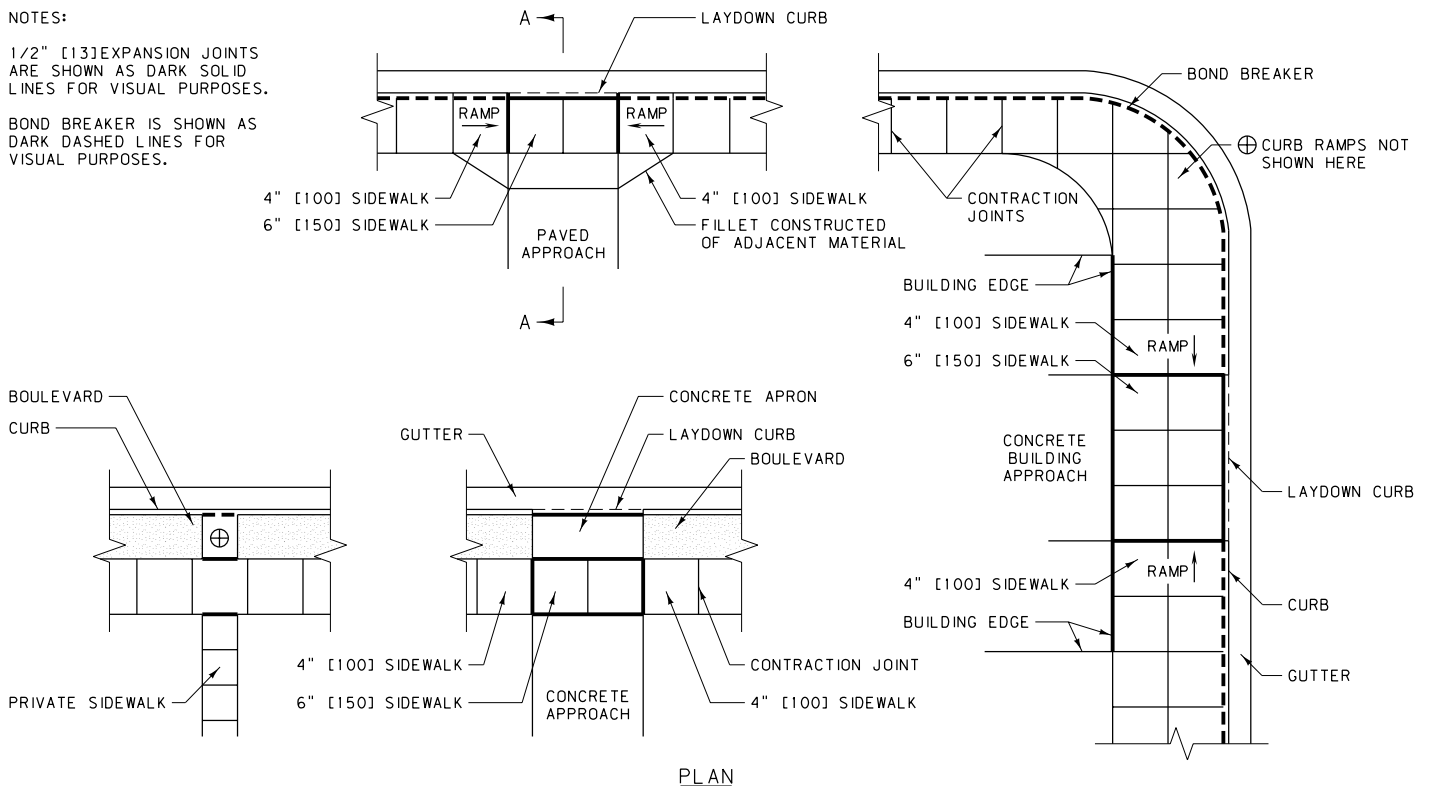


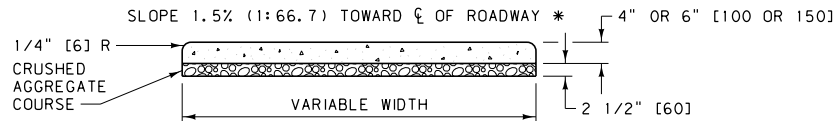
NOTES:

1/2" [13] EXPANSION JOINTS ARE SHOWN AS DARK SOLID LINES FOR VISUAL PURPOSES.

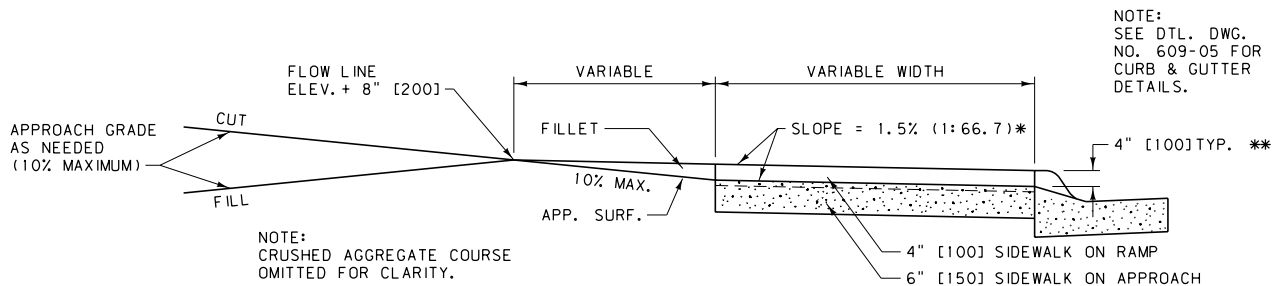
BOND BREAKER IS SHOWN AS DARK DASHED LINES FOR VISUAL PURPOSES.



PLAN




SECTION OF SIDEWALK



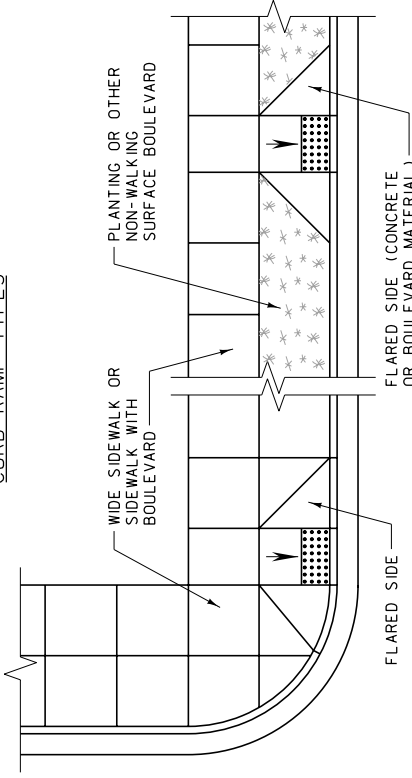
NOTES:

