts. Transition slopes are not to have detectable warnings.
- Where a curb ramp is constructed within existing curb, curb and gutter and/or sidewalk, the existing curb or curb and gutter shall be removed to the nearest joint beyond the curb transitions or to the extent that no remaining section of curb or curb and gutter is less than 5' long. The existing sidewalk shall be removed to the nearest joint beyond the transition slope or walk around or to the extent that no remaining section of sidewalk is less than 5' long. For details of Concrete Sidewalk See Index 310.
- Alpha-numeric identifications are for reference (plans, permits, etc.).
- Public sidewalk curb ramps are to be paid for as follows:  
Ramps, reconstructed sidewalks, walk around sidewalks, sidewalk landings and sidewalk curbs are to be paid for under the contract unit price for Sidewalk Concrete, (--- Thick), \$Y. Curb transitions and reconstructed curbs are to be paid for under the contract unit price for the parent curb i.e., Curb Conc., (Type ---) LF or Curb and Gutter Conc., (Type ---) LF.
- When a separate pay item for the removal and disposal of existing curb, curb and gutter, and/or sidewalk is not provided in the plans, the cost of removal and disposal of these features shall be included in the contract unit price for new curb and gutter and/or sidewalk respectively.
- Acceptance Criteria for Detectable Warnings:  
(a) The ramp detectable warning surface shall be complete and uniform in color and texture.  
(b) 90% of the individual truncated domes must comply with the design criteria.  
(c) There may be no more than 4 non-complying domes in any one square foot of surface.  
(d) No two adjacent domes may be non-compliant.  
(e) Surface may not deviate more than 0.10" from a true plane.
- All sidewalk surfaces, ramp surfaces, and landings with a cross slope shown in this Index to be 0:02 shall be 0:02 maximum. All ramp surfaces and ramp transition slopes with a slope shown in this Index to be 1:12 shall be 1:12 maximum.



