

Appendix A

New Mexico Department of Transportation ADA Directive



Subject: Infrastructure Design Directive
IDD-2015-01 (ADA Standard Drawings)

Date: January 23, 2015

To: Office of Infrastructure Divisions
District Offices
Transportation Design Community

From: Elias Archuleta, P.E. 
Chief Engineer
Office of Infrastructure Division

New Mexico Department of Transportation has established Standard Drawings (attached) for Americans with Disabilities Act (ADA) for use on NMDOT facilities. These Standard Drawings provide guidance for compliance with the PROPOSED Accessibility Guidelines for Pedestrian facilities in the Public Right-Of-Way (PROWAG). These guidelines shall apply to all new and altered Pedestrian Access Routes (PAR). These Standard Drawings are intended to provide guidance for the detailed design of ADA facilities and are not a substitute for detailed construction drawings. Standard Drawings PAD-001-7/10, PAD-001-8/10 and PAD-001-9/10 are no longer applicable.

General Office staff is to utilize the \\aspen\pseshare drive to access the Directive. District and Regional Office staff can access the Directive utilizing the appropriate District drive as indicated below:

District 1	\\d1vnxesvr01\d1design
District 2	\\d2vnxesvr01\d2public\public
District 3	\\d3vnxesvr01\D3Public\District 3\PS&E_Section
District 4	\\d4vnxesvr01\d4public\d4public
District 5	\\d5vnxesvr01\d5design
District 6	\\d6vnxesvr01\D6Public\nmdot_public

Furthermore, the Directive will reside in the Department's external website. The web address is:

<http://www.dot.state.nm.us>

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GENERAL NOTES:

- NMDOT IS RECOGNIZED AS A TITLE II PUBLIC ENTITY UNDER THE AMERICANS WITH DISABILITIES ACT (ADA), OF 1990 (PUBLIC LAW 101-336). A TITLE II ENTITY IS DEFINED AS ANY STATE OR LOCAL GOVERNMENT ENTITY AND PROHIBITS DISCRIMINATION ON THE BASIS OF DISABILITY. THE ADA EXTENDS THE PRINCIPLES OF SECTION 504 OF THE REHABILITATION ACT, OF 1973, AS AMENDED, TO PROTECT PERSONS WITH DISABILITIES IN ALL PUBLIC FACILITIES AND PROGRAMS IRRESPECTIVE OF THE FUNDING SOURCE.
- THESE DRAWINGS PROVIDE GUIDANCE FOR COMPLIANCE WITH THE PROPOSED ACCESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES IN THE PUBLIC RIGHT-OF-WAY (PROWAG), JULY 26, 2011, OR LATEST EDITION. THESE GUIDELINES SHALL APPLY TO ALL NEW AND ALTERED PEDESTRIAN ACCESS ROUTES (PAR).
- REFER TO CONSTRUCTION PLANS FOR THE DETAILED LAYOUTS AND DETAILS.
- PEDESTRIAN ACCESS ROUTES (PAR) SHALL BE FIRM, STABLE, AND SLIP RESISTANT. PROVIDE SLIP RESISTANT TEXTURE ON SIDEWALKS AND CURB RAMPS BY BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP AND/OR PERPENDICULAR TO PEDESTRIAN TRAVEL. EXTEND TEXTURE THE FULL WIDTH AND LENGTH OF THE CURB RAMP INCLUDING SIDE FLARES. DO NOT SCORE OR MAKE GROOVES IN SLOPED SURFACE. LINES SHOWN ON STANDARD DETAILS ARE FOR ILLUSTRATIONS ONLY.
- VERTICAL SURFACE DISCONTINUITIES SHALL BE 0.5 INCHES MAXIMUM. VERTICAL DISCONTINUITIES BETWEEN 0.25 INCHES AND 0.5 INCHES SHALL BE BEVELED WITH A SLOPE NOT STEEPER THAN 50 PERCENT. THE BEVEL SHALL BE APPLIED ACROSS THE ENTIRE VERTICAL SURFACE DISCONTINUITY.
- HORIZONTAL OPENINGS IN GRATINGS AND JOINTS SHALL NOT PERMIT PASSAGE OF A SPHERE MORE THAN 0.5 INCHES IN DIAMETER. ELONGATED OPENINGS IN GRATES SHALL BE PLACED SO THAT THE LONG DIMENSION IS PERPENDICULAR TO THE DOMINANT DIRECTION OF TRAVEL.
- PROVIDE EXPANSION JOINT MATERIAL 0.5 INCHES THICK WHERE CURB RAMP ADJOINS ANY RIGID PAVEMENT, SIDEWALK OR STRUCTURE WITH THE TOP OF JOINT FILLER FLUSH WITH ADJACENT CONCRETE SURFACE.
- SEAL ALL JOINTS WITH AN APPROVED SEALING MATERIAL.
- INSTALL JOINTS WHERE CURB RAMPS, TURNING SPACES, FLARES, AND SIDEWALKS ABUT. ALL JOINTS AND TRANSITIONS SHALL BE FLUSH.
- VERTICAL WALLS OR HEADER CURBS ARE PERMITTED WHEN ADJACENT TO NON-WALK AREAS OR ELEVATION DIFFERENCES CANNOT BE ACCOMMODATED BY CURB RAMP FLARES OR GRADING. GRADE NON-WALK AREAS AT 3:1 OR FLATTER.
- CONSTRUCTION TOP / BOTTOM OF CURB TO BE FLUSH WITH ADJACENT SURFACES (CURB RAMPS, SIDEWALKS, AND FLARES). VERTICAL LIPS NOT PERMITTED AT THE BOTTOM OF CURB RAMP WHERE THE RAMP MEETS STREET LEVEL.

SIDEWALKS

- SIDEWALK, AND CURB AND GUTTER CONSTRUCTION SHALL BE IN ACCORDANCE WITH SERIAL 609-01-1/1.
- SIDEWALK CROSS SLOPE IS RECOMMENDED TO BE CONSTRUCTED FOR CROSS SLOPE OF 1.5% TYPICAL, BUT SHALL NOT EXCEED 2.0% CROSS SLOPE ON THE PEDESTRIAN ACCESS ROUTE (PAR).
- SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 5.0 FT, EXCLUSIVE OF THE WIDTH OF THE CURB RETURN.
EXCEPTION: WHERE SIDEWALK WIDTH NEEDS TO BE REDUCED TO NO LESS 4.0 FT, PASSING SPACES SHALL BE PROVIDED AT INTERVALS OF 200 FT MAXIMUM. PASSING SPACES SHALL BE 5.0 FT MINIMUM BY 5.0 FT MINIMUM.
- ANY SIGNS POSTS, UTILITY POLES, FIRE HYDRANTS, TRAFFIC SIGNALS, STREET FURNITURE, AND OTHER OBJECTS SHALL NOT REDUCE THE CLEAR WIDTH TO LESS THAN 4.0 FT.
- THE CLEAR WIDTH OF PEDESTRIAN ACCESS ROUTES (PAR) WITHIN MEDIANS AND PEDESTRIAN REFUGE ISLANDS SHALL BE 5.0 FT MINIMUM.

CURB RAMPS

- FOR NEW CONSTRUCTION AND ALTERATIONS, CONSTRUCT CURB RAMP AND FLARE SLOPES WITH THE FLATTEST SLOPE FEASIBLE. THE MAXIMUM SLOPE ALLOWABLE IS INDICATED IN NOTE 18 OF THE CURB RAMP STANDARD DETAILS. SLOPES THAT EXCEED THOSE INDICATED IN THE CURB RAMP STANDARD DETAILS, OR CONSTRUCTION PLANS, WILL NOT BE ACCEPTED AND WILL BE REMOVED AND RECONSTRUCTED.
- RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.3 % MAX (RECOMMENDED 7.0%) BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15.0 FT TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAX LENGTH, THE RUNNING SLOPE OF THE CURB RAMP SHALL BE EXTENDED AS FLAT AS MAXIMUM EXTENT PRACTICABLE.
- CONSTRUCT THE CLEAR WIDTH OF CURB RAMP RUNS (EXCLUDING ANY FLARED SIDES), BLENDED TRANSITIONS, AND TURNING SPACES AS TYPICAL 5.0 FT X 5.0 FT AND MINIMUM 4.0 FT X 4.0 FT. CLEAR SPACE BEYOND THE CURB FACE, WITHIN THE WIDTH OF THE CROSSWALK AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE.
- CURB RAMP AND SIDE FLARE LENGTHS ARE VARIABLE AND BASED ON CURB HEIGHT AND THE SIDEWALK SLOPE.
- THE CHANGE IN GRADE AT THE BOTTOM OF THE CURB RAMP AND ADJOINING ROAD SURFACE SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 13.3%. THE COUNTER SLOPE OF THE GUTTER OR ROAD AT THE FOOT OF A CURB RAMP RUNS, TURNING SPACE OR BLENDED TRANSITION IS NOT TO EXCEED 5.0%.
- CONSTRUCT CURB RAMPS FLUSH TO ADJACENT ROADWAY. GRADE EDGE OF ROAD ELEVATIONS AT THE FLOW LINE TO ENSURE POSITIVE DRAINAGE AND PREVENT PONDING. FOR LEVEL TURNING SPACES BEHIND CURB, ADJUST SLOPES TO PROVIDE POSITIVE DRAINAGE.
- GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMPS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE CURB RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF CURB RAMP RUNS AND TURNING SPACES. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.
- ALL SLOPES ARE MEASURED WITH RESPECT TO A LEVEL PLANE. THEREFORE, THE LENGTH OF CURB RAMP IS NOT SOLELY DEPENDENT ON THE HEIGHT OF CURB. (FOR EXAMPLE, A 6" CURB DOES NOT NECESSARILY MEAN A RAMP LENGTH OF 6.0 FT FOR AN 8.3% SLOPE).

CROSSWALKS

- PROVIDE A SEPARATE CURB RAMP FOR EACH MARKED OR UNMARKED CROSSWALK. CURB RAMP LOCATIONS SHALL BE PLACED WITHIN THE WIDTH OF THE MARKED OR UNMARKED CROSSWALK AS SHOWN IN THE CONSTRUCTION PLANS.

DETECTABLE WARNING

- DETECTABLE WARNING SURFACES (DWS) CONSISTING OF TRUNCATED DOMES SHALL BE UTILIZED WHERE CURB RAMPS, BLENDED TRANSITIONS, OR TURNING SPACE PROVIDE A FLUSH PEDESTRIAN CONNECTION TO THE STREET OR WHERE THE PEDESTRIAN ACCESS ROUTE (PAR) CROSSES A STREET, ALLEY, TRAFFIC ISLAND, MEDIAN, OR RAILROAD. DETECTABLE WARNING SURFACES (DWS) WILL NOT BE INSTALLED AT RESIDENTIAL DRIVEWAYS. DETECTABLE WARNING SURFACE MUST BE PROVIDED AT THE JUNCTION BETWEEN THE PAR AND COMMERCIAL DRIVEWAYS THAT ARE STOP OR YIELD CONTROLLED OR ARE CONTROLLED BY A SIGNAL.
- DETAILS OF DETECTABLE WARNING SURFACE ARE SHOWN IN CONTRACT PLANS AND SHEET 608-001-8/12 OF THE STANDARD DRAWINGS.