- ① INSTALL PREFORMED EXPANSION JOINT FILLER, PER SECTION 707, AT ALL EXPANSION JOINTS, FOR THE FULL THICKNESS OF THE SIDEWALK AND USE AT ALL JOINTS BETWEEN NEW CONCRETE SIDEWALK AND STRUCTURES IN PLACE.
  - ② INSTALL A BOND BREAKER FOR THE FULL THICKNESS OF THE SIDEWALK AT LOCATIONS SPECIFIED ON THIS DETAIL. USE A 15 OR 30 POUND [6.8 OR 13.6 kg] ROOFING FELT MATERIAL, OR OTHER PRODUCT AS APPROVED BY THE PROJECT MANAGER, FOR THE BOND BREAKER. DO NOT USE EXPANSION JOINT MATERIAL AS A BOND BREAKER.
  - ③ CONSTRUCT ALL JOINTS STRAIGHT AND PERPENDICULAR TO THE CENTERLINE AND THE SURFACE OF THE SIDEWALK. WHERE PRACTICAL, ALIGN ALL JOINTS WITH LIKE JOINTS IN ADJOINING WORK. USE JOINTS TO OUTLINE ALL PANELS IN THE SIDEWALK, WHICH ARE TO BE, SO FAR AS POSSIBLE, SQUARE. THE LENGTHS OF THE PANELS ARE DETERMINED BY THE WIDTH OF THE SIDEWALK.
  - ④ WHERE RIGHT-OF-WAY PERMITS, NEW SIDEWALKS LESS THAN 5 FEET [1525] IN WIDTH MUST HAVE A PASSING AREA AT A MAXIMUM SPACING OF 200 FEET [61 m]. THE PASSING AREA IS A MINIMUM OF 5 FEET BY 5 FEET [1525 BY 1525] IN SIZE.
  - ⑤ PROVIDE CONTRACTION JOINTS NO LESS THAN 1/8" [3] WIDE AND NO MORE THAN 1/4" [6] WIDE AND NO LESS THAN 1" [25] IN DEPTH. CONTRACTION JOINTS MAY BE CUT BY A GROOVE FORMING TOOL.
  - ⑥ LOCATE EXPANSION JOINTS EVERY 100 FEET (± 30 FEET) [30 m (± 10 m)] AT INTERVALS EQUAL TO THE NEAREST MULTIPLE OF THE CONTRACTION JOINT INTERVAL.
  - ⑦ USE A LONGITUDINAL CONTRACTION JOINT IN THE CENTERLINE OF ALL SIDEWALKS WIDER THAN 5 FEET [1525].
- \* THE MAXIMUM CROSS SLOPE OF THE SIDEWALK IS 2% (1:50).
- \*\* THIS DEPTH IS STANDARD IN NEW CONSTRUCTION. ALTERATIONS TO EXISTING FACILITIES MAY RESULT IN A LARGER DEPTH, WHICH WILL REQUIRE A GREATER RAMP LENGTH.
- ⊕ SEE DTL. DWG. NO. 608-15 AND 608-20 FOR GUIDELINES ON RAMP DESIGN WHEN RAMPS ARE REQUIRED FOR ADA ACCESSIBILITY.

UNITS SHOWN IN BRACKETS [ ] ARE METRIC AND ARE IN MILLIMETERS (mm) UNLESS OTHER UNITS ARE SHOWN.

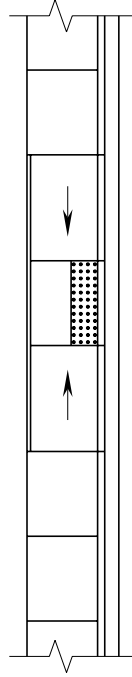
DETAILED DRAWING	
REFERENCE STANDARD SPEC. SECTION 608	DWG. NO. 608-05
CONCRETE SIDEWALK	
EFFECTIVE: SEPTEMBER 2014	
 MONTANA DEPARTMENT OF TRANSPORTATION	

## CURB RAMP TYPES



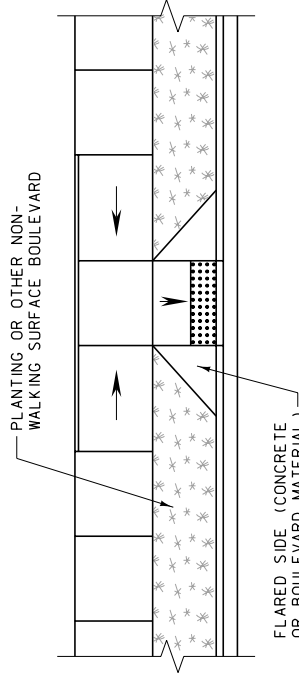
(A)

PERPENDICULAR PUBLIC SIDEWALK CURB RAMP  
(SEE DETAILED DRAWING NUMBER 608-25 FOR  
ADDITIONAL DETAILS)



(B)

PARALLEL PUBLIC SIDEWALK CURB RAMP  
(SEE DETAILED DRAWING NUMBER 608-30  
FOR ADDITIONAL DETAILS)



(C)

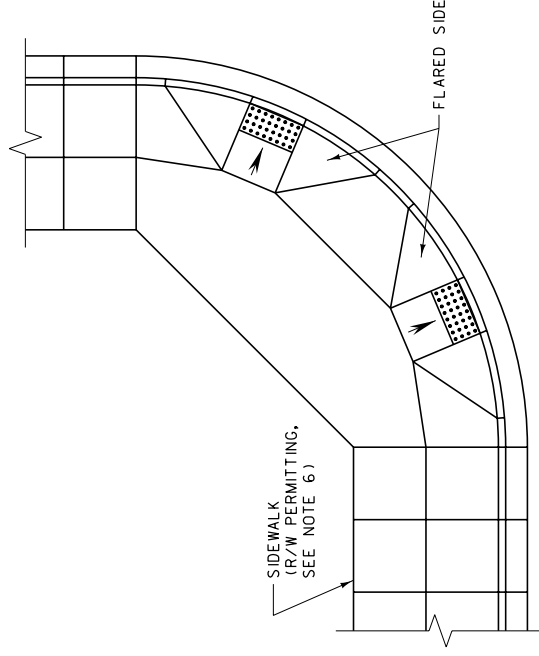
COMBINED (PARALLEL/PERPENDICULAR) PUBLIC  
SIDEWALK CURB RAMP (SEE DETAILED DRAWING  
NUMBERS 608-25 AND 608-30 FOR ADDITIONAL  
DETAILS)

### GENERAL NOTES:

- IN NEW CONSTRUCTION, USE PUBLIC SIDEWALK CURB RAMP IN THE FOLLOWING ORDER OF PREFERENCE:
  - PERPENDICULAR PUBLIC SIDEWALK CURB RAMP.
  - PARALLEL PUBLIC SIDEWALK CURB RAMP.
  - COMBINED (PARALLEL/PERPENDICULAR) PUBLIC SIDEWALK CURB RAMP.
  - DIAGONAL PERPENDICULAR PUBLIC SIDEWALK CURB RAMP.
- SINGLE DIAGONAL OR DEPRESSED CORNER PUBLIC SIDEWALK CURB RAMP SERVING TWO STREET CROSSING DIRECTIONS ARE NOT RECOMMENDED IN NEW CONSTRUCTION.
- WHEN ALTERING EXISTING FACILITIES, MEET NEW CONSTRUCTION REQUIREMENTS FOR PUBLIC SIDEWALK CURB RAMP TO THE MAXIMUM EXTENT FEASIBLE.
- IF POSSIBLE, DO NOT PLACE DRAINAGE STRUCTURES IN CONFLICT WITH PUBLIC SIDEWALK CURB RAMP. LOCATION OF CURB RAMP TAKES PRECEDENCE OVER LOCATION OF DRAINAGE STRUCTURES EXCEPT WHERE EXISTING DRAINAGE STRUCTURES ARE BEING UTILIZED.
- USE THE FLATTEST SLOPES POSSIBLE FOR ALL CURB RAMP. MAXIMUM SLOPES ARE SHOWN FOR GUIDANCE AT DIFFICULT SITES.
- FINAL FIELD LOCATION OF THE CURB RAMP WILL BE DETERMINED BY THE PROJECT MANAGER.
- IF R/W DOES NOT PERMIT LANDINGS FOR THESE RAMP, USE ANOTHER RAMP DESIGN.
- PEDESTRIAN ACCESS POINTS AT CROSSWALKS ARE TO BE WHOLLY CONTAINED WITHIN THE CROSSWALK LINES.
- FOR ADDITIONAL INFORMATION CONSULT:
  - DRAFT PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG)

### CONSTRUCTION REQUIREMENTS:

- OBTAIN A SURFACE TEXTURE ON THE RAMP BY COARSE BROOMING, TRANSVERSE TO THE RAMP SLOPE.
- TAKE CARE DURING CONSTRUCTION TO ASSURE UNIFORM RAMP GRADES, FREE OF SAGS AND SHARP GRADE CHANGES.