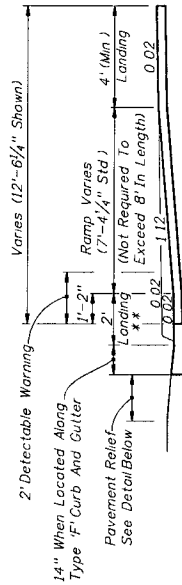
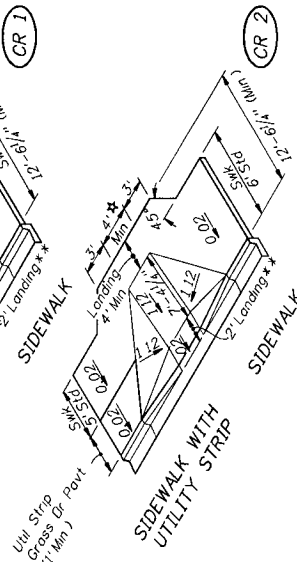
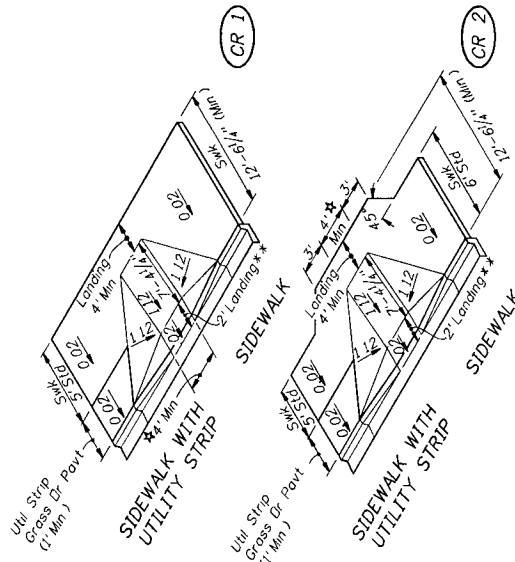
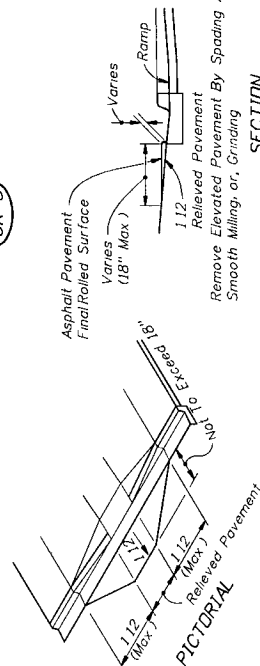
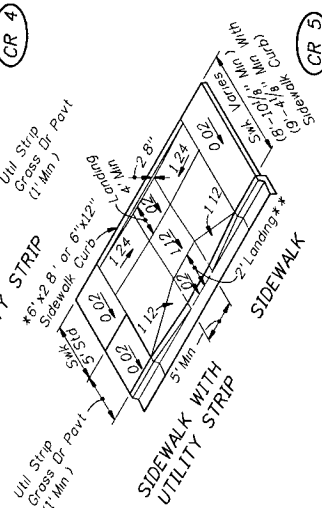
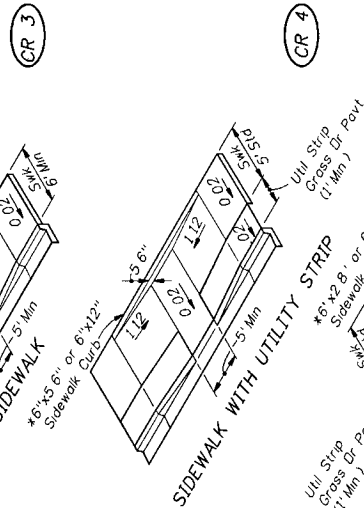
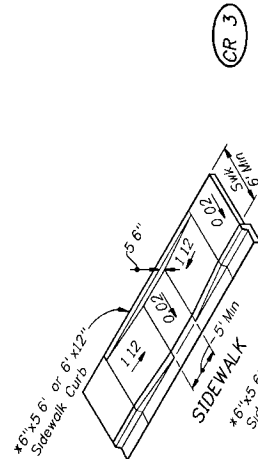
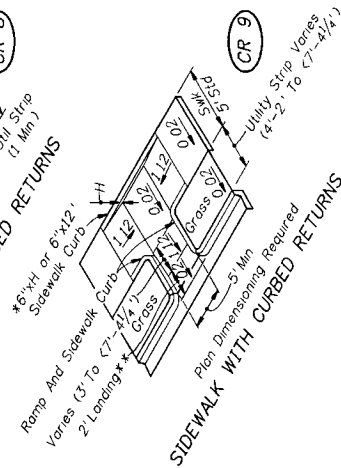
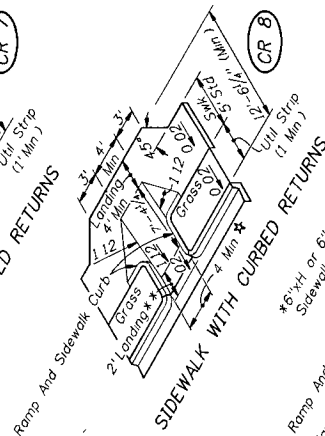
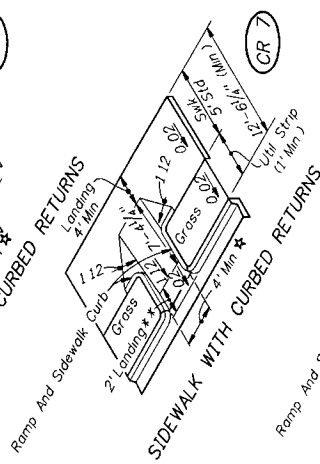
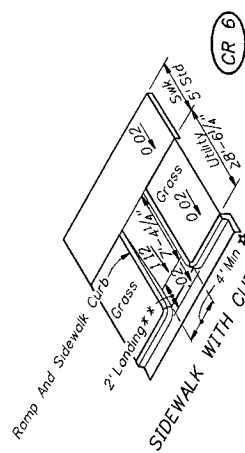
## TYPICAL PLACEMENT OF PUBLIC SIDEWALK CURB RAMP AT CURBED RETURNS



2010 FDOT Design Standards

### PUBLIC SIDEWALK CURB RAMP

|          |          |
|----------|----------|
| Sheet No | 304      |
| Index No | 1 of 6   |
| Revision | 07/01/07 |