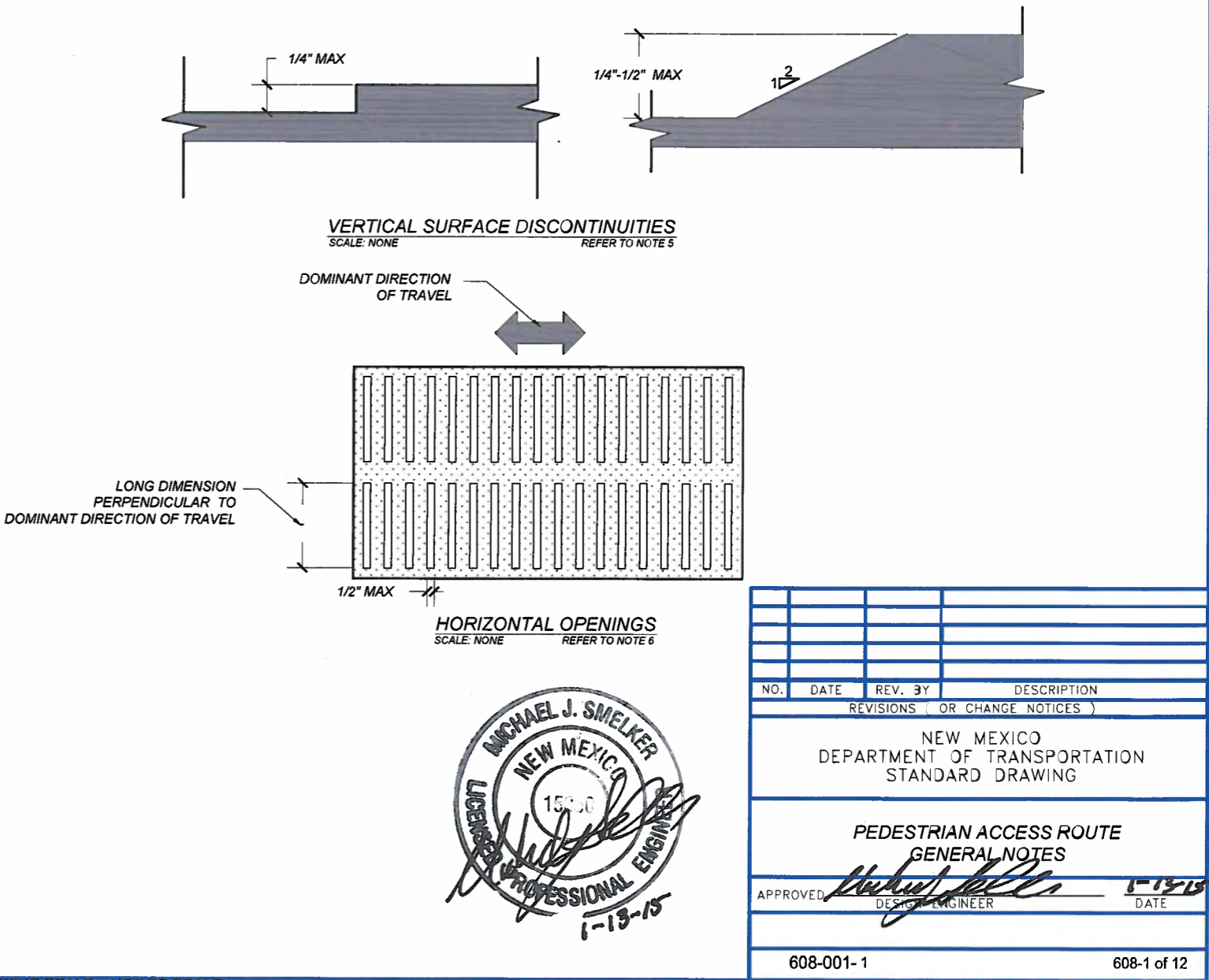
ACCESSIBLE PEDESTRIAN SIGNALS (APS) AND PEDESTRIAN PUSHBUTTONS


- FOR ALTERATION PROJECTS, PROVIDE ACCESS TO EXISTING PEDESTRIAN PUSHBUTTONS TO THE MAXIMUM EXTENT PRACTICABLE. INSTALL PEDESTRIAN STUB POLES, WHERE APPLICABLE, SO AS NOT TO CREATE PEDESTRIAN OBSTRUCTIONS. REFER TO THE MUTCD FOR FURTHER GUIDANCE.
- PEDESTRIAN SIGNAL PUSH BUTTONS SHALL COMPLY WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND LOCATED WITHIN A HORIZONTAL REACH OF 0" TO 10" AND SHALL BE WITHIN 36" TO 46" ABOVE THE SIDEWALK SURFACE.
- PEDESTRIAN SIGNAL SHALL HAVE 4FTx4FT MIN TURNING SPACE TO PROVIDE ACCESS TO PUSH BUTTONS.

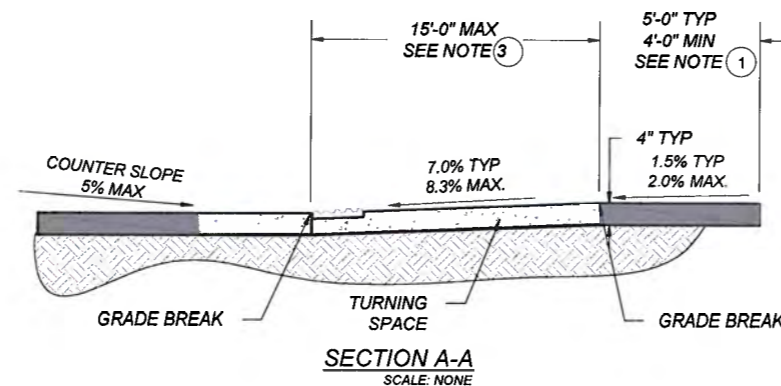
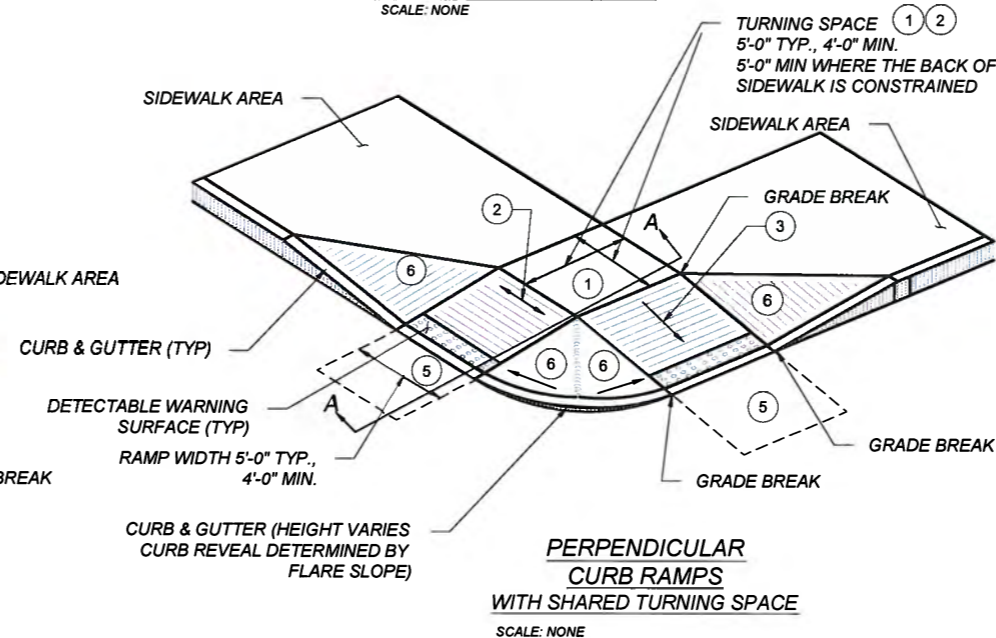
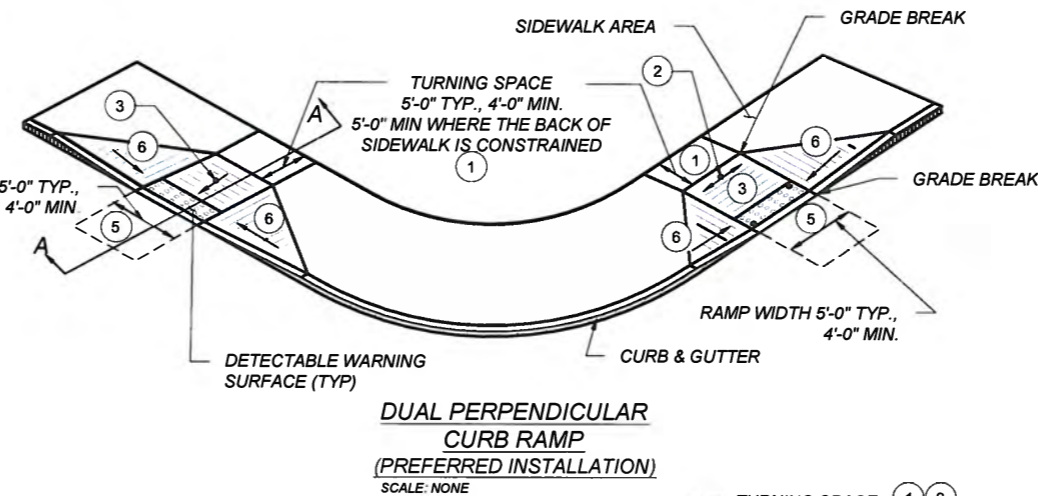
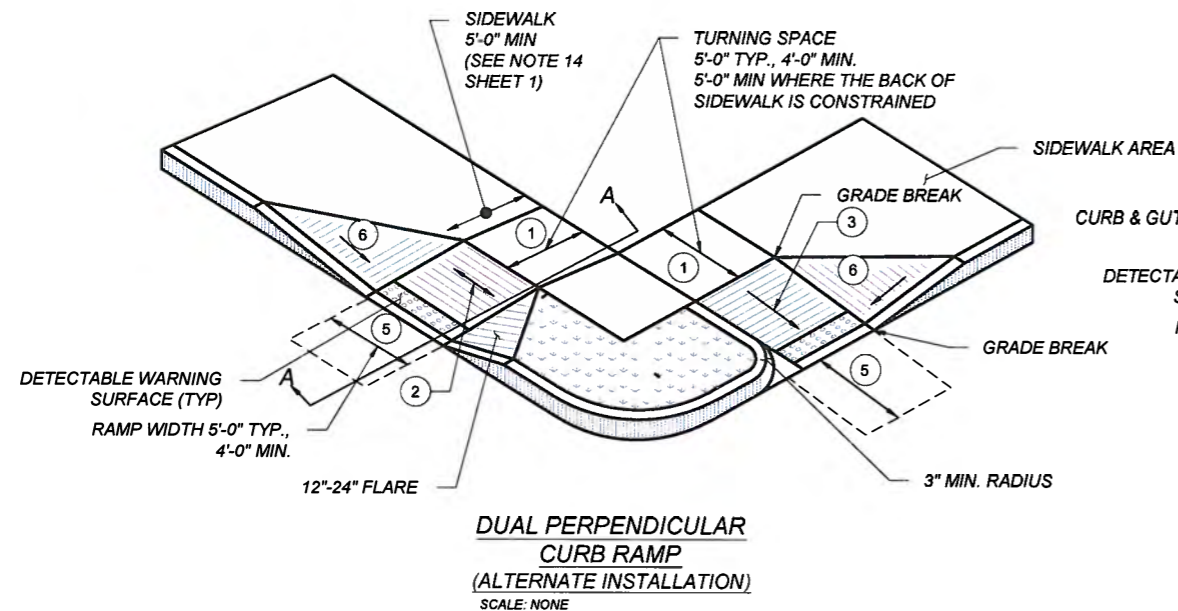
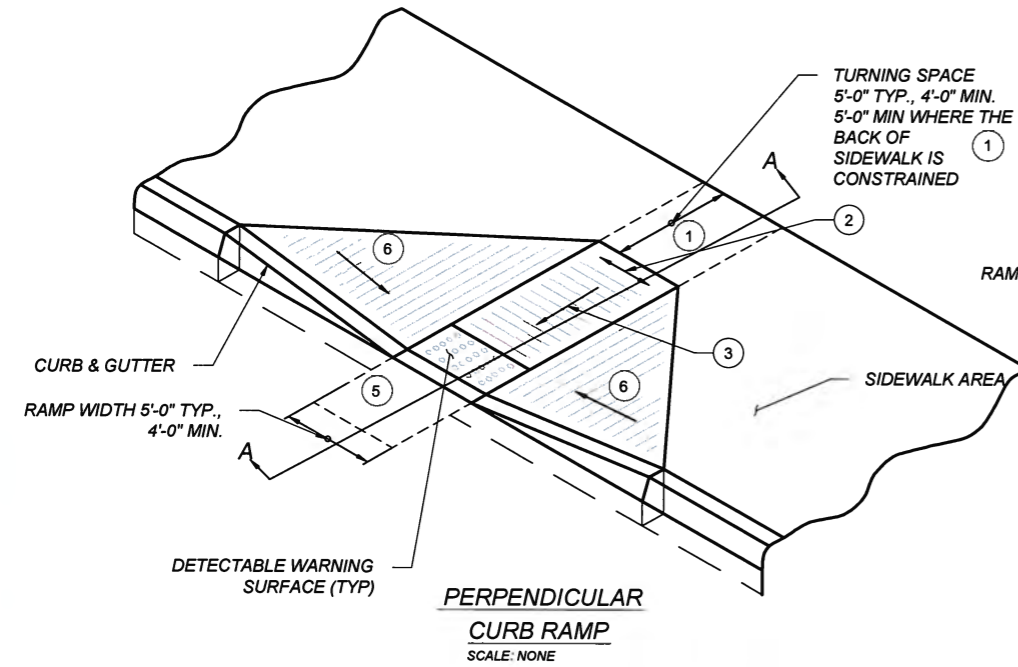
ALTERATIONS TO EXISTING FACILITIES - GENERAL NOTES:

ADDITIONS OR ALTERATIONS TO ANY FACILITY SHALL CONFORM TO THE REQUIREMENTS OF THE NEW CONSTRUCTION STANDARDS WITHIN THE NMDOT PEDESTRIAN ACCESS STANDARDS AND PROWAG 2011 OR LATEST EDITION. ANY DESIGN / CONSTRUCTION DEVIATION THAT IS DEEMED AN VARIANCE OR TECHNICALLY INFEASIBLE BY THE DEFINITION BELOW SHALL REQUIRE SUBMITTAL AND APPROVAL OF ADA DESIGN VARIANCE PROCEDURES.

- EXCEPTION: IN ALTERATION WORK, IF COMPLIANCE IS TECHNICALLY INFEASIBLE, THE ALTERATION SHALL PROVIDE ACCESSIBILITY TO THE MAXIMUM EXTENT PRACTICABLE. ANY ELEMENTS OR FEATURES OF THE BUILDING OR FACILITY THAT IS BEING ALTERED AND CAN BE MADE ACCESSIBLE SHALL BE MADE ACCESSIBLE WITHIN THE SCOPE OF THE ALTERATION.
- TECHNICAL INFEASIBILITY: MEANS, WITH RESPECT TO AN ALTERATION OF A BUILDING OR A FACILITY, THAT IT HAS LITTLE LIKELIHOOD OF BEING ACCOMPLISHED BECAUSE EXISTING STRUCTURAL CONDITIONS WOULD REQUIRE REMOVING OR ALTERING A LOAD-BEARING MEMBER WHICH IS AN ESSENTIAL PART OF THE STRUCTURAL FRAME; OR BECAUSE OTHER EXISTING PHYSICAL OR SITE CONSTRAINTS PROHIBIT.
- IN ALTERATIONS WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT COMPLIANCE TO PROVIDE A CURB RAMP FOR EACH PEDESTRIAN CROSSING A SINGLE DIAGONAL CURB RAMP SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS.



NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
PEDESTRIAN ACCESS ROUTE GENERAL NOTES			
APPROVED			1-15-15
	DESIGN ENGINEER		DATE
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608-1 of 12			



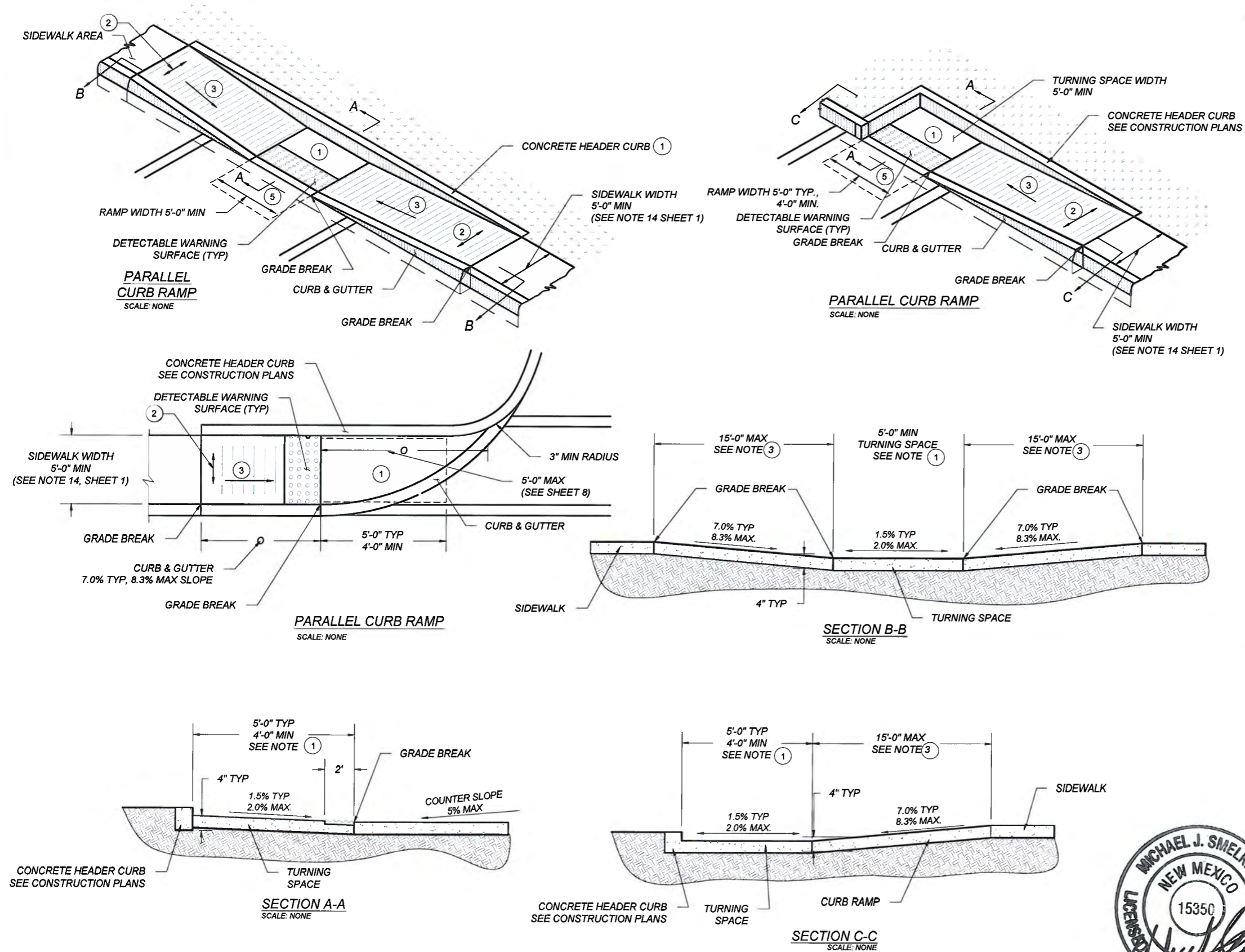
KEYED NOTES

- 1 TURNING SPACE SHALL HAVE MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.0% (RECOMMEND 1.5%). TURNING SPACE SHALL BE 4.0 FT BY 4.0 FT MIN (RECOMMEND 5.0 FT BY 5.0 FT) AT THE TOP OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF SIDEWALK, THE TURNING SPACE SHALL BE 4.0 FT MIN BY 5.0 FT MIN. THE 5.0 FT SHALL BE PROVIDED IN THE DIRECTION OF THE RAMP RUN.
- 2 CROSS SLOPE SHALL BE 2.0% MAX (RECOMMENDED 1.5%). EXCEPTION: THE CROSS SLOPE OF CURB RAMPS AT PEDESTRIAN STREET CROSSING WITHOUT YIELD OR STOP CONTROL, TRAFFIC SIGNALS DESIGNED FOR THE GREEN PHASE, AND AT MIDBLOCK PEDESTRIAN STREET CROSSING, THE CROSS SLOPE IS PERMITTED TO MATCH STREET OR HIGHWAY GRADE.
- 3 RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.3% MAX (RECOMMENDED 7.0%) BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15.0 FT TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAX LENGTH, THE RUNNING SLOPE OF THE CURB RAMP SHALL BE EXTENDED AS FLAT AS MAXIMUM EXTENT PRACTICABLE.
- 4 GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMPS RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF RAMP RUNS AND TURNING SPACE. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.
- 5 COUNTER SLOPE OF THE GUTTER OR STREET AT THE FOOT OF A CURB RAMP, RUN OR TURNING SPACE SHALL BE 5% MAX.
- 6 FLARED SIDES ARE TO HAVE A SLOPE OF 10% MAX (RECOMMEND 9%), MEASURED PARALLEL TO THE BACK OF THE CURB, UNLESS THE FLARED SIDES ARE PROTECTED FROM CROSS TRAVEL BY LANDSCAPING, STREET FURNITURE, CHAINS, FENCING, OR RAILINGS.

NOTES:

- A DO NOT SCORE OR MAKE GROOVES IN SLOPED SURFACE. LINES SHOWN ON STANDARD DETAILS ARE FOR ILLUSTRATION ONLY.
- B DETAILS OF THE DETECTABLE WARNING SURFACE ARE SHOWN IN THE CONSTRUCTION PLANS AND SHEET 608-001-8/12 OF THE STANDARD DRAWINGS.
- C IN ALTERATIONS WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT COMPLIANCE TO PROVIDE A CURB RAMP FOR EACH PEDESTRIAN CROSSING A SINGLE DIAGONAL CURB RAMP SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS.
- D CONCRETE HEADER CURBS CONSTRUCTED AS PART OF THE CURB RAMP WILL BE CONSIDERED INCIDENTAL TO ITEM NUMBER 608004 AND NO SEPARATE PAYMENT WILL BE MADE.





KEYED NOTES

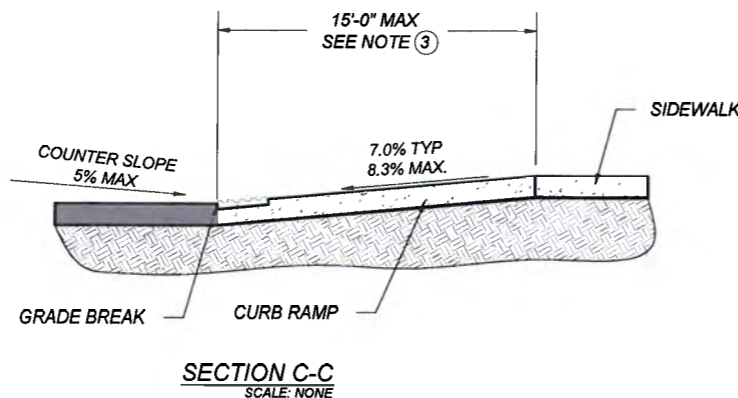
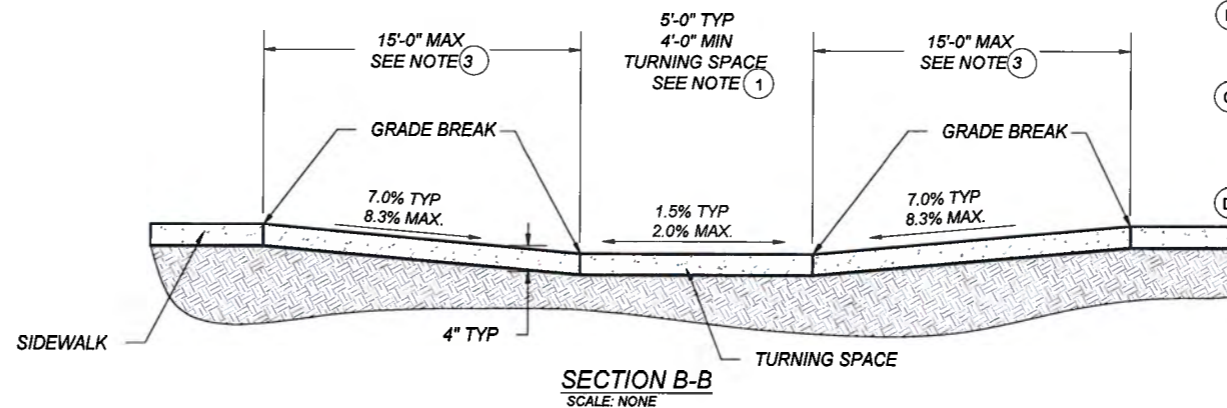
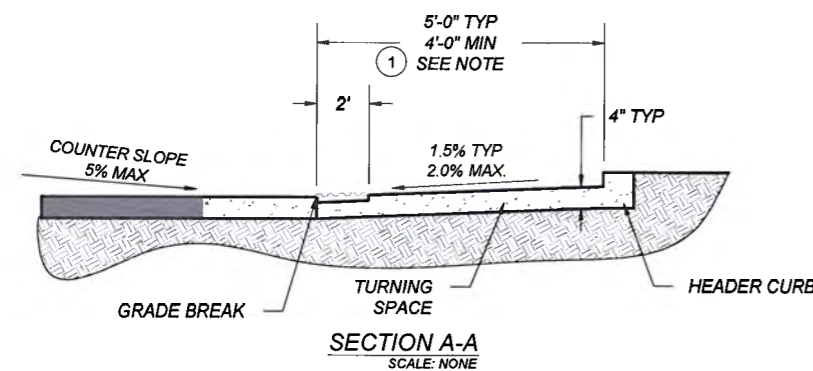
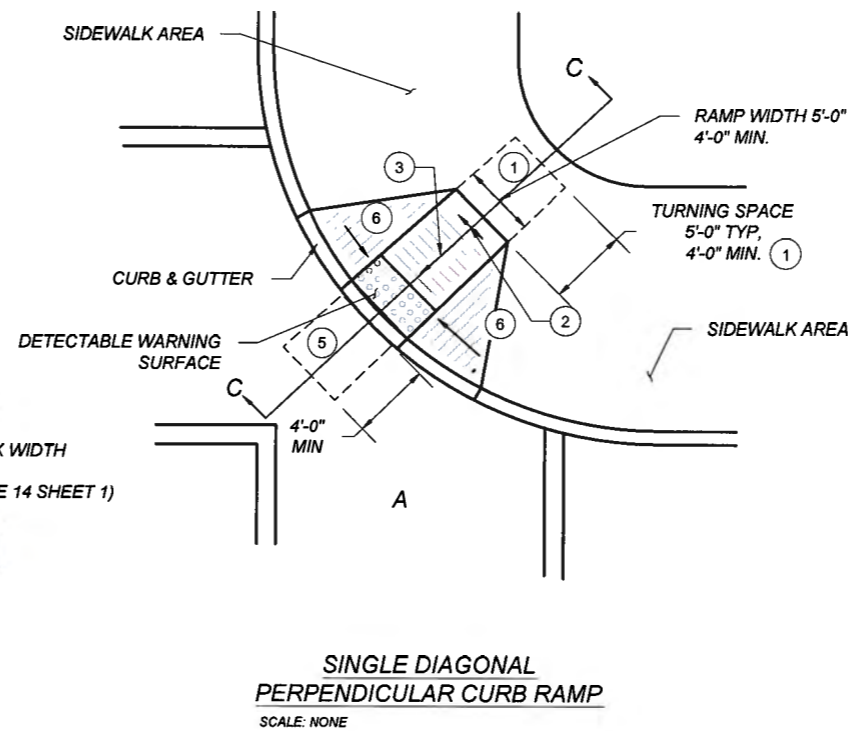
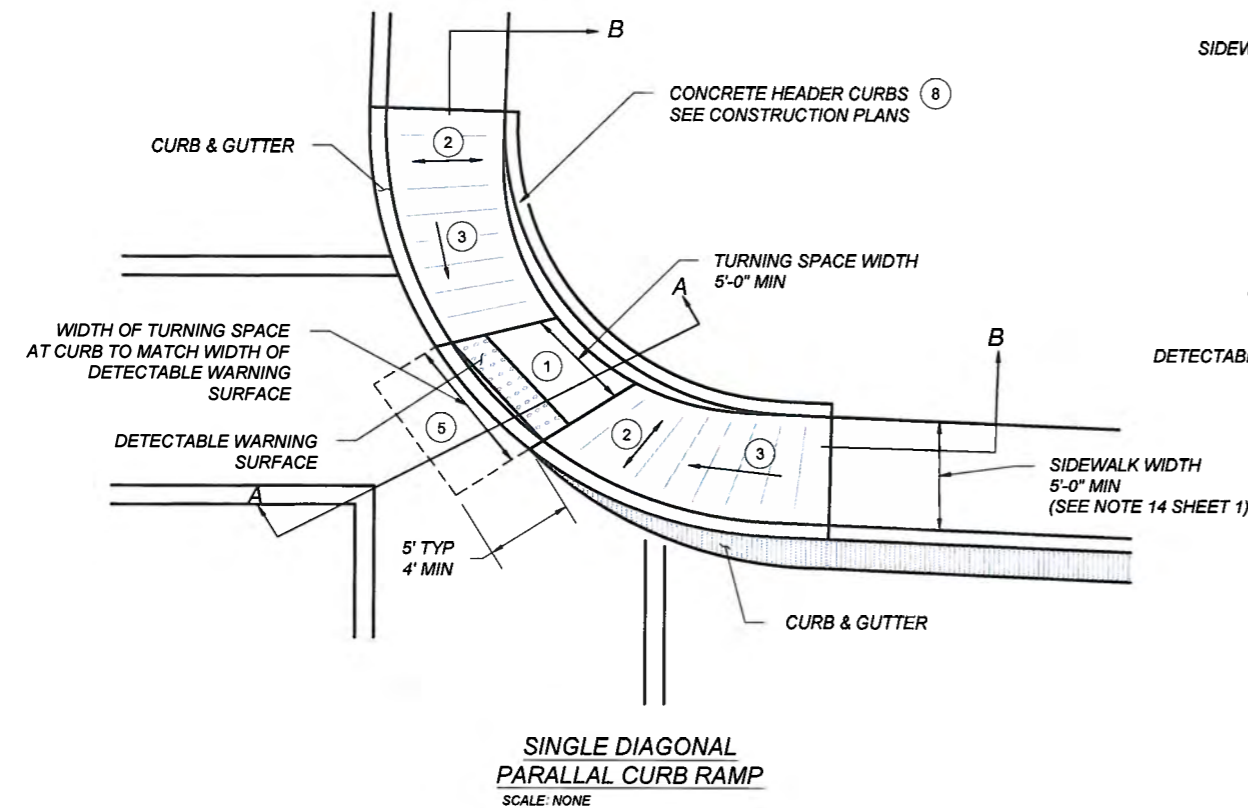
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NOTES:

