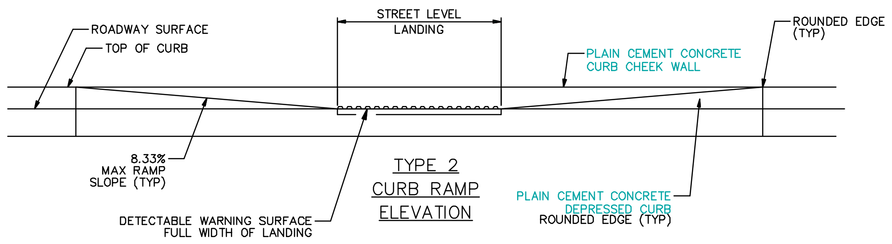
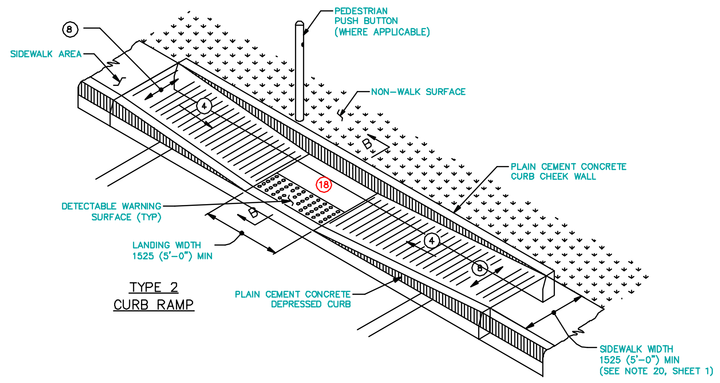
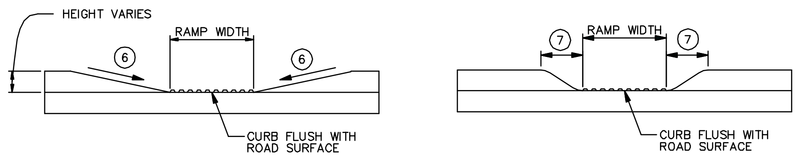


TYPE 2
CURB RAMP
ELEVATION

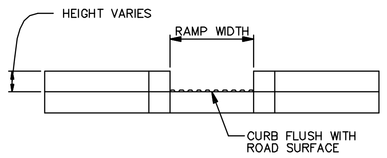


TYPE 2
CURB RAMP

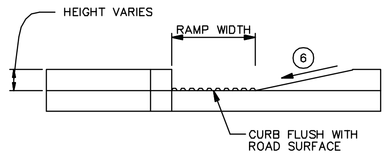


FLARED
TRANSITION

ROLLED
TRANSITION

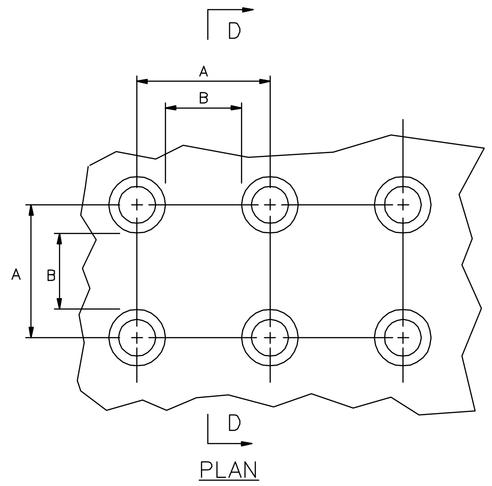


VERTICAL
TRANSITION

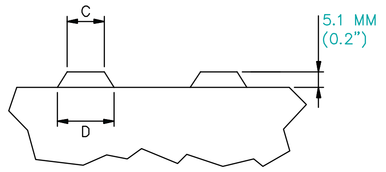


COMBINATION
TRANSITION

TYPICAL ELEVATIONS
FOR DEPRESSED CURBS



PLAN



SECTION D–D

TRUNCATED DOME DIMENSIONS		
DIM	MIN mm (inch)	MAX mm (inch)
A	41 (1.6")	61 (2.4")
B	17 (0.65")	38 (1.5")
C	(13)	(13)
D	23 (0.9")	36 (1.4")