SECTION THROUGH RAMP RUN AND LANDINGS WITH  
UPPER LANDING AT NORMAL SIDEWALK ELEVATION

ment

PAVEMENT RELIEF AT LIP OF CURB

SECTION

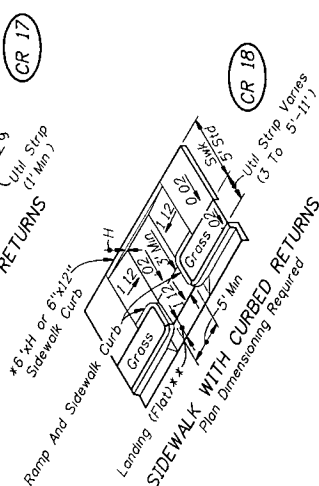
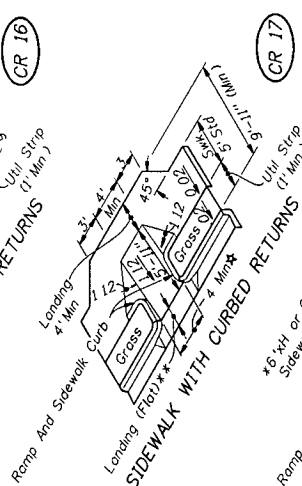
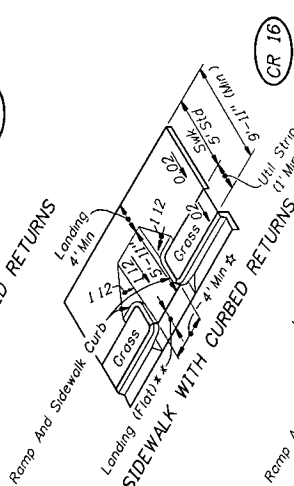
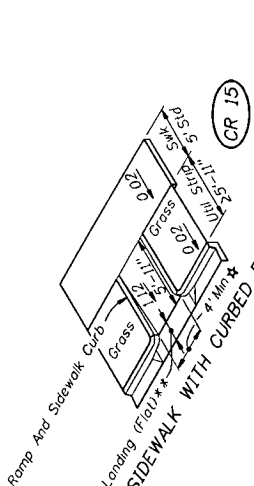
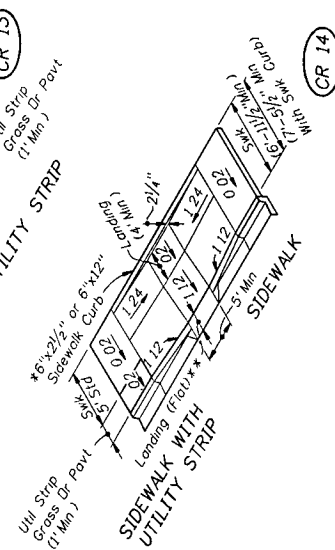
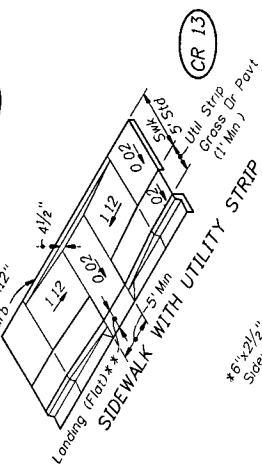
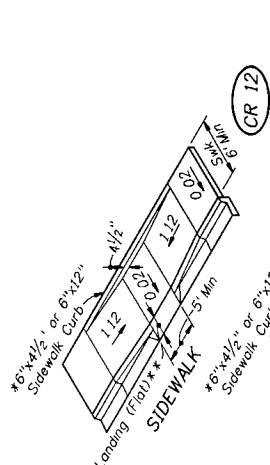
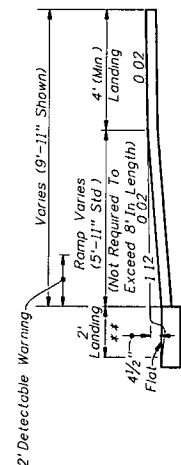
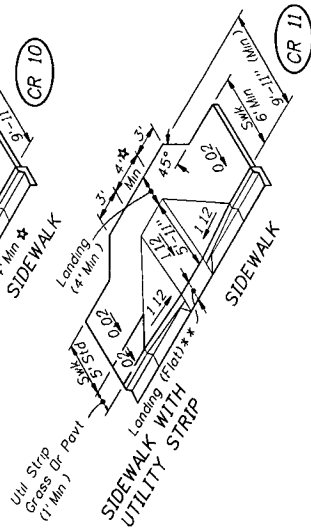
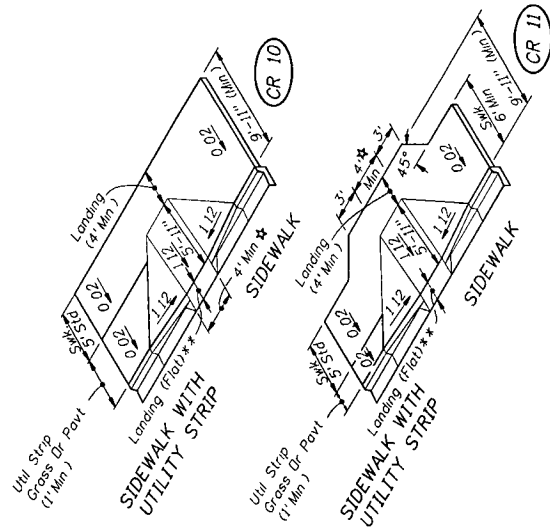
\* For BACK OF SIDEWALK CURB OR BUFFER TRANSITION And For RAMP AND SIDEWALK CURB OPTIONS See Sheet 4