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- CONCRETE HEADER CURBS CONSTRUCTED AS PART OF THE CURB RAMP WILL BE CONSIDERED INCIDENTAL TO ITEM NUMBER 608004 AND NO SEPARATE PAYMENT WILL BE MADE.



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REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
PARALLEL CURB RAMPS			
APPROVED	DESIGN ENGINEER	DATE	1-13-15
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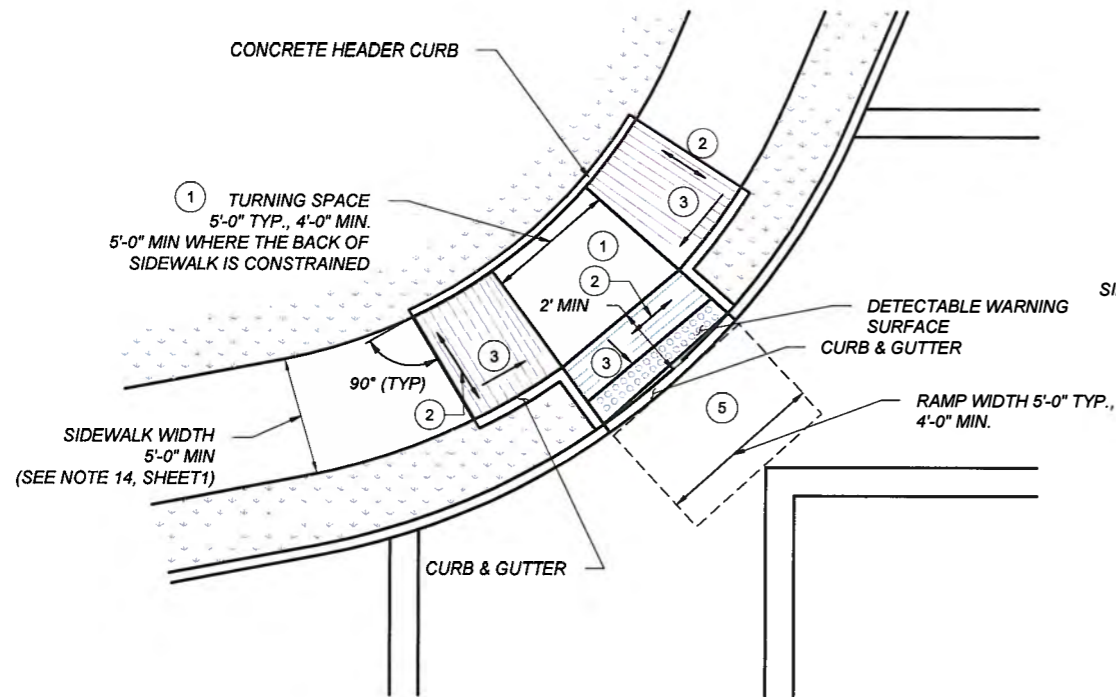
KEYED NOTES

- TURNING SPACE SHALL HAVE MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.0% (RECOMMEND 1.5%). TURNING SPACE SHALL BE 4.0 FT BY 4.0 FT MIN (RECOMMEND 5.0 FT BY 5.0 FT) AT THE TOP OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF SIDEWALK, THE TURNING SPACE SHALL BE 4.0 FT MIN BY 5.0 FT MIN. THE 5.0 FT SHALL BE PROVIDED IN THE DIRECTION OF THE RAMP RUN.
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- RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.3% MAX (RECOMMENDED 7.0%) BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15.0 FT TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAX LENGTH, THE RUNNING SLOPE OF THE CURB RAMP SHALL BE EXTENDED AS FLAT AS MAXIMUM EXTENT PRACTICABLE.
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- COUNTER SLOPE OF THE GUTTER OR STREET AT THE FOOT OF A CURB RAMP, RUN OR TURNING SPACE SHALL BE 5% MAX.
- FLARED SIDES ARE TO HAVE A SLOPE OF 10% MAX (RECOMMEND 9%), MEASURED PARALLEL TO THE BACK OF THE CURB, UNLESS THE FLARED SIDES ARE PROTECTED FROM CROSS TRAVEL BY LANDSCAPING, STREET FURNITURE, CHAINS, FENCING, OR RAILINGS.

NOTES:

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- IN ALTERATIONS WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT COMPLIANCE TO PROVIDE A CURB RAMP FOR EACH PEDESTRIAN CROSSING A SINGLE DIAGONAL CURB RAMP SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS.
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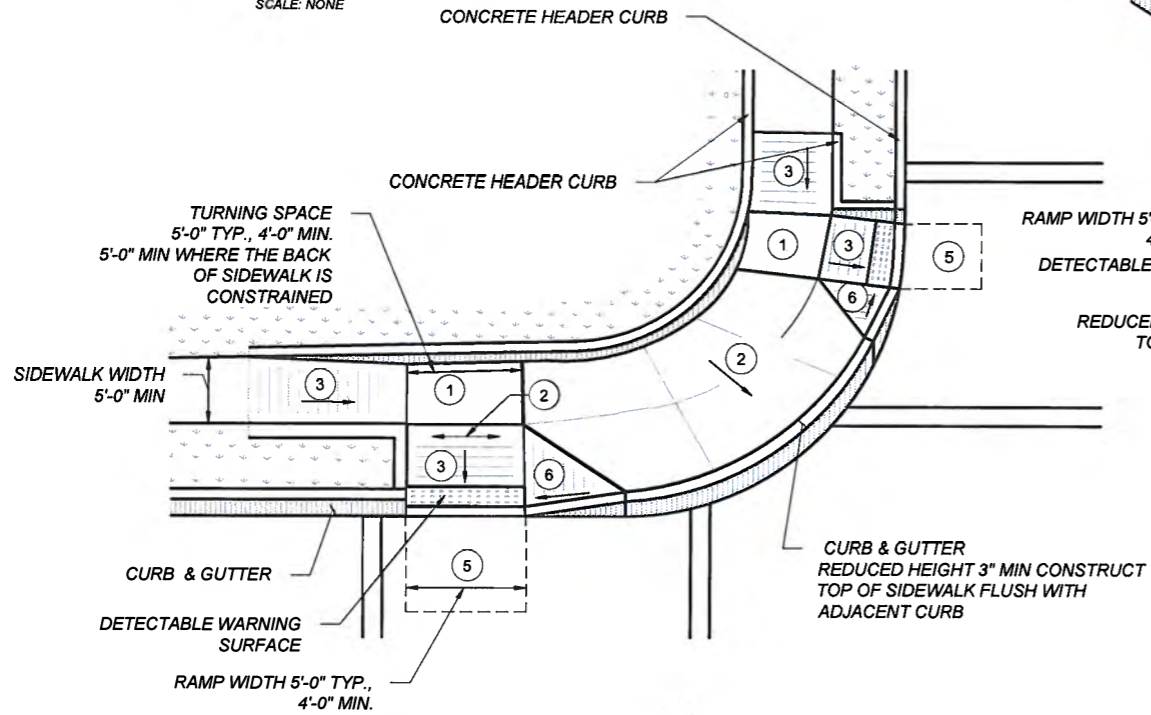




COMBINATION CURB RAMP (A)

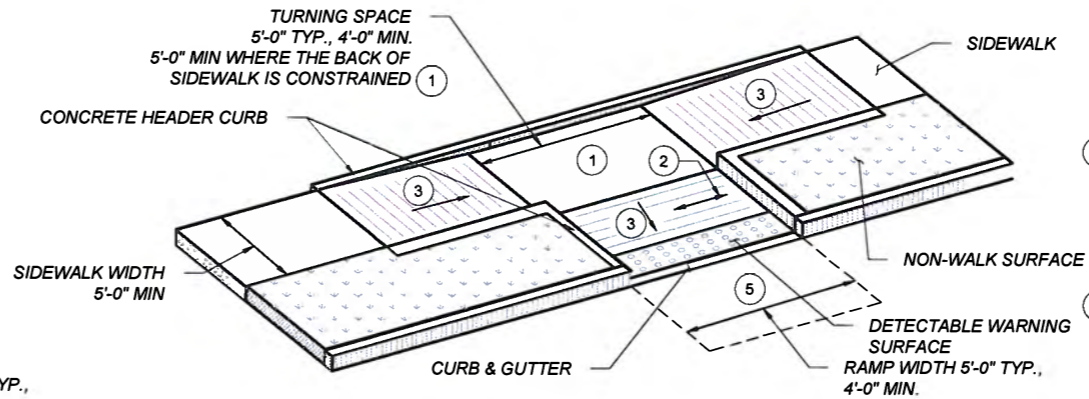
DIAGONAL

SCALE: NONE



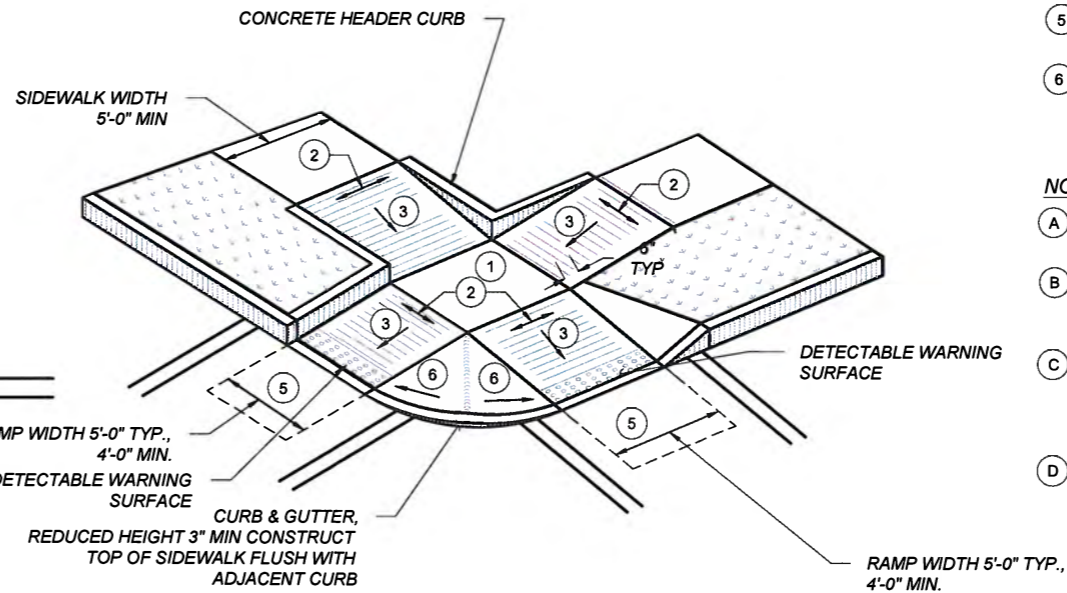
COMBINATION CURB RAMP (C)

SCALE: NONE



COMBINATION CURB RAMP (B)

SCALE: NONE



COMBINATION CURB RAMP (D)