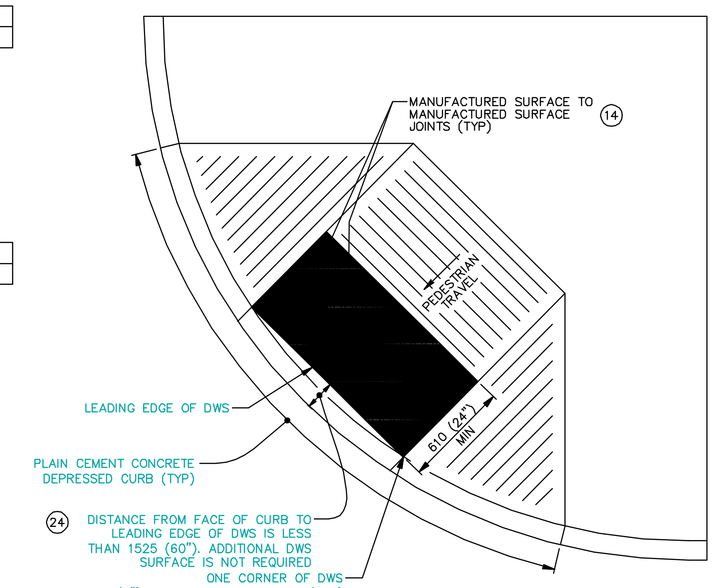
DETECTABLE WARNING SURFACE (DWS)
TRUNCATED DOME DETAILS

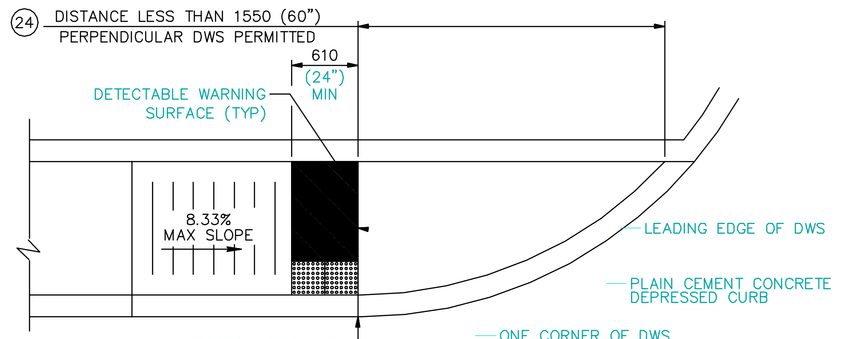
(13) THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.

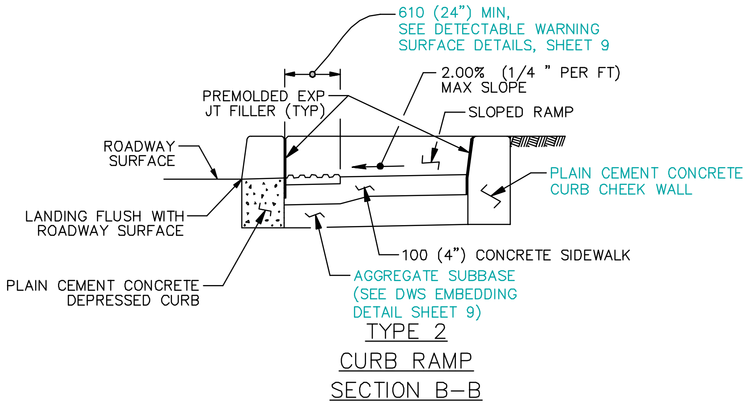
(14) CONSTRUCTION JOINTS ARE SHOWN TO DEPICT A 90 DEGREE GRID. ACTUAL SIZE AND SHAPE MAY VARY.

(24) ONE CORNER OF THE DWS MUST BE WITHIN 200 (8") OF THE FACE OF CURB. NO OTHER POINT ON THE LEADING EDGE OF THE DWS MAY BE MORE THAN 1550 (60") AWAY FROM THE FACE OF CURB.