(D)

DIAGONAL PERPENDICULAR PUBLIC SIDEWALK  
CURB RAMP (SEE DETAILED DRAWING NUMBER  
608-35 FOR ADDITIONAL DETAILS)

UNITS SHOWN IN BRACKETS ( ) ARE  
METRIC AND ARE IN MILLIMETERS (mm)  
UNLESS OTHER UNITS ARE SHOWN.

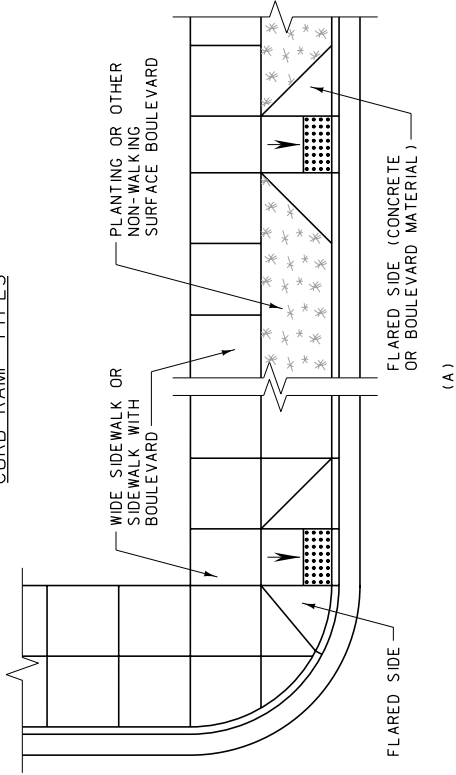
DETAILED DRAWING	
REFERENCE	DWG. NO.
STANDARD SPEC.	608-15
SECTION 608	

NEW CONSTRUCTION  
PUBLIC SIDEWALK  
CURB RAMP

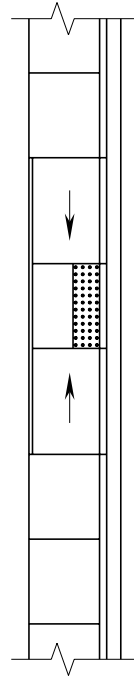
EFFECTIVE: SEPTEMBER 2014

**MDTA** MONTANA DEPARTMENT  
OF TRANSPORTATION

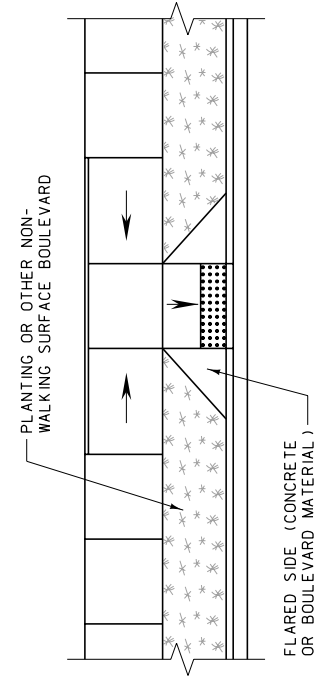
## CURB RAMP TYPES



PERPENDICULAR PUBLIC SIDEWALK CURB RAMP  
(SEE DETAILED DRAWING NUMBER 608-25 FOR  
ADDITIONAL DETAILS)

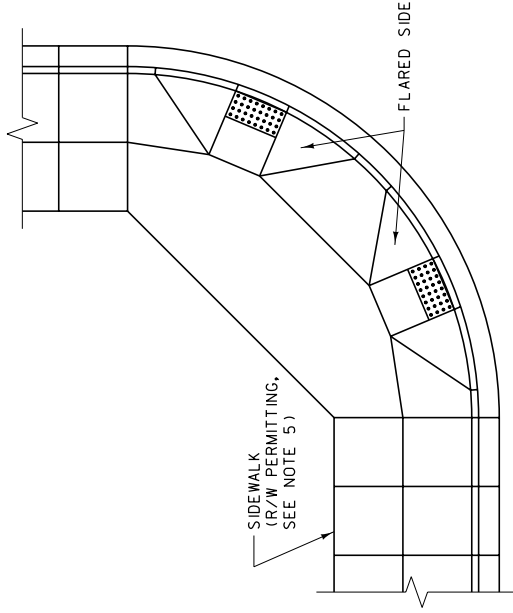


PARALLEL PUBLIC SIDEWALK CURB RAMP  
(SEE DETAILED DRAWING NUMBER 608-30  
FOR ADDITIONAL DETAILS)

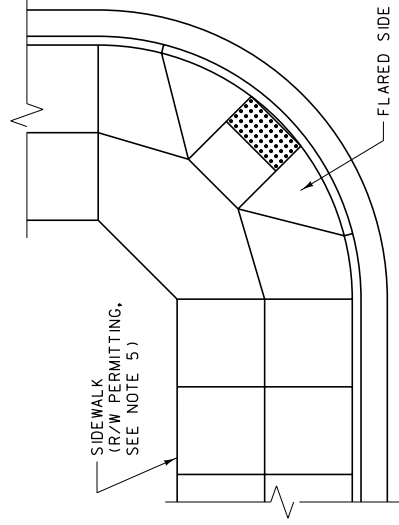


COMBINED (PARALLEL/PERPENDICULAR) PUBLIC  
SIDEWALK CURB RAMP (SEE DETAILED DRAWING  
NUMBERS 608-25 AND 608-30 FOR ADDITIONAL  
DETAILS)

## CURB RAMP TYPES



DIAGONAL PERPENDICULAR PUBLIC SIDEWALK  
CURB RAMP (SEE DETAILED DRAWING NUMBER  
608-35 FOR ADDITIONAL DETAILS)



SINGLE DIAGONAL PERPENDICULAR PUBLIC  
SIDEWALK CURB RAMP (SEE DETAILED DRAWING  
NUMBER 608-35 FOR ADDITIONAL DETAILS)