WITH SHARED TURNING SPACE

SCALE: NONE


KEYED NOTES

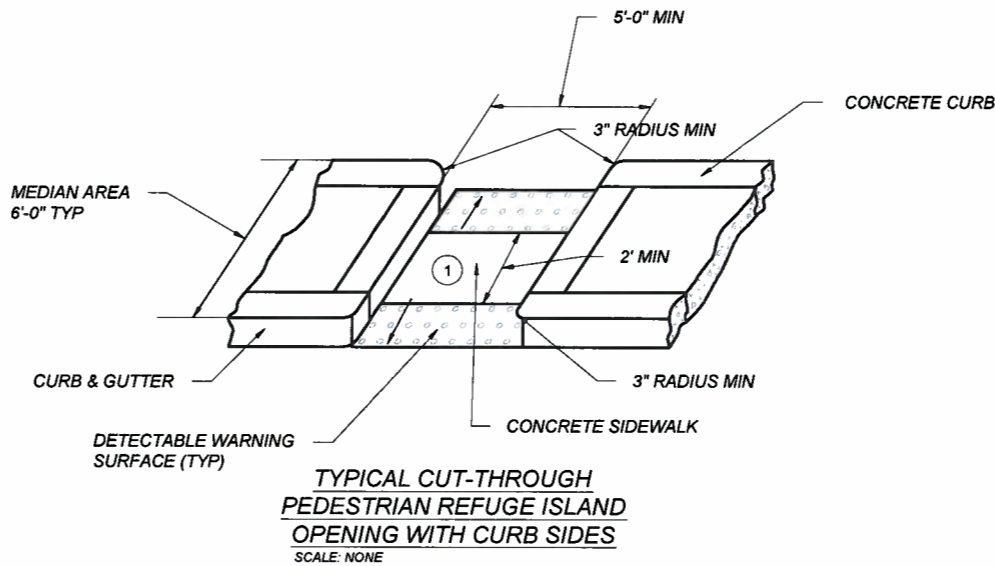
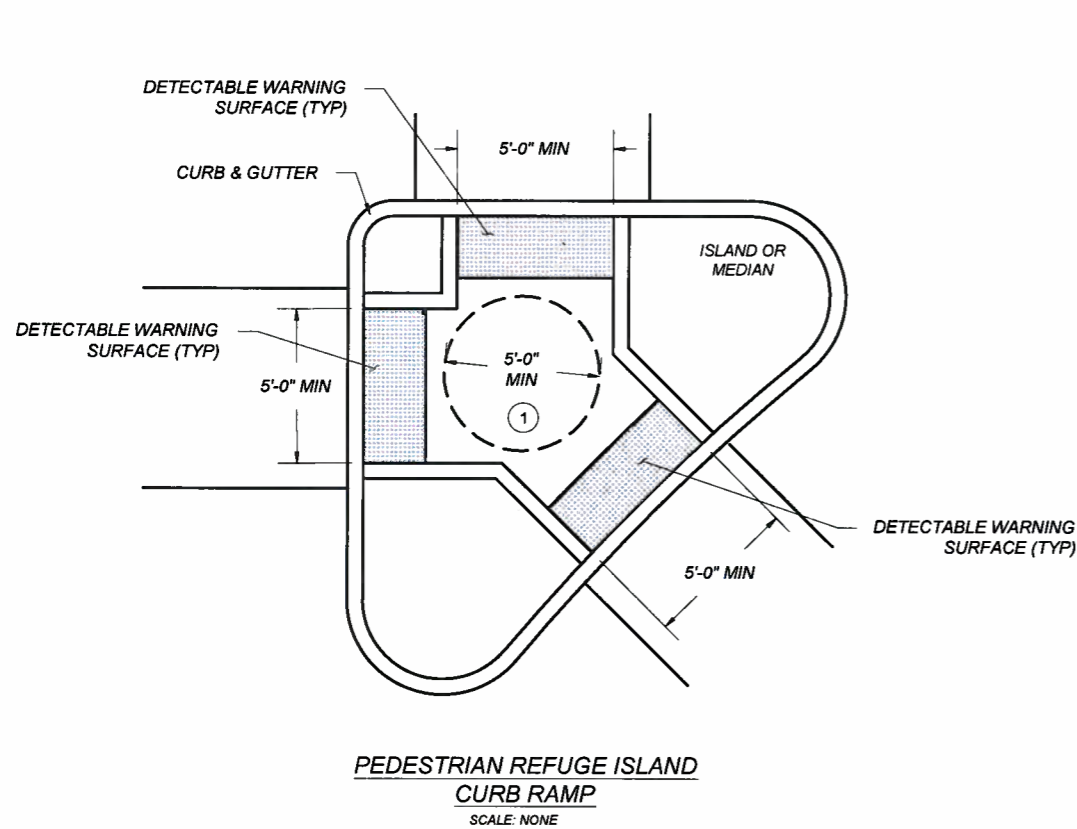
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NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
COMBINATION CURB RAMPS			
APPROVED			1-13-15
	DESIGN ENGINEER		DATE
608-001-5			
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KEYED NOTES

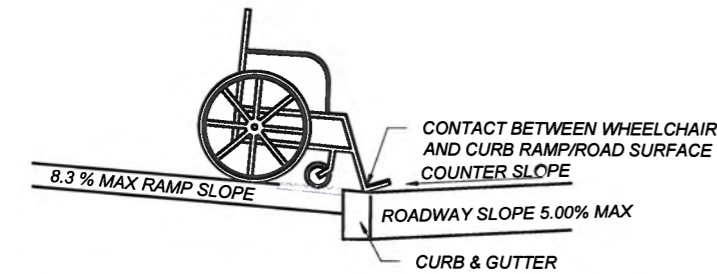
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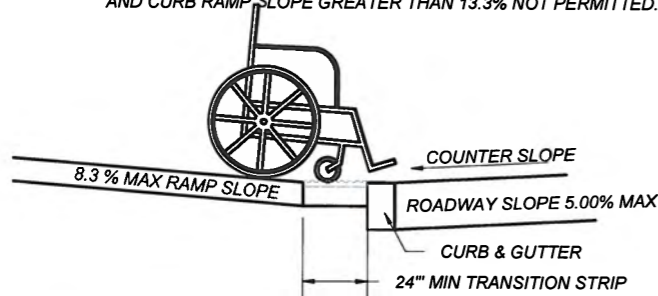
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NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
PEDESTRIAN REFUGE ISLAND			
APPROVED			1-13-15
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ALGEBRAIC DIFFERENCES BETWEEN ROADWAY SLOPE AND CURB RAMP SLOPE GREATER THAN 13.3% NOT PERMITTED.



PROVIDE A 24" MIN TRANSITION STRIP IF ALGEBRAIC DIFFERENCES BETWEEN ROADWAY SLOPE AND CURB RAMP SLOPE ARE GREATER THAN 13.33%
TRANSITION STRIP SLOPE NOT TO EXCEED 5.00%

CHANGE OF GRADE

LIMITATIONS
SCALE: NONE

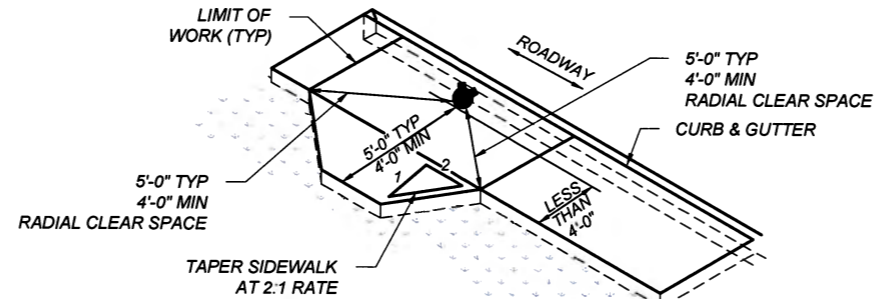


RAMP CROSS SLOPE TRANSITION TO MATCH ROADWAY PROFILE SLOPE

* SLOPES SHOWN ARE FOR ILLUSTRATION ONLY.

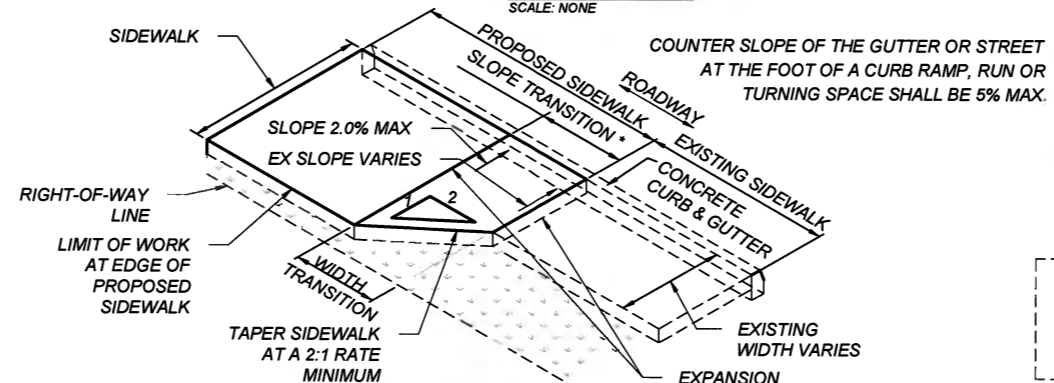
NOTE:

- 1) CROSS SLOPE OF CURB RAMP AT PEDESTRIAN STREET CROSSING WITHOUT YIELD ON STOP CONTROL, AND AT MID BLOCK PEDESTRIAN STREET CROSSING, THE CROSS SLOPE ARE PERMITTED TO EQUAL THE STREET OR HIGHWAY GRADE.
- 2) CROSS SLOPE IF CURB RAMP IS AT YIELD OR STOP CONTROL REQUIRES 2% MAX CROSS SLOPE AT CURB LINE



SIDEWALK ADDITION DUE TO OBSTRUCTIONS

SCALE: NONE



TRANSITION TO EXISTING SIDEWALK DETAIL

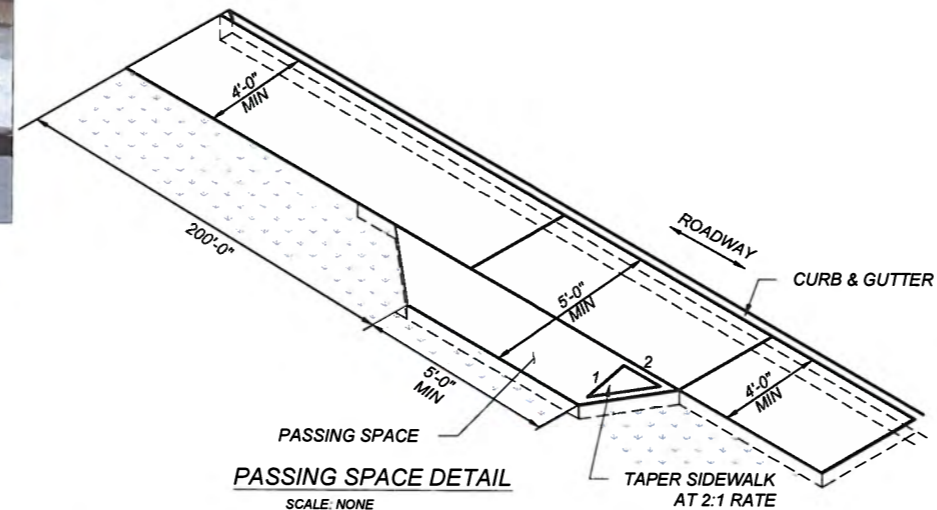
SCALE: NONE

MINIMUM SLOPE TRANSITION LENGTH BASED ON THE DIFFERENCE OF PROPOSED SIDEWALK CROSS SLOPE AND EXISTING SIDEWALK CROSS SLOPE AT THE LOCATION OF TIE IN. THIS MINIMUM LENGTH TO BE DETERMINED BY THE FOLLOWING FORMULA: $\Delta \% \text{ SLOPE} \times 0.5'$ OR MIN WIDTH OF 1 FT.

THE MINIMUM WIDTH TRANSITION SHALL BE CALCULATED USING THE FOLLOWING FORMULA: $\text{CHANGE IN WIDTH} \times 2$.

DEPENDING ON WHICH IS LONGEST, EITHER THE SLOPE TRANSITION OR WIDTH TRANSITION WILL CONTROL THE LENGTH OF SIDEWALK TRANSITION.

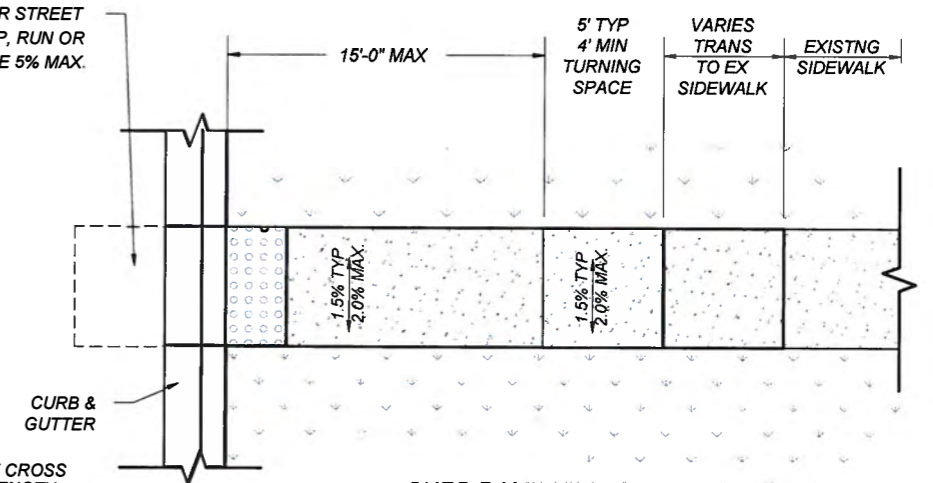
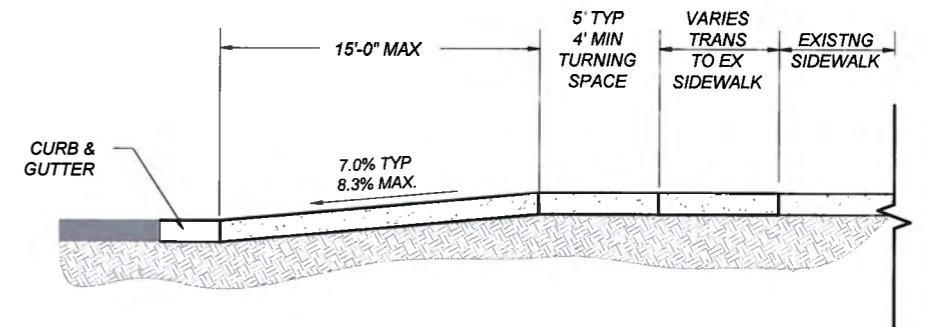
TRANSITION AREAS SERVE AS TEMPORARY CONNECTIONS OF THE PEDESTRIAN ACCESS ROUTE. FUTURE IMPROVEMENTS TO THE REMAINING PORTION OF EXISTING SIDEWALK SHALL INCLUDE REMOVING THE TRANSITION AREA AND CONSTRUCTING A FULLY COMPLIANT SIDEWALK.