**\*\*Lower landing not required at driveways, parking lots, or other areas with pavement cross-slopes less than 2% (0.02)**

★ Ramp Widths For Curb Ramps CR 1, CR 2, CR 6, CR 7, And CR 8 May Be Reduced To 3' Min In Restricted Conditions When Approved By The Engineer

*DIMENSIONAL FEATURES FOR PUBLIC SIDEWALK CURB RAMPS WHERE RAMP AND LANDING DEPTH ARE NOT RESTRICTED BY RIGHT OF WAY*





SECTION THROUGH RAMP RUN AND LANDINGS WITH UPPER LANDING AT NORMAL SIDEWALK ELEVATION

- \* Ramp Widths For Curb Ramps CR 10, CR 11, CR 15, CR 16, And CR 17 May Be Reduced To 3' Min In Restricted Conditions When Approved By The Engineer
- \* For BACK OF SIDEWALK CURB OR BUFFER TRANSITION And For RAMP AND SIDEWALK CURB OPTIONS See Sheet 4
- \*\* Lower landing not required at driveways, parking lots, or other areas with pavement cross-slopes less than 2% (0.02)

DIMENSIONAL FEATURES FOR PUBLIC SIDEWALK CURB RAMP WHERE RAMP AND LANDING DEPTH ARE RESTRICTED BY RIGHT OF WAY

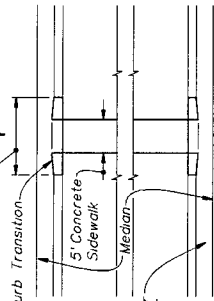


5' Refuge With Maximum Slope Of 0.02 Must Be Provided When Slopes Of 0.05 Or Flatter And 5' In Length Are Not Available On Crosswalk. The Refuge Can Be Constructed At Any Location Within The Crosswalk. Dr. A 5' x 5' Concrete Landing With Maximum Slope Of 0.02 Can Be Constructed Adjacent To The Crosswalk

Cross Walk (Concrete Sidewalk, 4")  
Roadway Pavement  
Slope Varies (0.02 Std. 1:12 Max.)

Slopes Shall Intersect At Centerline Of Median On The 0.02 Rate When The Edge Of Pavement Elevations Are Equal. The Slopes May Intersect Off The Centerline For Variable Edge Of Pavement Elevations Or To Accommodate Other Construction In The Median. However, Slopes Shall Not Be Steeper Than 1:12

Curb Transition (On Existing Facilities Remove And Reconstruct Curb Dr Curb And Gutter) For Payment See General Note 8