## GENERAL NOTES:

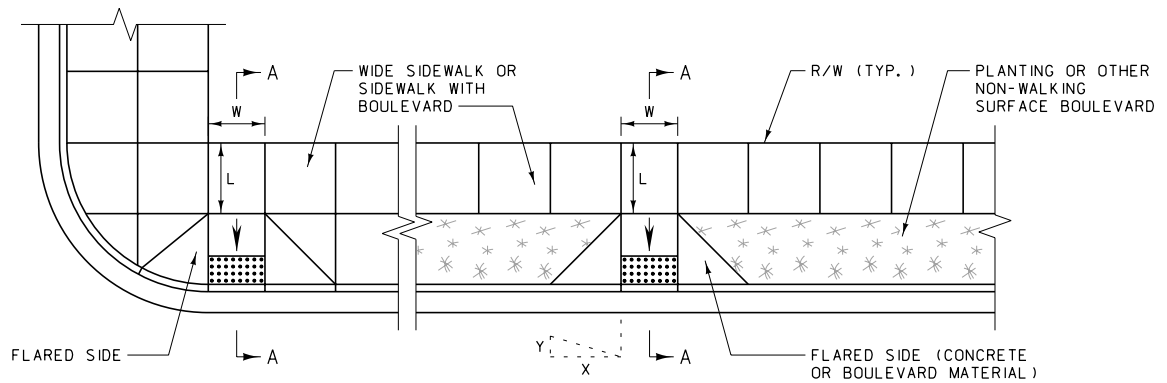
- WHEN ALTERING EXISTING FACILITIES, USE PUBLIC SIDEWALK CURB RAMPS IN THE FOLLOWING ORDER OF PREFERENCE:
  - PERPENDICULAR PUBLIC SIDEWALK CURB RAMP
  - PARALLEL PUBLIC SIDEWALK CURB RAMP
  - COMBINED (PARALLEL/PERPENDICULAR) PUBLIC SIDEWALK CURB RAMP
  - DIAGONAL PERPENDICULAR PUBLIC SIDEWALK CURB RAMP
  - SINGLE DIAGONAL PERPENDICULAR PUBLIC SIDEWALK CURB RAMP
- NOTE: USE DIAGONAL PUBLIC SIDEWALK CURB RAMPS AS THE LAST OPTION AND CONSTRUCT TO COMPLY WITH ALL ADA SLOPE AND CONSTRUCTION CRITERIA TO THE GREATEST EXTENT POSSIBLE.
- PLACE CURB RAMPS TO AVOID EXISTING DRAINAGE STRUCTURES AND OTHER OBSTRUCTIONS TO THE GREATEST EXTENT POSSIBLE.
- USE THE FLATTEST SLOPES POSSIBLE FOR ALL CURB RAMPS. MAXIMUM SLOPES ARE SHOWN FOR GUIDANCE AT DIFFICULT SITES AND SHOULD BE AVOIDED IF POSSIBLE.
- FINAL FIELD LOCATION OF THE CURB RAMPS WILL BE DETERMINED BY THE PROJECT MANAGER.
- IF R/W DOES NOT PERMIT LANDINGS FOR THESE RAMPS, USE ANOTHER RAMP DESIGN.
- PEDESTRIAN ACCESS POINTS AT CROSSWALKS ARE TO BE WHOLLY CONTAINED WITHIN THE CROSSWALK LINES.
- FOR ADDITIONAL INFORMATION CONSULT:
  - DRAFT PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG)

## CONSTRUCTION REQUIREMENTS:

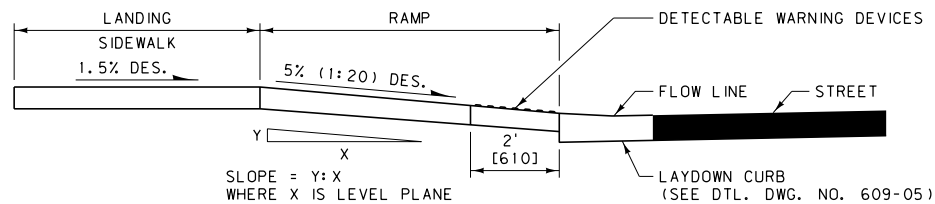
- OBTAIN A SURFACE TEXTURE ON THE RAMP BY COARSE BROOMING, TRANSVERSE TO THE RAMP SLOPE.
- PROVIDE UNIFORM RAMP GRADES FREE OF SAGS AND GRADE CHANGES.

UNITS SHOWN IN BRACKETS [ ] ARE  
METRIC AND ARE IN MILLIMETERS (mm)  
UNLESS OTHER UNITS ARE SHOWN.

DETAILED DRAWING	
REFERENCE	DWG. NO.
STANDARD SPEC.	608-20
SECTION 608	
ALTERATIONS TO EXISTING FACILITIES - PUBLIC SIDEWALK CURB RAMPS	
EFFECTIVE: SEPTEMBER 2014	
 MONTANA DEPARTMENT OF TRANSPORTATION	



PERPENDICULAR PUBLIC SIDEWALK CURB RAMP



SECTION A-A

#### NEW CONSTRUCTION REQUIREMENTS:

1. THE DESIRABLE WIDTH OF THE CURB RAMP (DIMENSION "W" ABOVE) IS 5 FEET [1525 mm] OR WIDER. THE MINIMUM WIDTH ("W") IS 4 FEET [1220 mm].
2. THE DESIRABLE LENGTH OF THE LANDING AT THE TOP OF THE CURB RAMP (DIMENSION "L" ABOVE) IS 5 FEET [1525 mm]. THE MINIMUM LENGTH "L" IS 4 FEET [1220 mm]. THE LANDING WIDTH IS EQUAL TO THE RAMP WIDTH.
3. THE DESIRABLE SLOPE FOR THE CURB RAMP IS 5% (1:20) OR FLATTER. THE MAXIMUM CURB RAMP SLOPE IS 8.3% (1:12).
4. THE DESIRABLE SLOPE FOR THE FLARED SIDE OF THE CURB RAMP IS 8.3% (1:12) OR FLATTER. THE MAXIMUM FLARED SIDE SLOPE IS 10% (1:10).
5. THE DESIRABLE CROSS SLOPE OF THE SIDEWALK, RAMP, OR LANDING IS 1.5% (1:66.7). THE MAXIMUM CROSS SLOPE OF THE SIDEWALK, RAMP, OR LANDING IS 2% (1:50).
6. PROVIDE DETECTABLE WARNING DEVICES ON THE BOTTOM 2 FEET [610 mm] OF EACH RAMP AS SHOWN ABOVE. SEE DETAILED DRAWING NUMBER 608-40 FOR DETECTABLE WARNING DEVICES DETAILS.

#### REQUIREMENTS FOR ALTERATIONS TO EXISTING FACILITIES:


NOTE: WHEREVER POSSIBLE, ALTER EXISTING FACILITIES TO COMPLY WITH THE NEW CONSTRUCTION REQUIREMENTS.

1. THE MINIMUM WIDTH OF THE CURB RAMP (DIMENSION "W" ABOVE) IS 4 FEET [1220 mm].
2. WHERE RIGHT-OF-WAY WIDTH IS INSUFFICIENT TO ACCOMMODATE A TOP LANDING OF 5 FEET [1525 mm], PROVIDE A TOP LANDING OF 4 FEET [1220 mm]. THE LANDING WIDTH IS EQUAL TO THE RAMP WIDTH.
3. THE MAXIMUM CURB RAMP SLOPE IS 10% (1:10), PROVIDED THE RISE (DIMENSION "Y" ABOVE) IS 6 INCHES [150 mm] OR LESS. AN 8.3% (1:12) OR FLATTER SLOPE IS DESIRABLE.
4. THE MAXIMUM FLARED SIDE SLOPE IS 10% (1:10).
5. THE DESIRABLE CROSS SLOPE OF THE SIDEWALK, RAMP, OR LANDING IS 1.5% (1:66.7). THE MAXIMUM CROSS SLOPE OF THE SIDEWALK, RAMP, OR LANDING IS 2% (1:50).
6. PROVIDE DETECTABLE WARNING DEVICES ON THE BOTTOM 2 FEET [610 mm] OF EACH RAMP AS SHOWN ABOVE. SEE DETAILED DRAWING NUMBER 608-40 FOR DETECTABLE WARNING DEVICES DETAILS.
7. WHERE EXISTING SITE DEVELOPMENT CONDITIONS PROHIBIT THE STRICT AND FULL COMPLIANCE OF ALL ADA CRITERIA, PROVIDE ACCESSIBILITY TO THE MAXIMUM EXTENT FEASIBLE.