PASSING SPACE DETAIL

SCALE: NONE

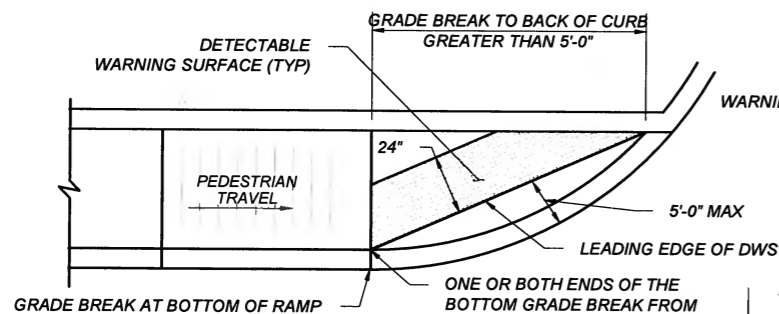
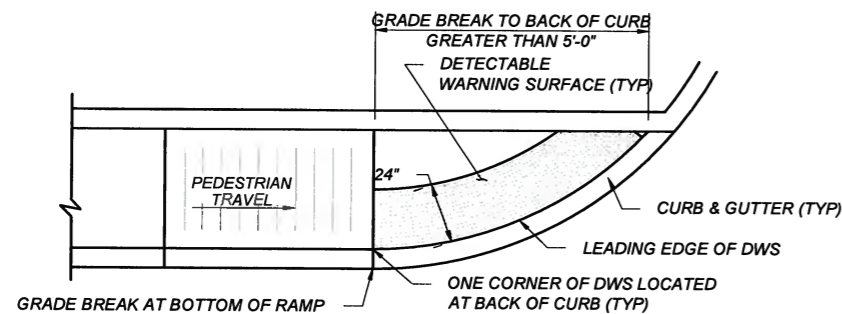
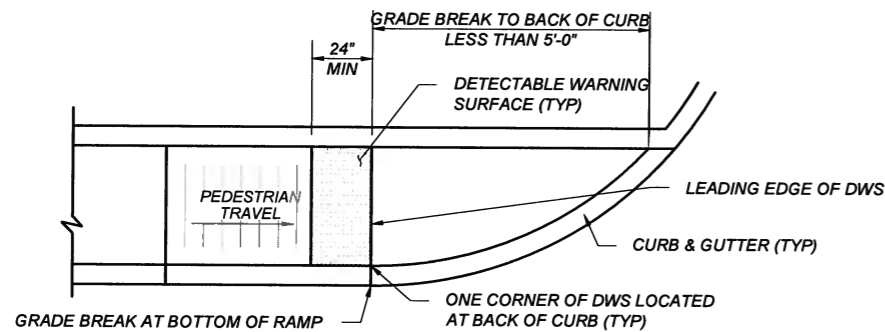
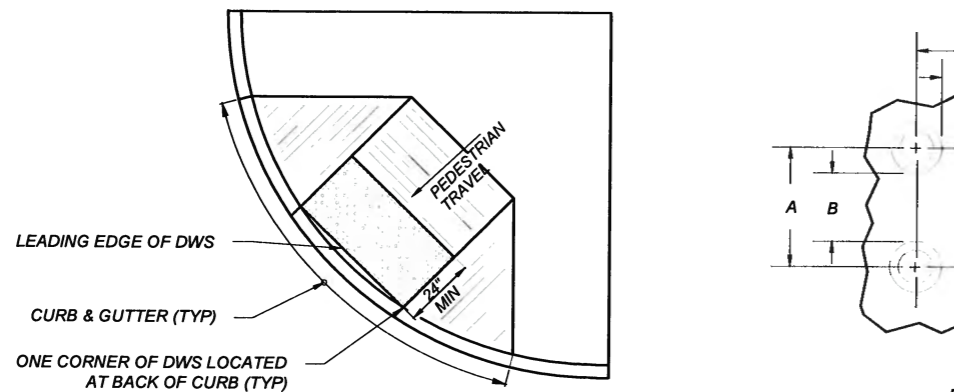
1. WHERE THE CLEAR WIDTH OF PEDESTRIAN ACCESS ROUTES IS GREATER THAN 4ft AND LESS THAN 5ft, PASSING SPACES SHALL BE PROVIDED AT INTERVALS 200ft MAXIMUM.
2. PASSING SPACES ARE PERMITTED TO OVERLAP PEDESTRIAN ACCESS ROUTES.



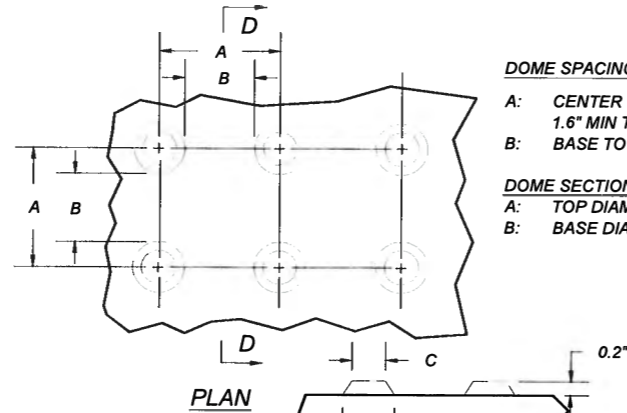
CURB RAMP TRANSITION TO EXISTING SIDEWALK DETAIL



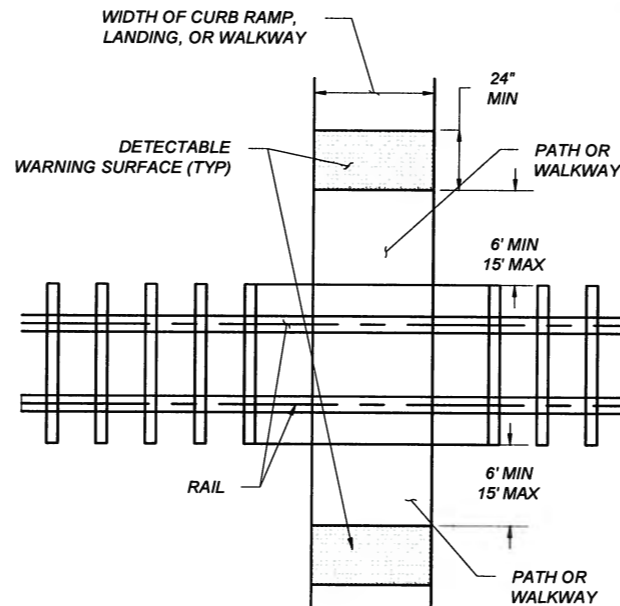
NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
CURB RAMP AND SIDEWALK TRANSITION DETAILS			
APPROVED	DESIGN ENGINEER	DATE	1-13-15
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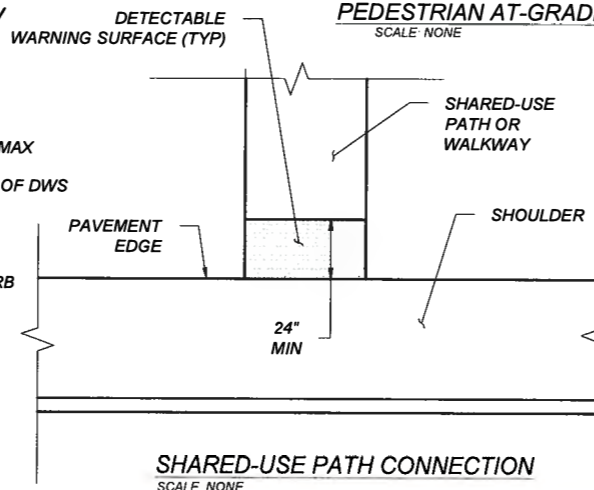
DETECTABLE WARNING SURFACE (DWS) ON CURVED SURFACES
SCALE: NONE



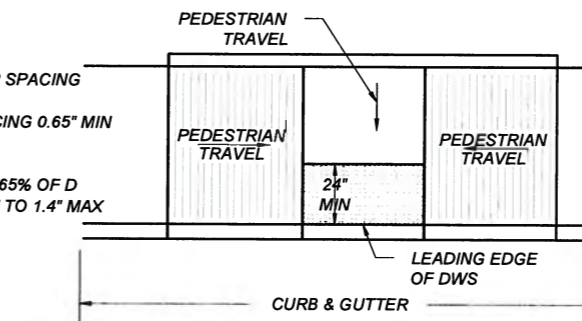
DETECTABLE WARNING SURFACE (DWS) TRUNCATED DOME DETAILS
SCALE: NONE



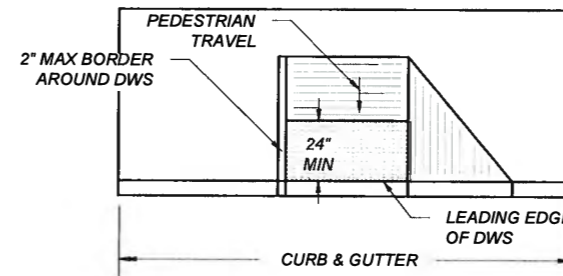
PEDESTRIAN AT-GRADE RAIL CROSSINGS
SCALE: NONE



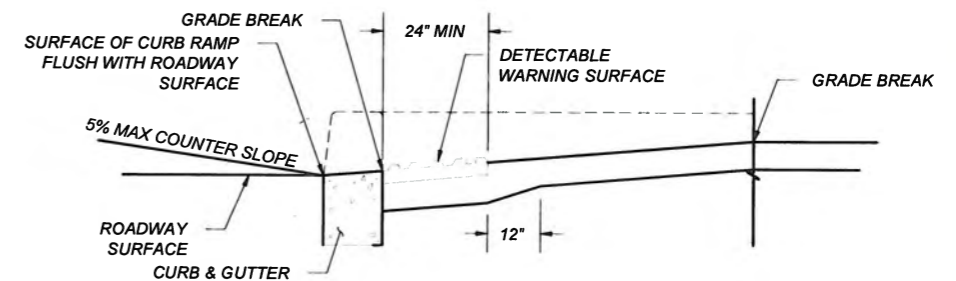
SHARED-USE PATH CONNECTION
SCALE: NONE



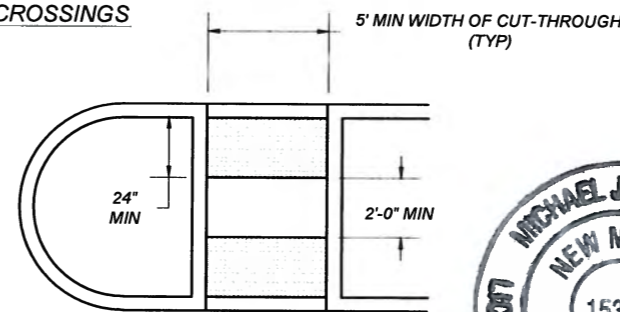
DETECTABLE WARNING SURFACE
SCALE: NONE



DETECTABLE WARNING SURFACE
SCALE: NONE



DETECTABLE WARNING SURFACE
SCALE: NONE



MEDIAN CUT-THROUGH
SCALE: NONE
EXCEPTION: IF THE LENGTH BETWEEN TWO DWS SURFACE IS LESS THAN 2' THEN DETECTABLE WARNING SURFACE WILL NOT BE INSTALLED



DETECTABLE WARNING SURFACE (DWS):

A STANDARDIZED TRUNCATED DOME GRID SURFACE BUILT IN OR APPLIED TO THE PEDESTRIAN ACCESS ROUTE TO WARN VISUALLY IMPAIRED PEOPLE OF HAZARDS. THE SURFACE IS PLACED WHERE DETECTABLE WARNING SURFACE (DWS): A STANDARDIZED TRUNCATED DOME GRID SURFACE BUILT IN OR APPLIED TO THE PEDESTRIAN ACCESS ROUTE TO WARN VISUALLY IMPAIRED PEOPLE OF HAZARDS. THE SURFACE IS PLACED WHERE PEDESTRIANS WILL ENCOUNTER THE PRESENCE OF HAZARDS IN THE LINE OF TRAVEL, SUCH AS THE EDGE OF ROADWAY AND AT-GRADE RAIL CROSSINGS, INDICATING THEY SHOULD STOP AND DETERMINE THE NATURE OF THE HAZARD BEFORE PROCEEDING.