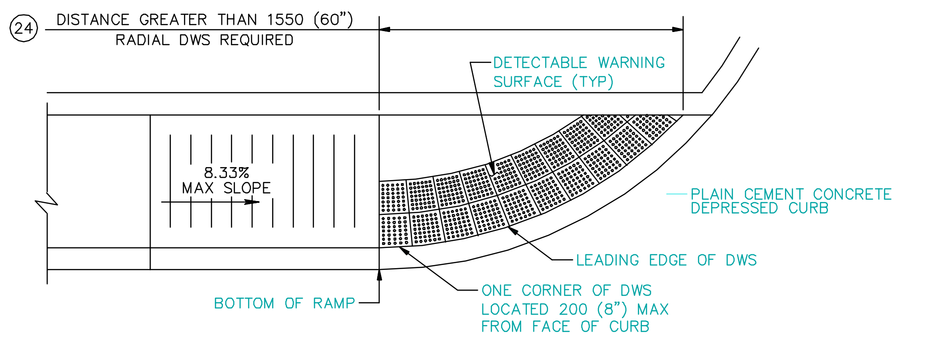
SEE NOTE 3 ON SHEET 1 CONCERNING DIAGONAL RAMPS



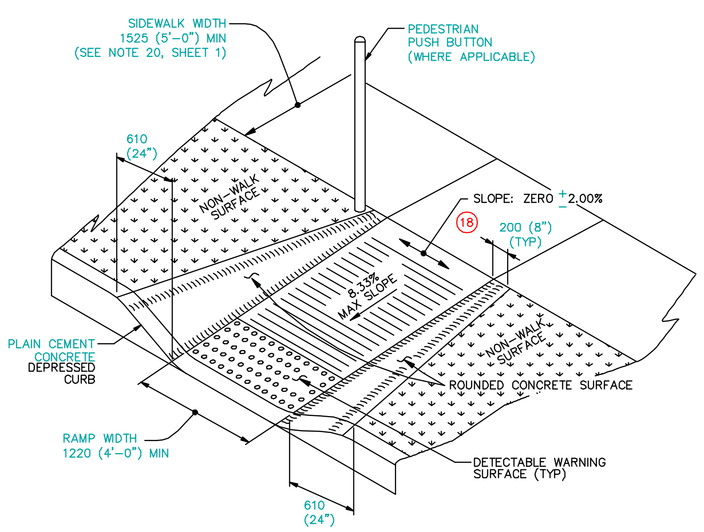




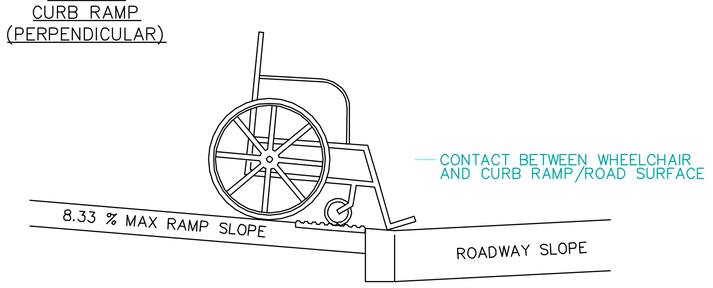
TYPE 2
CURB RAMP
SECTION B–B



DETECTABLE WARNING SURFACE (DWS)
ON CURVED SURFACES

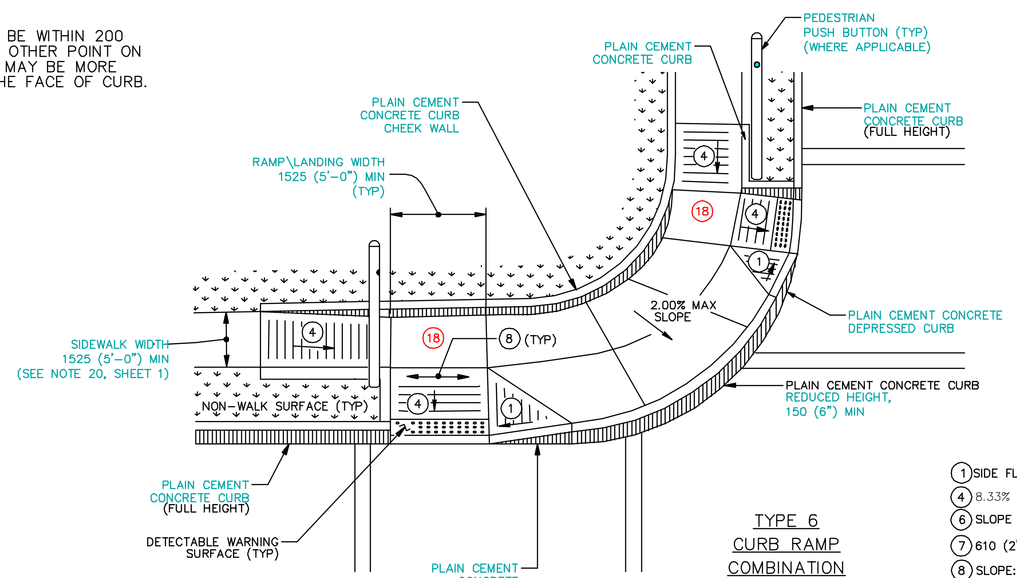


ALTERNATE
TYPE 4A
CURB RAMP
(PERPENDICULAR)