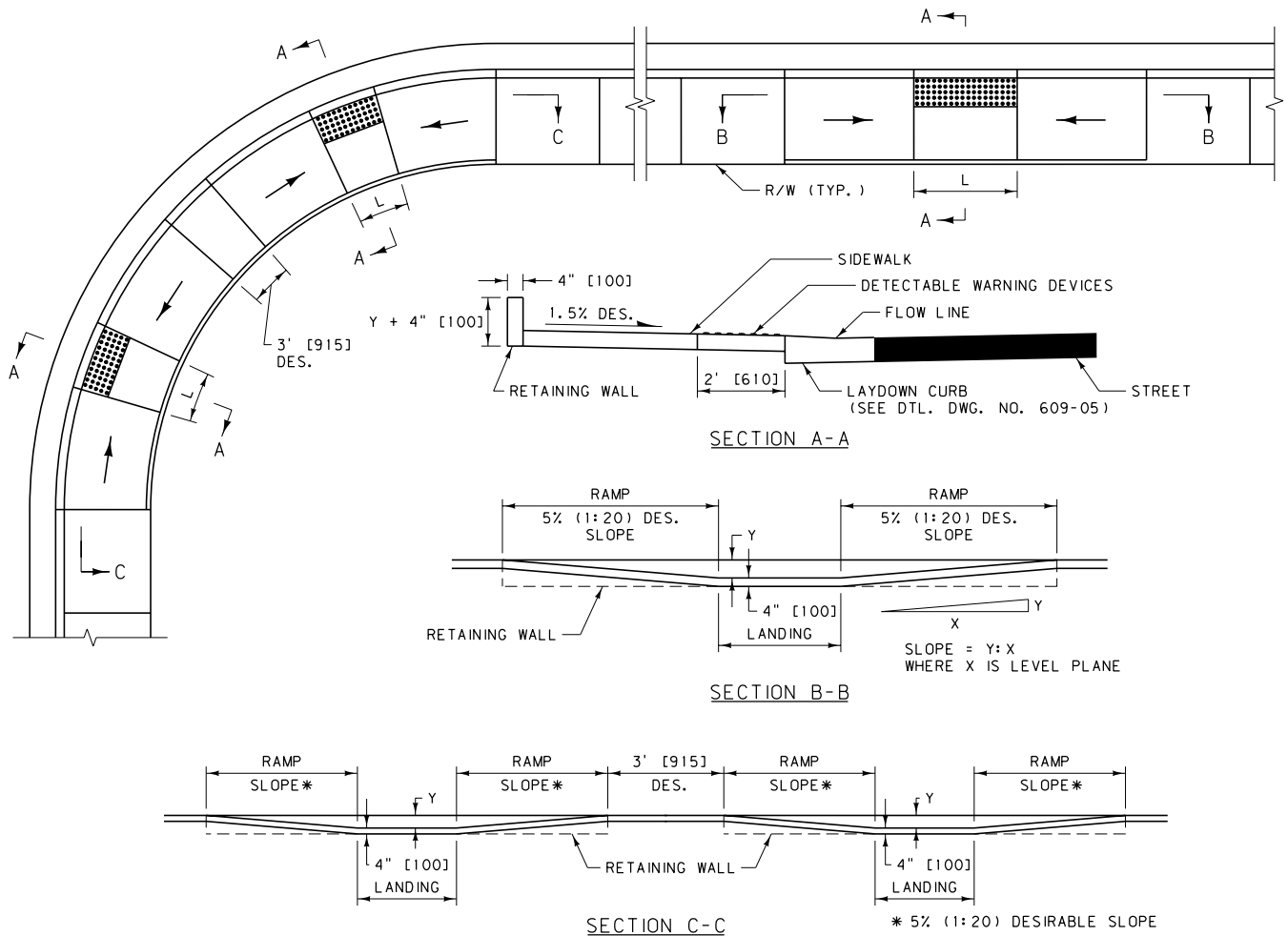
#### GENERAL NOTES:

1. WHERE THE RIGHT-OF-WAY WILL NOT ACCOMMODATE A PERPENDICULAR PUBLIC SIDEWALK CURB RAMP AND LANDING MEETING THESE REQUIREMENTS, USE A COMBINED (PARALLEL/PERPENDICULAR) OR PARALLEL PUBLIC SIDEWALK CURB RAMP.
2. COMBINED (PARALLEL/PERPENDICULAR) PUBLIC SIDEWALK CURB RAMPs ARE TO MEET THE CRITERIA FOR BOTH THE PARALLEL AND PERPENDICULAR PUBLIC SIDEWALK CURB RAMPs. (SEE DETAILED DRAWING NUMBER 608-30 AND THIS DRAWING.)

UNITS SHOWN IN BRACKETS [ ] ARE METRIC AND ARE IN MILLIMETERS (mm) UNLESS OTHER UNITS ARE SHOWN.

DETAILED DRAWING	
REFERENCE	DWG. NO.
STANDARD SPEC.	608-25
SECTION 608	
PERPENDICULAR PUBLIC SIDEWALK CURB RAMPs	
EFFECTIVE: SEPTEMBER 2014	
 MONTANA DEPARTMENT OF TRANSPORTATION	

# PARALLEL PUBLIC SIDEWALK CURB RAMPS



## NEW CONSTRUCTION REQUIREMENTS:

1. THE MINIMUM LENGTH OF THE LANDING (DIMENSION "L" ABOVE) IS 5 FEET [1525 mm].
2. THE DESIRABLE SLOPE FOR THE CURB RAMPS IS 5% (1:20) OR FLATTER. THE MAXIMUM CURB RAMP SLOPE IS 8.3% (1:12).
3. THE DESIRABLE CROSS SLOPE OF THE SIDEWALK, RAMP, OR LANDING IS 1.5% (1:66.7). THE MAXIMUM CROSS SLOPE OF THE SIDEWALK, RAMP, OR LANDING IS 2% (1:50).
4. PROVIDE DETECTABLE WARNING DEVICES ON THE BOTTOM 2 FEET [610 mm] OF EACH LANDING AS SHOWN ABOVE. SEE DETAIL DRAWING NUMBER 608-40 FOR DETECTABLE WARNING DEVICES DETAILS.

## REQUIREMENTS FOR ALTERATIONS TO EXISTING FACILITIES:


NOTE: WHEREVER POSSIBLE, ALTER EXISTING FACILITIES TO COMPLY WITH THE NEW CONSTRUCTION REQUIREMENTS.

1. THE DESIRABLE LENGTH OF THE LANDING (DIMENSION "L" ABOVE) IS 5 FEET [1525 mm]. THE MINIMUM LANDING LENGTH IS 4 FEET [1220 mm].
2. THE MAXIMUM CURB RAMP SLOPE IS 10% (1:10), PROVIDED THE RISE (DIMENSION "Y" ABOVE) IS 6 INCHES [150 mm] OR LESS. AN 8.3% (1:12) OR FLATTER SLOPE IS DESIRABLE.
3. THE DESIRABLE CROSS SLOPE OF THE SIDEWALK, RAMP, OR LANDING IS 1.5% (1:66.7). THE MAXIMUM CROSS SLOPE OF THE SIDEWALK, RAMP, OR LANDING IS 2% (1:50).
4. PROVIDE DETECTABLE WARNING DEVICES ON THE BOTTOM 2 FEET [610 mm] OF EACH LANDING AS SHOWN ABOVE. SEE DETAILED DRAWING NUMBER 608-40 FOR DETECTABLE WARNING DEVICES DETAILS.
5. WHERE EXISTING SITE DEVELOPMENT CONDITIONS PROHIBIT THE STRICT AND FULL COMPLIANCE OF ALL ADA CRITERIA, PROVIDE ACCESSIBILITY TO THE MAXIMUM EXTENT FEASIBLE.