LOCATION:

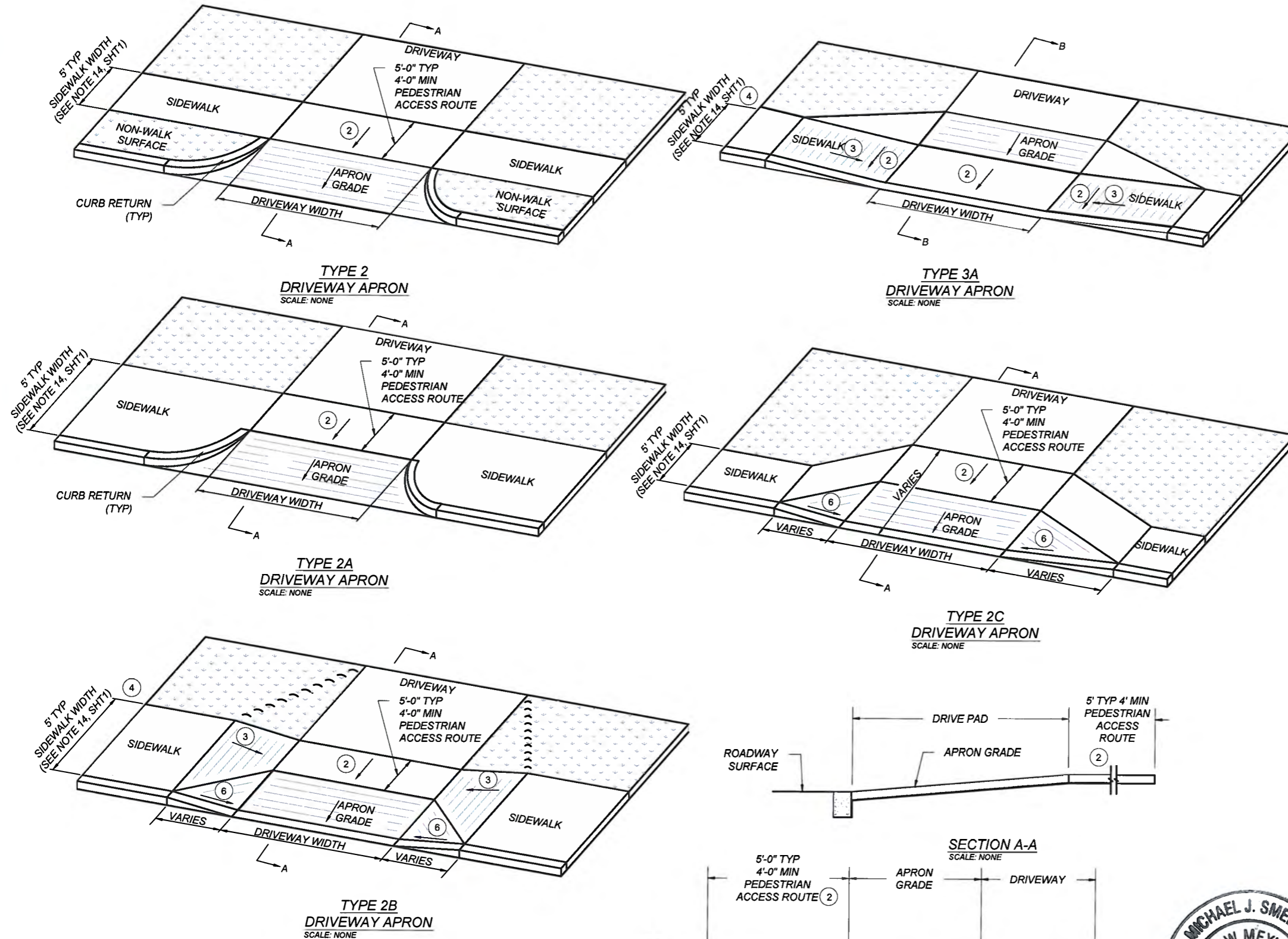
1. THE DETECTABLE WARNING SURFACE (DWS) SHALL BE 2.0 FT MINIMUM WIDTH AND EXTENDED THE FULL WIDTH OF THE CURB RAMP RUN, TURNING SPACE, BLENDED TRANSITION, AN EXCLUDING ANY THE FLARED SIDES
2. THE ROWS OF TRUNCATED DOMES SHALL BE ALIGNED TO BE PERPENDICULAR TO THE GRADE BREAK AT THE BACK OF THE CURB.
3. THE ROWS OF TRUNCATED DOMES SHALL BE ALIGNED TO BE PARALLEL TO THE DIRECTION OF TRAVEL.
4. IF CURB AND GUTTER ARE NOT PRESENT, SUCH AS A SHARED-USE PATH CONNECTION, THE DETECTABLE WARNING SURFACE SHALL BE PLACED AT THE PAVEMENT EDGE.
5. PEDESTRIAN REFUGE ISLANDS SHALL HAVE DETECTABLE WARNINGS. DETECTABLE WARNINGS AT CUT THROUGH ISLANDS SHALL BE SEPARATED BY A 24 INCH MINIMUM LENGTH OF THE WALKWAY WITHOUT MARKINGS.

EXCEPTION: DETECTABLE WARNINGS SHALL NOT BE REQUIRED ON CUT THROUGH ISLANDS WHERE THE CROSSING IS LESS THAN 6 FT IN THE DIRECTION OF PEDESTRIAN TRAVEL.

NOTES:

1. DETAILS SPECIFIED ON THIS PLAN APPLY TO ALL CONSTRUCTION OR RECONSTRUCTION OF STREETS, CURBS, OR SIDEWALKS BY ALL PUBLIC AGENCIES AND BY ALL PRIVATE ORGANIZATIONS CONSTRUCTING FACILITIES FOR PUBLIC USE.
2. DETECTABLE WARNING SURFACE SHALL CONTRAST VISUALLY WITH ADJACENT GUTTER, WALKWAY SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT FOR THE FULL WIDTH OF RAMP.
3. ALL PRODUCTS USED FOR DETECTABLE WARNING SURFACES SHALL BE ON THE DEPARTMENT'S APPROVED PRODUCT LIST.

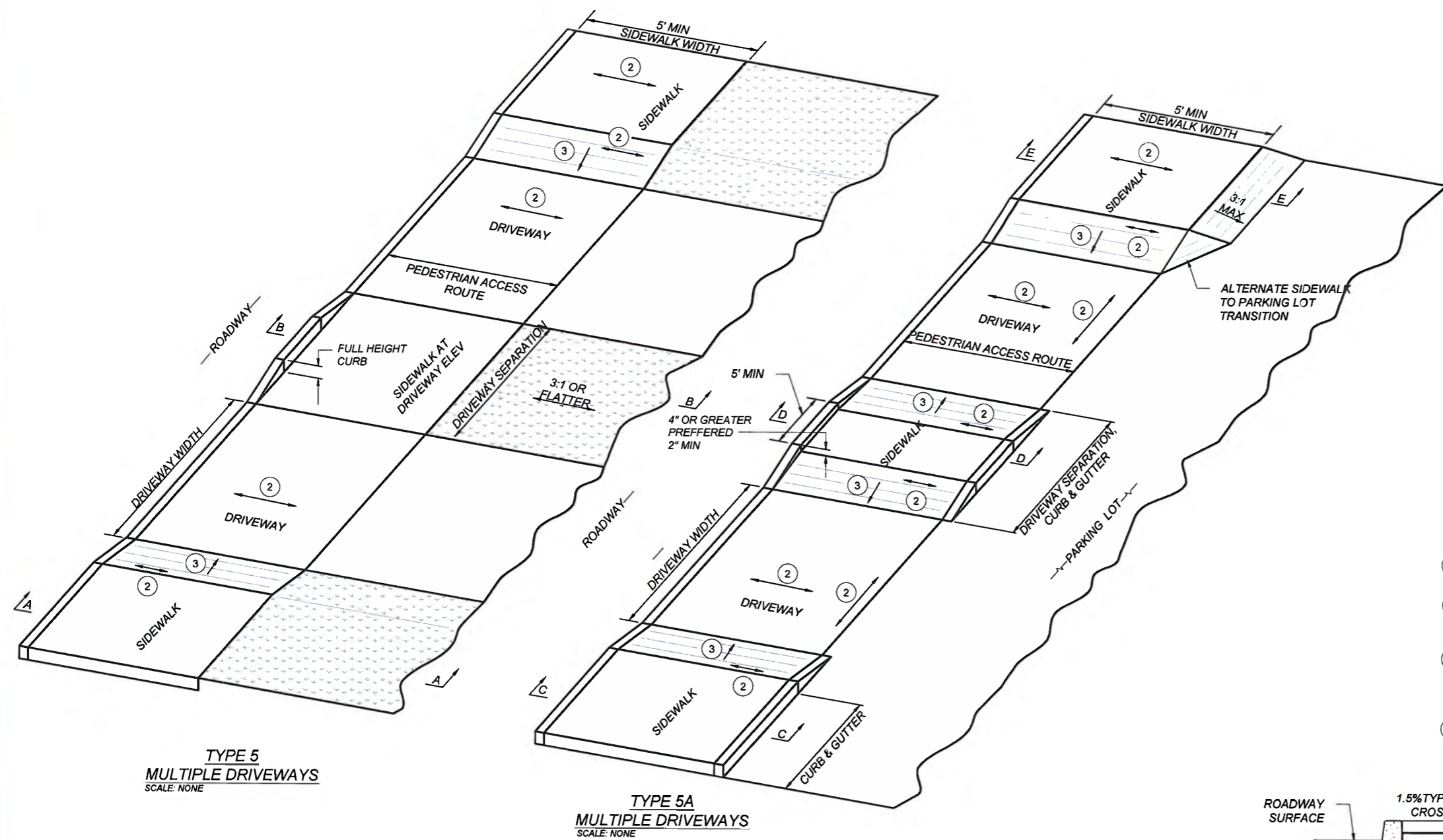
NO.	DATE	REV. BY	DESCRIPTION	
REVISIONS (OR CHANGE NOTICES)				
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING				
DETECTABLE WARNING SURFACE				
APPROVED			1-13-15	DATE
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KEYED NOTES

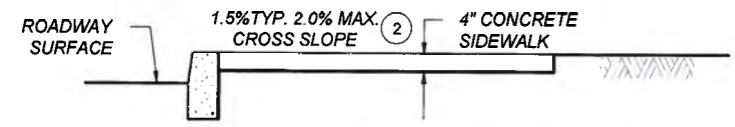
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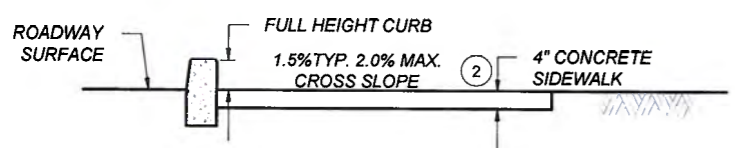


TYPE 5
MULTIPLE DRIVEWAYS
SCALE: NONE

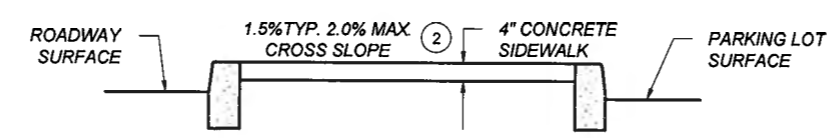
TYPE 5A
MULTIPLE DRIVEWAYS
SCALE: NONE



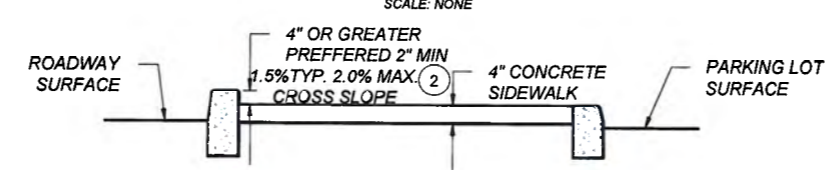
SECTION A-A
SCALE: NONE



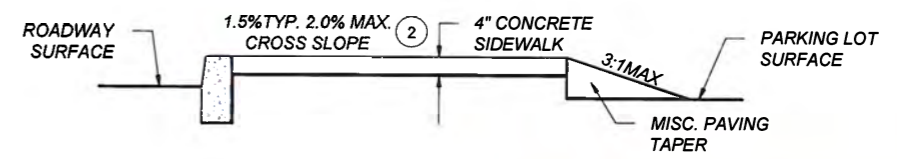
SECTION B-B
SCALE: NONE



SECTION C-C
SCALE: NONE



SECTION D-D
SCALE: NONE



SECTION E-E
SCALE: NONE

KEYED NOTES

- TURNING SPACE SHALL HAVE MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.0% (RECOMMEND 1.5%). TURNING SPACE SHALL BE 4.0 FT BY 4.0 FT MIN (RECOMMEND 5.0 FT BY 5.0 FT) AT THE TOP OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF SIDEWALK, THE TURNING SPACE SHALL BE 4.0 FT MIN BY 5.0 FT MIN. THE 5.0 FT SHALL BE PROVIDED IN THE DIRECTION OF THE RAMP RUN.
- CROSS SLOPE SHALL BE 2.0% MAX (RECOMMENDED 1.5%). EXCEPTION: THE CROSS SLOPE OF CURB RAMPS AT PEDESTRIAN STREET CROSSING WITHOUT YIELD OR STOP CONTROL, TRAFFIC SIGNALS DESIGNED FOR THE GREEN PHASE, AND AT MIDBLOCK PEDESTRIAN STREET CROSSING, THE CROSS SLOPE IS PERMITTED TO MATCH STREET OR HIGHWAY GRADE.
- RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.3 % MAX (RECOMMENDED 7.0%) BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15.0 FT TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAX LENGTH, THE RUNNING SLOPE OF THE CURB RAMP SHALL BE EXTENDED AS FLAT AS MAXIMUM EXTENT PRACTICABLE.
- GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMPS RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF RAMP RUNS AND TURNING SPACE. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.
- COUNTER SLOPE OF THE GUTTER OR STREET AT THE FOOT OF A CURB RAMP, RUN OR TURNING SPACE SHALL BE 5% MAX.
- FLARED SIDES ARE TO HAVE A SLOPE OF 10% MAX (RECOMMEND 9%), MEASURED PARALLEL TO THE BACK OF THE CURB, UNLESS THE FLARED SIDES ARE PROTECTED FROM CROSS TRAVEL BY LANDSCAPING, STREET FURNITURE, CHAINS, FENCING, OR RAILINGS.