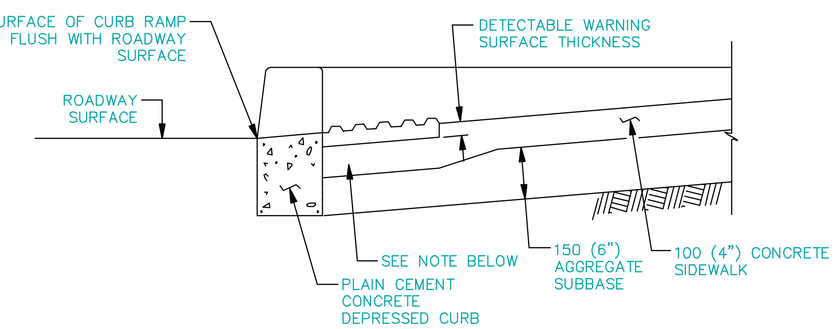
ALGEBRAIC DIFFERENCES BETWEEN ROADWAY SLOPE AND CURB RAMP SLOPE GREATER THAN 11% NOT PERMITTED.

CHANGE OF GRADE
LIMITATIONS



TYPE 6
CURB RAMP
COMBINATION

(1) SIDE FLARES 10.00% MAX SLOPE
(4) 8.33% MAX RAMP SLOPE
(6) SLOPE VARIES SEE RAMP DETAILS
(7) 610 (2'-0") ROLLED TRANSITION
(8) SLOPE: ZERO ? 2.00%
(18) CURB RAMPS REQUIRE A 1220 (4'-0") MINIMUM LANDING WITH A MAXIMUM SLOPE OF 2.00% IN ALL DIRECTIONSWHERE PEDESTRIANS PERFORM TURNING MANEUVERS.SEE DETAILS FOR LOCATIONS.



NOTE: CONSTRUCT NOTCH AS SHOWN TO PROVIDE FULL THICKNESS SIDEWALK UNDER DETECTABLE WARNING SURFACE.