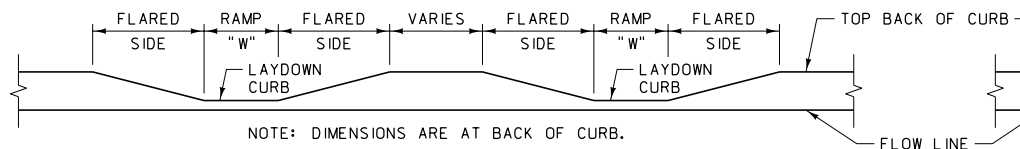
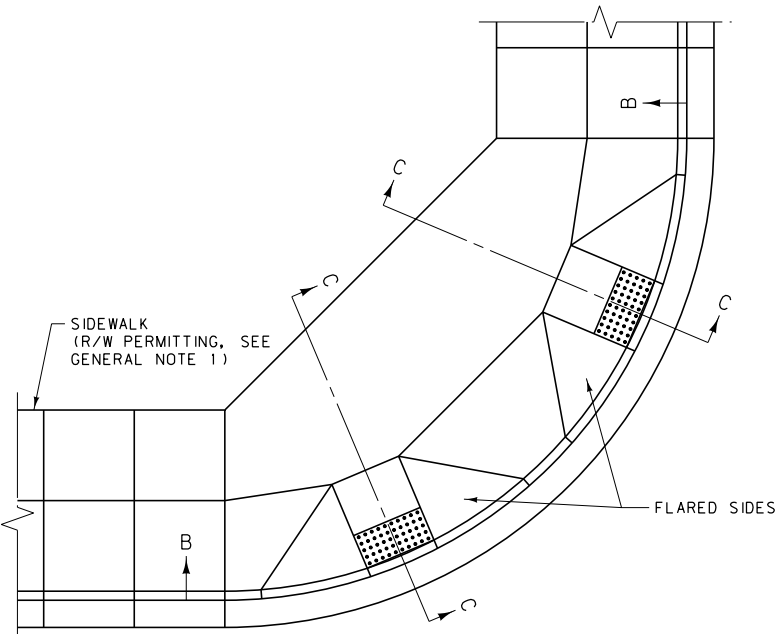
## GENERAL NOTES:

1. THE COST OF THE RETAINING WALL IS INCLUDED IN THE UNIT PRICE BID FOR CONCRETE SIDEWALK.
2. COMBINED (PARALLEL/PERPENDICULAR) PUBLIC SIDEWALK CURB RAMPS ARE TO MEET THE CRITERIA FOR BOTH THE PARALLEL AND PERPENDICULAR PUBLIC SIDEWALK CURB RAMPS. (SEE DETAILED DRAWING NUMBER 608-25 AND THIS DRAWING.)

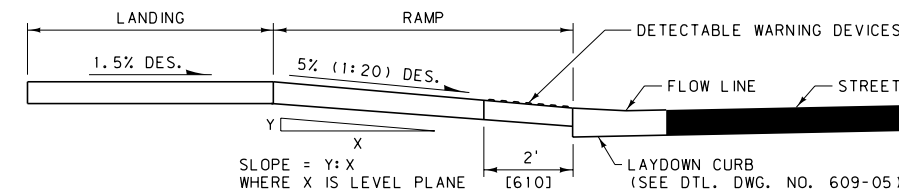
UNITS SHOWN IN BRACKETS [ ] ARE METRIC AND ARE IN MILLIMETERS (mm) UNLESS OTHER UNITS ARE SHOWN.

DETAILED DRAWING	
REFERENCE STANDARD SPEC. SECTION 608	DWG. NO. 608-30
PARALLEL PUBLIC SIDEWALK CURB RAMPS	
EFFECTIVE: SEPTEMBER 2014	
 MONTANA DEPARTMENT OF TRANSPORTATION	

DIAGONAL PERPENDICULAR PUBLIC SIDEWALK CURB RAMP



SECTION B-B



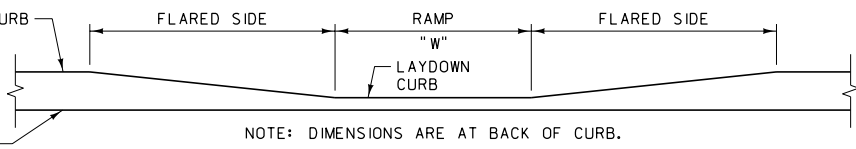
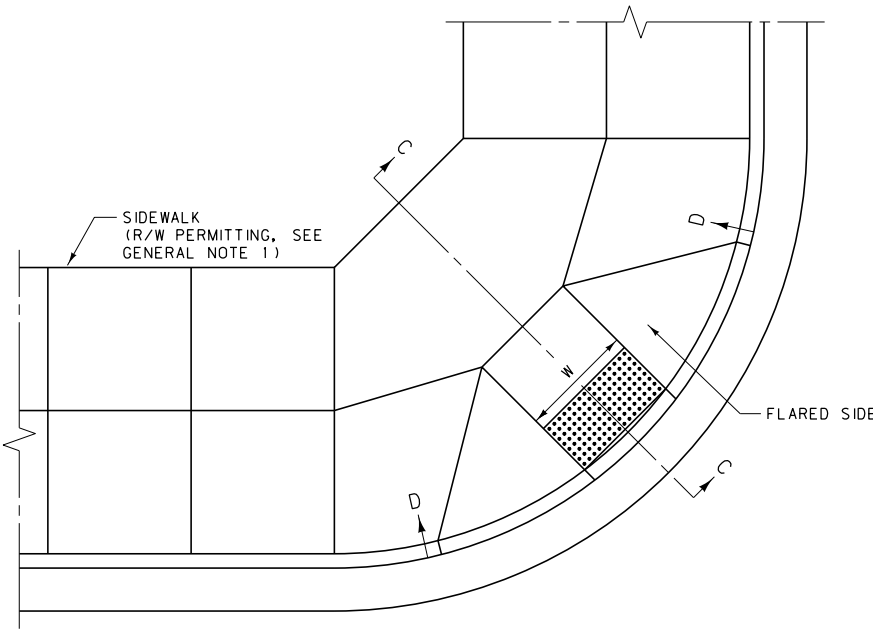
SECTION C-C

NEW CONSTRUCTION REQUIREMENTS:

1. THE DESIRABLE WIDTH OF THE CURB RAMP (DIMENSION "W" ABOVE) IS 5 FEET [1525 mm] OR WIDER. THE MINIMUM WIDTH ("W") IS 4 FEET [1220 mm].
2. THE DESIRABLE LENGTH OF THE LANDING AT THE TOP OF THE CURB RAMP IS 5 FEET [1525 mm]. THE MINIMUM LENGTH OF THE LANDING IS 4 FEET [1220 mm]. THE LANDING WIDTH IS EQUAL TO THE RAMP WIDTH.
3. THE DESIRABLE SLOPE FOR THE CURB RAMP IS 5% (1:20) OR FLATTER. THE MAXIMUM CURB RAMP SLOPE IS 8.3% (1:12).
4. THE DESIRABLE SLOPE FOR THE FLARED SIDE OF THE CURB RAMP IS 8.3% (1:12) OR FLATTER. THE MAXIMUM FLARED SIDE SLOPE IS 10% (1:10).
5. THE DESIRABLE CROSS SLOPE OF THE SIDEWALK, RAMP, OR LANDING IS 1.5% (1:66.7). THE MAXIMUM CROSS SLOPE OF THE SIDEWALK, RAMP, OR LANDING IS 2% (1:50).
6. PROVIDE DETECTABLE WARNING DEVICES ON THE BOTTOM 2 FEET [610 mm] OF EACH RAMP AS SHOWN ABOVE. SEE DETAILED DRAWING NUMBER 608-40 FOR DETECTABLE WARNING DEVICES DETAILS.