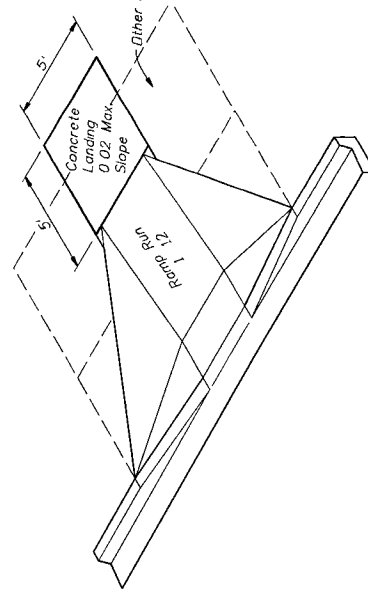
Curb Types A Or B Or Curb & Gutter Type E (Curb And Gutter Type E Shown)

SECTION CC

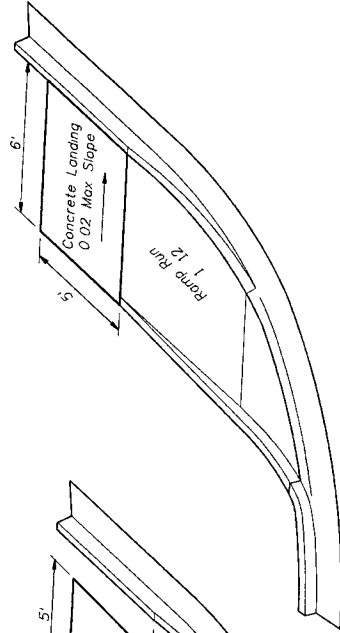
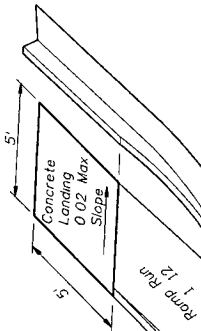
# MEDIAN CROSSWALKS

PLAN

PLAN - (ALTERNATE DETAIL)



Other Options As Shown In The Plans



LANDINGS FOR RAMPS WITHIN PUBLIC RIGHT OF WAY CONSTRUCTED AT LOCATIONS WHERE FUTURE SIDEWALKS ARE PROPOSED, WHERE STABLE SURFACES OTHER THAN SIDEWALKS ARE PART OF A CONTINUOUS PASSAGE OR WHERE A CURB FALLS ALONG THE CIRCULATION PATH TO PEDESTRIAN ROUTES ON ADJACENT SITES



2010 FDOT Design Standards

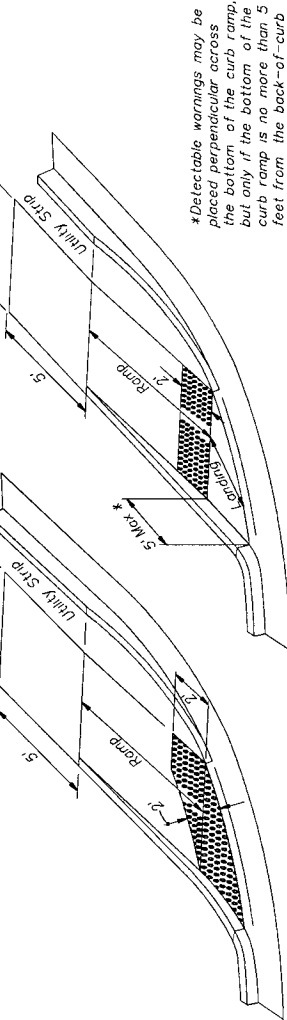
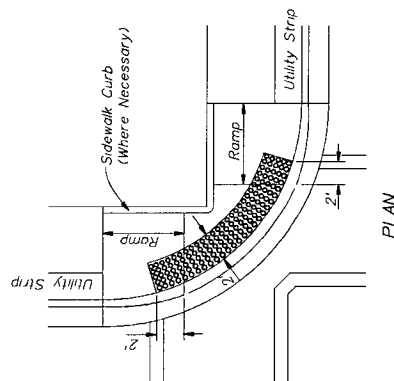
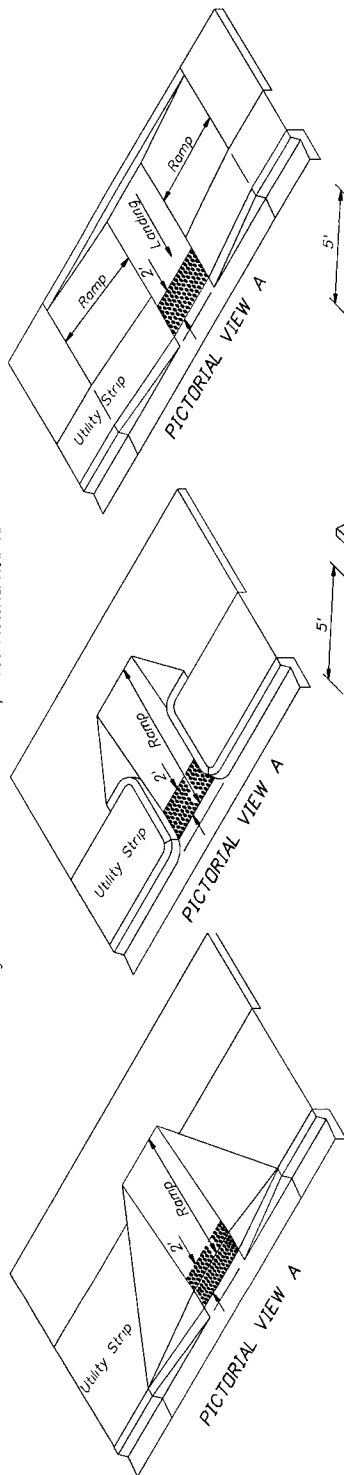
## PUBLIC SIDEWALK CURB RAMPS