DETECTABLE WARNING SURFACE
EMBEDDING DETAIL

NOTES

1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTIONS 350, 409, 630, 676 AND 694.
2. PROVIDE EXPANSION JOINT MATERIAL 13 (1/2") THICK WHERE CURB RAMP ADJOINS ANY RIGID PAVEMENT, SIDEWALK OR STRUCTURE WITH THE TOP OF JOINT FILLER FLUSH WITH ADJACENT CONCRETE SURFACE.
3. CONSTRUCT DIAGONAL CURB RAMPS WITH A 1220 (4'–0") CLEARSPACE OUTSIDE OF TRAVEL LANES AT THE BOTTOM OF THE RAMP. IF DIAGONAL CURB RAMPS ARE PROVIDED AT MARKED CROSSINGS, THE 1220 (4'–0") CLEAR SPACE IS LOCATED WTHIN THE MARKINGS AND OUTSIDE OF THE TRAVEL LANES. SEE SHEET 7 FOR CROSSWALK DETAILS.
4. SEAL JOINTS WITH AN APPROVED SEALING MATERIAL.
5. PROVIDE SLIP RESISTANT TEXTURE ON CURB RAMP BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP. EXTEND TEXTURE THE FULL WIDTH AND LENGTH OF THE CURB RAMP INCLUDING FLARED SIDE RAMPS.
6. MODIFY CONSTRUCTION DETAILS TO ADAPT DIMENSIONS TO EXISTING CURB HEIGHTS WHERE THE CURB IS LESS THAN THE STANDARD 200 (8") HEIGHT.
7. CURB RAMP AND SIDE FLARE LENGTHS ARE VARIABLE AND BASED ON CURB HEIGHT AND THE SIDEWALK SLOPE.
8. IT MAY BE NECESSARY TO LIMIT THE RUN OF A PARALLEL OR PERPENDICULAR CURB RAMP IN ORDER TO AVOID CHASING GRADE INDEFINITELY WHEN TRAVERSING THE HEIGHT OF CURB. RAMP LENGTH NOT TO EXCEED 4500 (15'–0"), ADJUST RAMP SLOPE AS NEEDED TO PROVIDE ACCESS TO THE MAXIMUM EXTENT POSSIBLE.
9. MEASURE AND PAY FOR DEPRESSED CURB IN ACCORDANCE WITH SECTION 630.4.
10. THE DETAILS DEPICT PEDESTRIAN PUSH BUTTON POLES TO ILLUSTRATE THE PREFERRED PLACEMENT OF PEDESTRIAN PUSH BUTTONS. PEDESTRIAN PUSH BUTTONS ARE TO BEINSTALLED WHERE APPLICABLE.
11. CONSTRUCT BUILT–UP CURB RAMP OF BITUMINOUS MATERIAL AS INDICATED, INCLUDING SURFACE PREPARATION AND TACK COAT, AS REQUIRED.
12. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED. US CUSTOMARY UNITS IN () PARENTHESIS.
13. ALIGN DETECTABLE WARNING DOMES ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF THE RAMP AND PERPENDICULAR TO CURB.
14. PROVIDE DETECTABLE WARNING SURFACES (DWS) 610 (24") MINIMUM (IN THE DIRECTION OF PEDESTRIAN TRAVEL) ACROSS FULL WIDTH OF RAMP AT THE GRADE BREAK NEAR STREET EDGE. PROVIDE DWS THAT CONTRAST VISUALLY WITH ADJACENT WALKWAY SURFACES, EITHER LIGHT–ON–DARK OR DARK–ON–LIGHT FOR THE FULL WIDTH OF RAMP.
15. FOR NEW CONSTRUCTION, DO NOT EXCEED 2.00% CROSS SLOPE ON THE CURB RAMP OR ACCESSIBLE ROUTE.
16. FOR NEW CONSTRUCTION AND ALTERATIONS, CONSTRUCT CURB RAMP AND FLARE SLOPES WITH THE FLATTEST SLOPE POSSIBLE. THE SLOPES INDICATED IN THE DETAILS SHOW THE MAX SLOPE ALLOWABLE. SLOPES THAT EXCEED THOSE INDICATED IN THE DETAILS, OR CONTRACT DOCUMENTS AS APPLICIABLE, WILL NOT BE ACCEPTED AND WILL BE RECONSTRUCTED.
17. THE IMMEDIATE ADJOINING SURFACE AT THE BOTTOM AND TOP OF CURB RAMPS IS NOT TO EXCEED ROADWAY PROFILE SLOPE WHEN LOCATED ADJACENT TO THE ROADWAY. IN AREAS WHERE THE ADJOINING SURFACE IS NOT ADJACENT TO THE ROADWAY, THE LONGITUDINAL SLOPE IS NOT TO EXCEED 5.00%. FOR ALL LOCATIONS DO NOT EXCEED 2.00% CROSSLOPE. FOR LOCATIONS THAT REQUIRE A TURNING MANEUVER, THE MAXIMUM SLOPE IS 2.00% IN ALL DIRECTIONS. THE CHANGE IN GRADE AT THE BOTTOM OF THE CURB RAMP AND ADJOINING ROAD SURFACE IS NOT TO EXCEED AN ALGEBRAIC DIFFERENCE OF 11.00%. SEE SHEET 8 FOR DETAILS.
18. THE CONSTRUCTION STANDARDS DEPICTED ARE MOST APPROPRIATE FOR NEW CONSTRUCTION. ALL CONSTRUCTION MUST MEET THE STANDARDS CONTAINED HEREIN UNLESS OTHERWISE NOTED OR DIRECTED.
19. ALL SLOPES ARE MEASURED WITH RESPECT TO A LEVEL PLANE. THEREFORE, THE LENGTH OF RAMP IS NOT SOLELY DEPENDANT ON THE HEIGHT OF CURB. (FOR EXAMPLE, A 150 (6") CURB DOES NOT NECESSARILY MEAN A RAMP LENGTH OF 1800 (6–0") FOR A 12:1 (1:12) SLOPE.
20. SIDEWALK WIDTH MAY BE REDUCED TO 1220 (4'–0"), WHEN PASSING AREAS 1525 X 1525 (5'–0" X 5'–0") ARE PROVIDED EVERY 61 METERS (200').
21. THE TRAVEL LANE IS DEFINED BY THE OUTSIDE EDGE OF THE WHITE PAVEMENT MARKING LINE. IF A WHITE PAVEMENT MARKING LINE DOES NOT EXIST, THE TRAVEL LANE IS DEFINED BY THE CONTRACT DOCUMENTS.
22. DEPRESSED CURB FOR CURB RAMPS MUST BE FLUSH TO ADJACENT ROADWAY. EDGE OF ROAD ELEVATIONS AT THE FLOW LINE SHALL BE GRADEDTO ENSURE POSITIVE DRAINAGE AND PREVENT PONDING.

DRAFT -
NOT FOR CONSTRUCTION

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	TAX MAP PARCEL NO.:	CONSTRUCTION DETAILS – ADA
MUNICIPAL FILE NO.:	TOTAL AREA: / TOTAL LOTS:	*WILLIAMS LANE IMPROVEMENTS*
	DATE: / SCALE: AS NOTED	HATBORO BOROUGH, MONGOMERY COUNTY, PENNSYLVANIA

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JOB NO.: 2008-02133
SHEET NO.: X OF

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