SINGLE DIAGONAL PERPENDICULAR PUBLIC SIDEWALK CURB RAMP

NOTE: SINGLE DIAGONAL PERPENDICULAR PUBLIC SIDEWALK CURB RAMPS SERVING TWO STREET CROSSING DIRECTIONS ARE NOT RECOMMENDED IN NEW CONSTRUCTION.



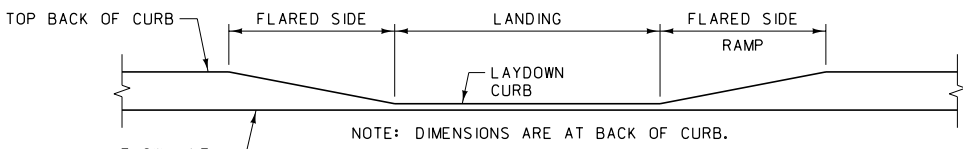
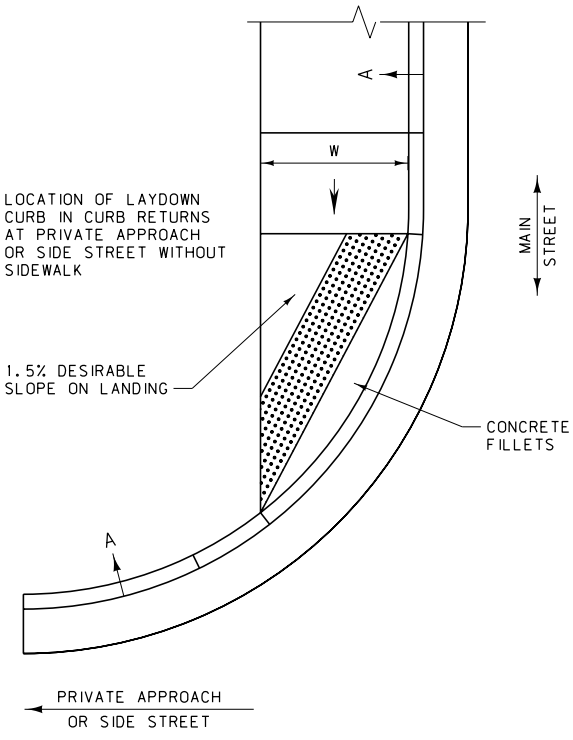
SECTION D-D

REQUIREMENTS FOR ALTERATIONS TO EXISTING FACILITIES:

NOTE: WHEREVER POSSIBLE, ALTER EXISTING FACILITIES TO COMPLY WITH THE NEW CONSTRUCTION REQUIREMENTS.

1. THE MINIMUM WIDTH OF THE CURB RAMP (DIMENSION "W" ABOVE) IS 4 FEET [1220 mm].
2. WHERE RIGHT-OF-WAY WIDTH IS INSUFFICIENT TO ACCOMMODATE A TOP LANDING OF 5 FEET [1525 mm], PROVIDE A TOP LANDING OF 4 FEET [1220 mm]. THE LANDING WIDTH IS EQUAL TO THE RAMP WIDTH.
3. THE MAXIMUM CURB RAMP SLOPE IS 8.3% (1:12), PROVIDED THE RISE (DIMENSION "Y" ABOVE) IS 6 INCHES [150 mm] OR LESS. A 7.5% (1:13.3) OR FLATTER SLOPE IS DESIRABLE.
4. THE MAXIMUM FLARED SIDE SLOPE IS 10% (1:10).
5. THE DESIRABLE CROSS SLOPE OF THE SIDEWALK, RAMP, OR LANDING IS 1.5% (1:66.7). THE MAXIMUM CROSS SLOPE OF THE SIDEWALK, RAMP, OR LANDING IS 2% (1:50).
6. PROVIDE DETECTABLE WARNING DEVICES ON THE BOTTOM 2 FEET [610 mm] OF EACH RAMP AS SHOWN ABOVE. SEE DETAILED DRAWING NUMBER 608-40 FOR DETECTABLE WARNING DEVICES DETAILS.
7. WHERE EXISTING SITE DEVELOPMENT CONDITIONS PROHIBIT THE STRICT AND FULL COMPLIANCE OF ALL ADA CRITERIA, PROVIDE ACCESSIBILITY TO THE MAXIMUM EXTENT FEASIBLE.

PRIVATE APPROACH SIDEWALK CURB RAMP



SECTION A-A

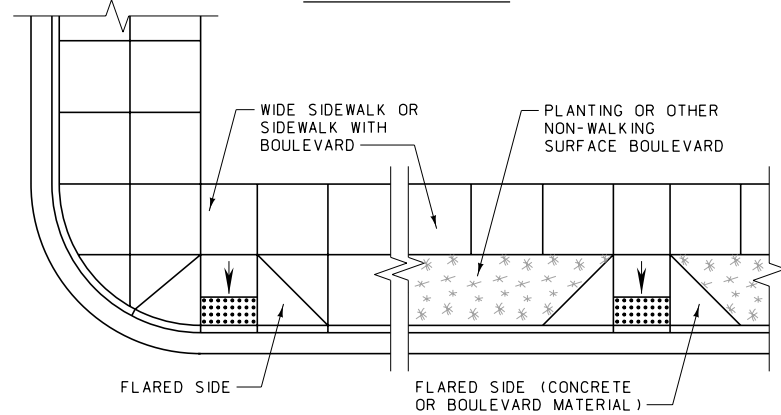
GENERAL NOTES:

1. WHERE THE RIGHT-OF-WAY WILL NOT ACCOMMODATE A DIAGONAL PERPENDICULAR PUBLIC SIDEWALK CURB RAMP AND LANDING MEETING THESE REQUIREMENTS, USE ANOTHER RAMP DESIGN.
2. TRIM PRECAST DETECTABLE WARNING DEVICES PANELS TO FIT ON PRIVATE APPROACH SIDEWALK CURB RAMPS AS SHOWN ABOVE.

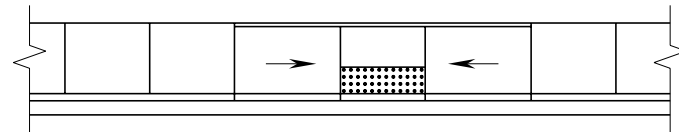
UNITS SHOWN IN BRACKETS [ ] ARE METRIC AND ARE IN MILLIMETERS (mm) UNLESS OTHER UNITS ARE SHOWN.