Last Revision  
07/01/07

Sheet No  
5 of 6

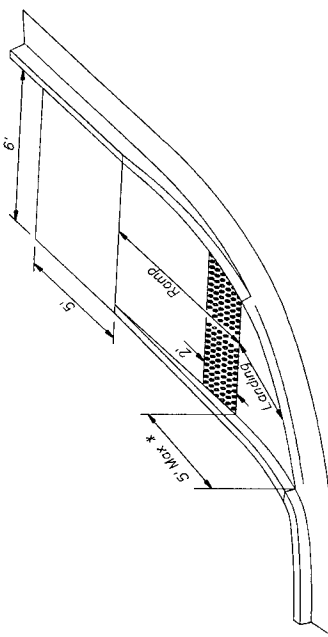
Index No  
304

On curb ramps, landings and flush transitions perpendicular to the curb line Rows of domes shall be aligned with the centerline of the ramp (See Pictorial View A)



PICTORIAL VIEW B

PICTORIAL VIEW C

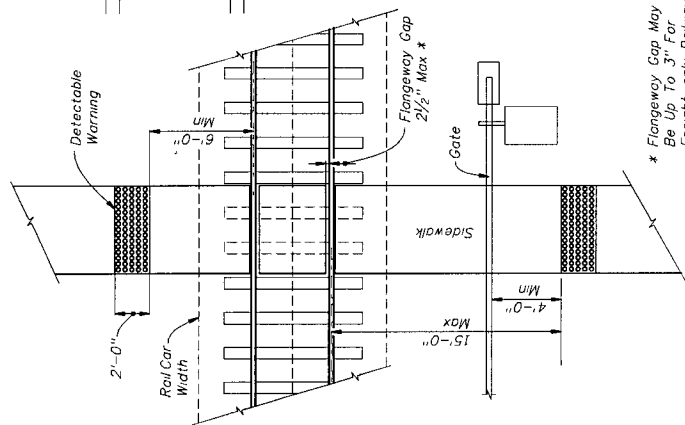


PICTORIAL VIEW B

PICTORIAL VIEW C

On landings and flush transitions at radius returns Rows of domes are not required to be aligned with the centerline of the ramp (See Pictorial View B)

On curb ramps at radius returns Rows of domes shall be aligned with the centerline of the ramp (See Pictorial View C)



Rail Road Crossing

PLAN

## TYPICAL PLACEMENT OF DETECTABLE WARNING AT CURB RAMP

2010 FDOT Design Standards



## PUBLIC SIDEWALK CURB RAMPS

Last Revision 01/01/09  
Sheet No 8 of 8  
Index No 304

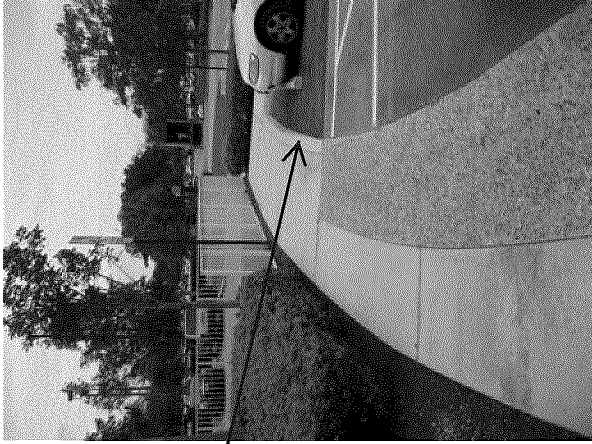


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Edge protection at this condition?

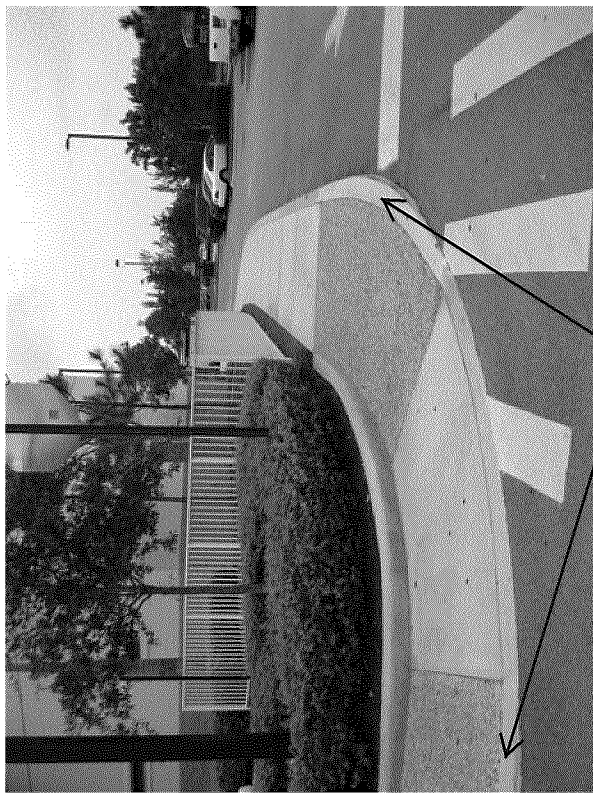


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Edge protection on these curb ramps?



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Edge protection on these curb ramps?



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Edge protection on these curb ramps?



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6/18/2012

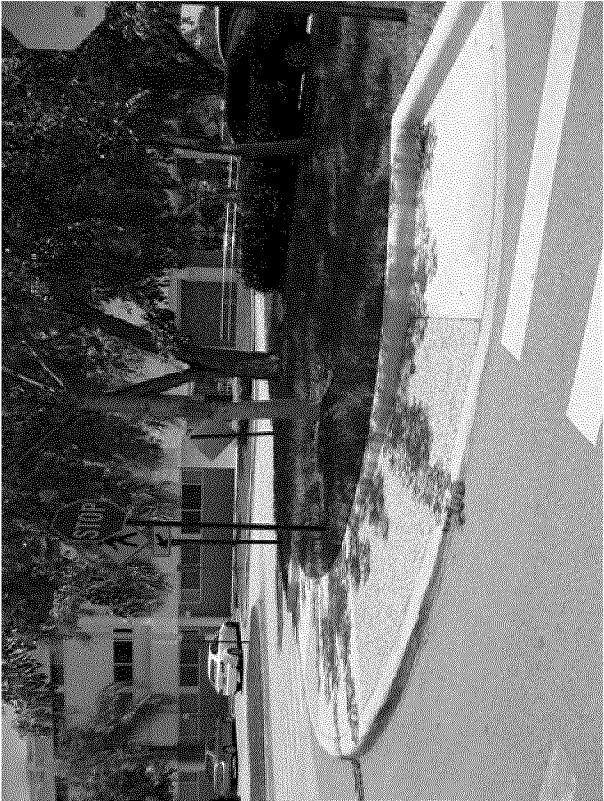


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Edge protection on these curb ramps?