DETAILED DRAWING	
REFERENCE	DWG. NO.
STANDARD SPEC.	608-35
SECTION 608	
DIAGONAL PERPENDICULAR PUBLIC SIDEWALK CURB RAMPS	
EFFECTIVE: SEPTEMBER 2014	
MDT MONTANA DEPARTMENT OF TRANSPORTATION	

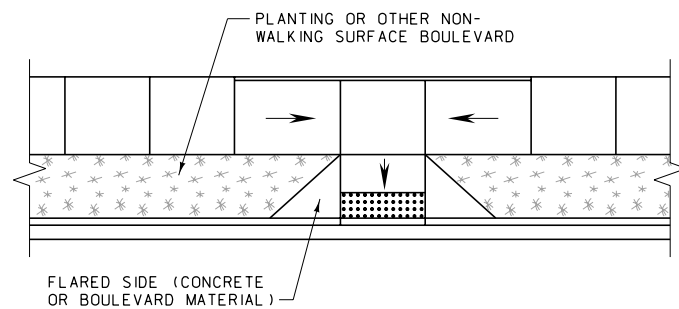
## CURB RAMP TYPES



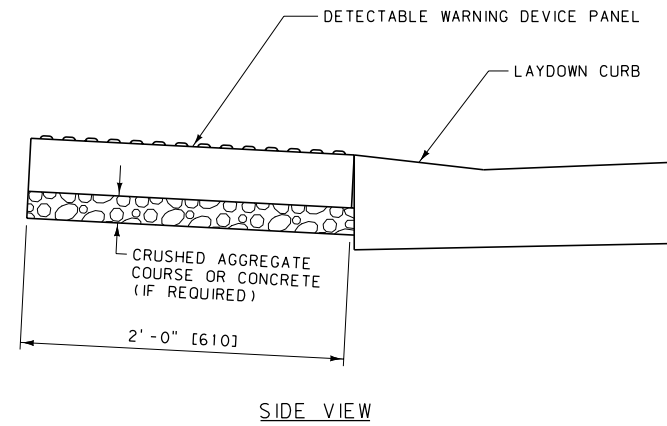
PERPENDICULAR PUBLIC SIDEWALK CURB RAMP  
(SEE DETAILED DRAWING NUMBER 608-25 FOR  
ADDITIONAL DETAILS)



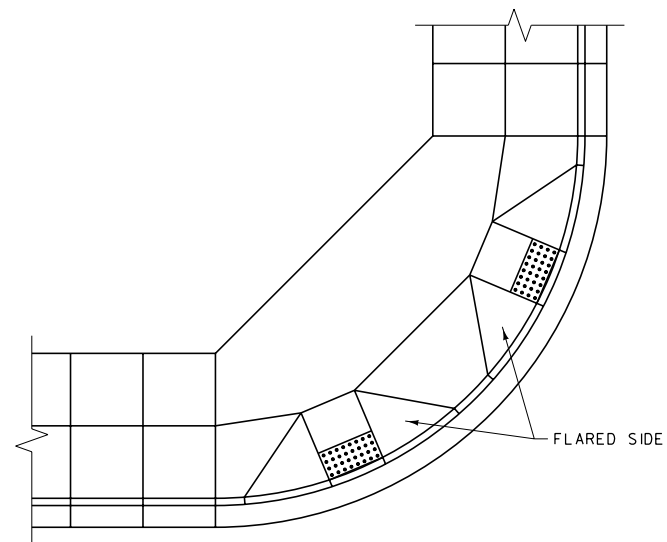
PARALLEL PUBLIC SIDEWALK CURB RAMP  
(SEE DETAILED DRAWING NUMBER 608-30  
FOR ADDITIONAL DETAILS)



COMBINED (PARALLEL/PERPENDICULAR) PUBLIC  
SIDEWALK CURB RAMP (SEE DETAILED DRAWING  
NUMBERS 608-25 AND 608-30 FOR ADDITIONAL  
DETAILS)

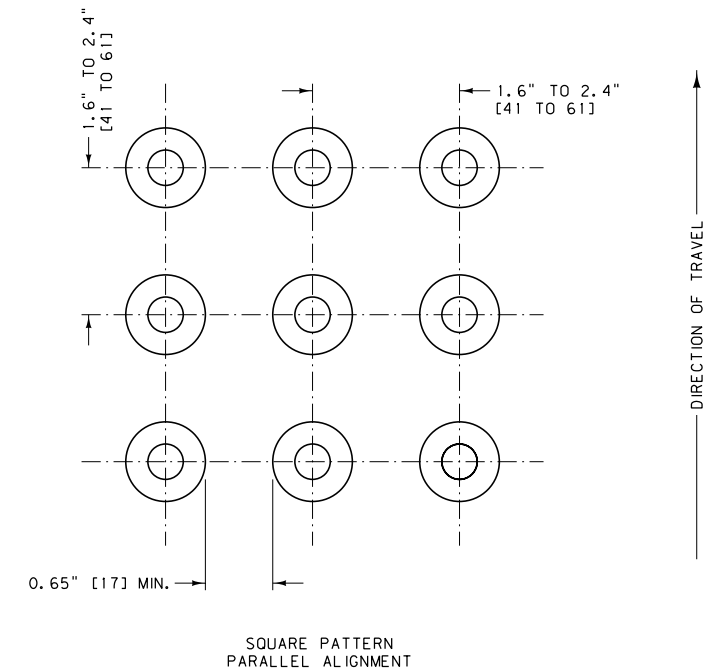


SIDE VIEW

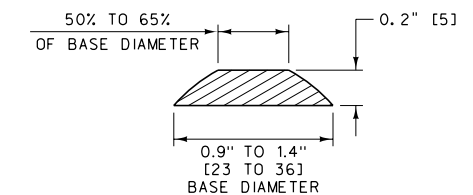


DIAGONAL PERPENDICULAR PUBLIC SIDEWALK  
CURB RAMP (SEE DETAILED DRAWING NUMBER  
608-35 FOR ADDITIONAL DETAILS)

## DETECTABLE WARNING DEVICE ALIGNMENT AND PATTERN



## DOMES PROFILE



## CONSTRUCTION REQUIREMENTS:

1. INSTALL DETECTABLE WARNING DEVICES THAT EXTEND THE FULL WIDTH OF THE RAMP, 2 FEET [610] IN DEPTH.
2. INSTALL THE DOME PANEL ADJACENT TO THE BACK OF CURB. IF THE PANEL IS OFFSET, LOCATE THE EDGE OF THE PANEL AS CLOSE AS PRACTICABLE TO THE BACK OF CURB.
3. IF THE DETECTABLE WARNING DEVICE IS EMBEDDED IN CONCRETE, INSTALL SO THE TOP OF THE PANEL IS FLUSH WITH THE ADJACENT CONCRETE AND THE DOMES WILL PROTRUDE ABOVE THE ADJACENT SURFACE.
4. ENSURE A UNIFORM GRADE ON THE DETECTABLE WARNING DEVICES FREE OF SAGS AND IRREGULAR EDGES.
5. USE DETECTABLE WARNING DEVICES - TYPE I FOR NEW SIDEWALK CONSTRUCTION. DETECTABLE WARNING DEVICES - TYPE I ARE CAST DIRECTLY INTO SIDEWALK. USE DETECTABLE WARNING DEVICES - TYPE II FOR RETROFITS ON EXISTING SIDEWALKS WHERE NEW CONCRETE IS NOT BEING PLACED. DETECTABLE WARNING DEVICES - TYPES II ARE SURFACE APPLIED ON THE SIDEWALK. MEET THE DEPARTMENT'S REQUIREMENTS ON THE QUALIFIED PRODUCTS LIST (QPL) FOR DETECTABLE WARNING DEVICES - TYPE I AND FOR DETECTABLE WARNING DEVICES - TYPE II.
6. USE DETECTABLE WARNING DEVICES THAT VISUALLY CONTRAST WITH ADJACENT WALKWAY SURFACES.
7. ENSURE THE ALIGNMENT AND PATTERN OF THE DOMES IS CONTINUED ACROSS ANY JOINTS BETWEEN DETECTABLE WARNING DEVICE PANELS

UNITS SHOWN IN BRACKETS [ ] ARE  
METRIC AND ARE IN MILLIMETERS (mm)  
UNLESS OTHER UNITS ARE SHOWN.

DETAILED DRAWING	
REFERENCE STANDARD SPEC. SECTION 608	DWG. NO. 608-40
DETECTABLE WARNING DEVICES	
EFFECTIVE: SEPTEMBER 2014	
<b>MDT</b> MONTANA DEPARTMENT OF TRANSPORTATION	