NOTES:

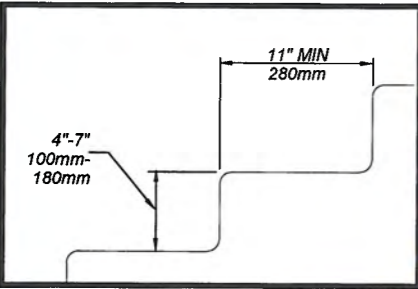
- DO NOT SCORE OR MAKE GROOVES IN SLOPED SURFACE. LINES SHOWN ON STANDARD DETAILS ARE FOR ILLUSTRATION ONLY.
- DETAILS OF THE DETECTABLE WARNING SURFACE ARE SHOWN IN THE CONSTRUCTION PLANS AND SHEET 608-001-8/12 OF THE STANDARD DRAWINGS.
- IN ALTERATIONS WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT COMPLIANCE TO PROVIDE A CURB RAMP FOR EACH PEDESTRIAN CROSSING A SINGLE DIAGONAL CURB RAMP SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS.
- CONCRETE HEADER CURBS CONSTRUCTED AS PART OF THE CURB RAMP WILL BE CONSIDERED INCIDENTAL TO ITEM NUMBER 608004 AND NO SEPARATE PAYMENT WILL BE MADE.



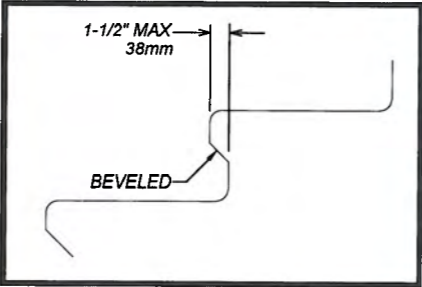
NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
DRIVEWAY APRONS			
APPROVED: <i>[Signature]</i>			DATE: 1-13-15
DESIGN ENGINEER			
608-001-10			608-10 of 12

STAIRWAY REQUIREMENTS

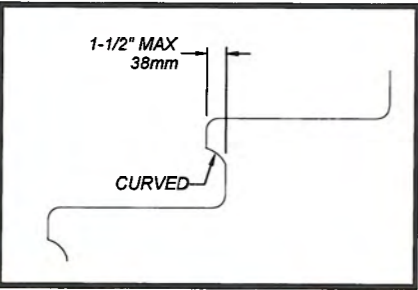
- 1. STAIRWAYS SHALL BE 4 FT WIDE MINIMUM BETWEEN HANDRAILS.
- 2. ALL STEPS ON A FLIGHT OF STAIRS SHALL HAVE UNIFORM RISER HEIGHTS AND UNIFORM TREAD DEPTH. RISERS SHALL BE 4 INCHES (100mm) HIGH MINIMUM AND 7 INCHES (180mm) MAXIMUM. TREADS SHALL BE 11 INCHES (280mm) DEEP MINIMUM MEASURED FROM RISER TO RISER.
- 3. OPEN RISERS SHALL NOT BE PERMITTED.
- 4. STAIR TREADS SHALL BE STABLE, FIRM, AND SLIP RESISTANT.
- 5. THE RADIUS OF CURVATURE AT THE LENDING EDGE OF THE TREAD SHALL BE 1/2 INCH (13mm) MAXIMUM. NOSINGS THAT PROJECT BEYOND RISERS SHALL HAVE THE UNDERSIDE OF THE LANDING EDGE CURVED OR BEVELED. RISERS SHALL BE PERMITTED TO SLOPE UNDER THE TREAD AT AN ANGLE OF 30 DEGREES MAXIMUM FROM THE VERTICAL. THE PERMITTED PROJECTION OF THE NOSING SHALL BE 1 INCHES (38mm) MAXIMUM BEYOND THE TREAD BELOW.
- 6. HANDRAILS SHALL BE PROVIDED ON BOTH SIDES OF STAIRS.
- 7. OUTDOOR STAIRS AND OUTDOOR APPROACHES TO STAIRS SHALL BE DESIGNED SO THAT WATER WILL NOT ACCUMULATE ON WALKING SURFACES.



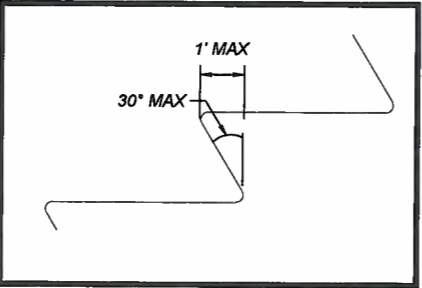
VERTICAL RISER



BEVELED RISER



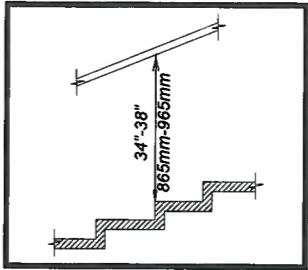
CURVED RISER



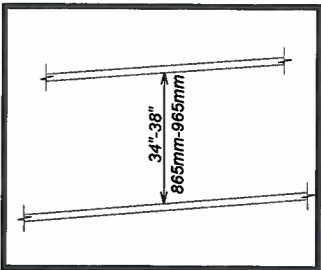
ANGLED RISER

HANDRAIL REQUIREMENTS

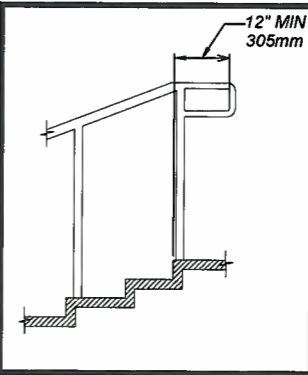
- 1. HANDRAILS SHALL BE PROVIDED ON BOTH SIDES OF STAIRS AND RAMPS.
- 2. HANDRAILS SHALL BE CONTINUOUS WITHIN THE FULL LENGTH OF EACH STAIR FLIGHT OR RAMP RUN. INSIDE HANDRAILS ON SWITCH BACK OR DOGLEG STAIRS OR RAMPS SHALL BE CONTINUOUS BETWEEN FLIGHTS OR RUNS.
- 3. TOP GRIPPING SURFACES OF HANDRAILS SHALL BE 34 INCHES (865mm) MINIMUM AND 38 INCHES (965mm) MAXIMUM VERTICALLY ABOVE STAIR NOSINGS AND RAMP SURFACES. HANDRAILS SHALL BE AT A CONSISTENT HEIGHT ABOVE STAIR NOSINGS AND RAMP SURFACES.
- 4. CLEAR SPACE BETWEEN HANDRAIL AND WALL SHALL BE 1 INCH (38mm) MINIMUM
- 5. GRIPPING SURFACES SHALL BE CONTINUOUS WITHOUT INTERRUPTION BY NEW POSTS, OTHER CONSTRUCTION ELEMENTS, OR OBSTRUCTIONS. EXCEPTION: HANDRAIL BRACKETS OR BALUSTERS ATTACHED TO THE BOTTOM SURFACE OF THE HANDRAIL SHALL NOT BE CONSIDERED OBSTRUCTIONS PROVIDED THEY COMPLY WITH THE FOLLOWING CRITERIA:
 - A. NOT MORE THAN 20 PERCENT OF THE HANDRAIL LENGTH IS OBSTRUCTED.
 - B. HORIZONTAL PROJECTIONS BEYOND THE SIDES OF THE HANDRAIL OCCUR 2 INCHES (64mm) MINIMUM BELOW THE BOTTOM OF THE HANDRAIL AND
 - C. EDGES HAVE 11 INCH (32MM) MINIMUM RADIUS.
- 6. HANDRAILS SHALL HAVE A CIRCULAR CROSS SECTION WITH AN OUTSIDE DIAMETER OD 1-1/4" or 1.25" INCH (32mm) MINIMUM AND 2 INCH (51mm) MAXIMUM OR SHALL PROVIDE EQUIVALENT GRASPABILITY. EXCEPTION: HANDRAILS WITH OTHER SHAPES SHALL BE PERMITTED PROVIDED THEY HAVE A PERIMETER DIMENSION OF 4 INCH (100mm) MINIMUM AND A 6.25 INCH(160mm) MAXIMUM AND PROVIDED THEIR LARGEST CROSS SECTION DIMENSION IS 2.25 INCH (57mm) MAXIMUM.
- 7. HANDRAILS AND ANY WALL OR OTHER SURFACES ADJACENT TO THEM, SHALL BE FREE OF ANY SHARP OR ABRASIVE ELEMENTS. EDGES SHALL HAVE 1 INCH (32mm) MINIMUM RADIUS.
- 8. HANDRAILS SHALL NOT ROTATE WITHIN THEIR FITTINGS.
- 9. HANDRAILS FOR STAIRS AND RAMPS SHALL HAVE EXTENSIONS. EXCEPTIONS:
 - A. EXTENSIONS ARE NOT REQUIRED FOR CONTINUOUS HANDRAILS AT THE INSIDE TURN OF STAIRS AND RAMPS
 - B. IN ALTERATIONS FULL EXTENSIONS OF HANDRAILS SHALL NOT BE REQUIRED WHERE SUCH EXTENSIONS WOULD BE HAZARDOUS OR IMPOSSIBLE DUE TO PLAN CONFIGURATION.
- 10. RAMP HANDRAILS SHALL EXTEND HORIZONTALLY 12 INCHES (305mm) MINIMUM BEYOND OF RAMP RUNS SUCH EXTENSION SHALL RETURN TO WALL GUARD OR THE WALKING SURFACE OR SHALL BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT RAMP RUN.
- 11. AT THE TOP OF A STAIR FLIGHT HANDRAILS SHALL EXTEND HORIZONTALLY ABOVE THE LANDING FOR 12 INCHES (305mm) MINIMUM BEGINNING DIRECTLY ABOVE THE FIRST RISER NOSING. SUCH EXTENSIONS SHALL RETURN TO A WALL, OR THE WALKING SURFACE, OR SHALL BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT STAIR FLIGHT.
- 12. AT THE BOTTOM OF THE STAIR FLIGHT HANDRAILS SHALL EXTEND AT THE SLOPE OF THE STAIR FLIGHT FOR A HORIZONTAL DISTANCE AT LEAST EQUAL TO ON TREAD DEPTH BEYOND THE LAST RISER NOSING. EXTENSIONS SHALL RETURN TO A WELL, GUARD, OR THE LANDING SURFACE, OR SHALL BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT STAIR FLIGHT.



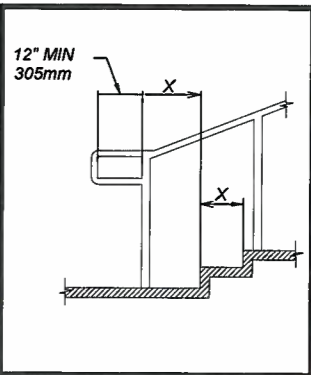
STAIR HANDRAIL HEIGHT



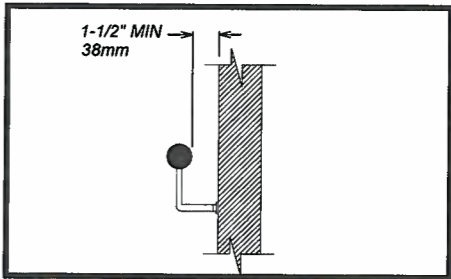
RAMP HANDRAIL HEIGHT



TOP HANDRAIL EXTENSION AT STAIRS



BOTTOM HANDRAIL EXTENSION AT STAIRS



HANDRAIL CLEARANCE



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ACCESSIBLE ROUTES:

ACCESSIBLE EXTERIOR ROUTES SHALL BE PROVIDED FROM TRANSPORTATION STOPS, ACCESSIBLE PARKING AND ACCESSIBLE PASSENGER LOADING ZONES AND PUBLIC SIDEWALKS TO THE ACCESSIBLE BUILDING ENTRANCE THEY SERVE. ACCESSIBLE PARKING SPACES SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE OF TRAVEL FROM ADJACENT PARKING TO AN ACCESSIBLE BUILDING ENTRANCE OR FACILITY

ACCESSIBLE PARKING REQUIREMENTS:

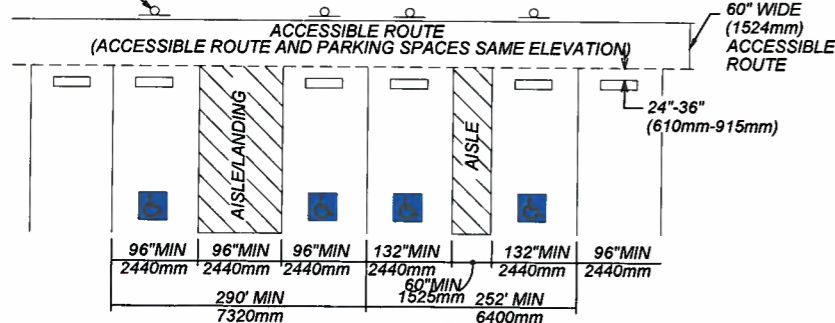
1. EACH FACILITY SHALL PROVIDE ACCESSIBLE PARKING SPACES IN COMPLIANCE WITH THE FOLLOWING TABLE:

NUMBER OF ACCESSIBLE PARKING SPACES

TOTAL PARKING SPACES	TOTAL REQUIRED ACCESSIBLE PARKING SPACES	NUMBER REQUIRED TO BE VAN ACCESSIBLE
1-25	1	1
26-35	2	1
36-50	3	1
51-100	4	1
101-300	8	2
301-500	12	2
501-800	16	3
801-1000	20	4
OVER 1,000	20 SPACES PLUS 1 SPACE FOR EVERY 100 SPACES, OR FRACTION THEREOF, OVER 1,000	1 OF EVERY 6 ACCESSIBLE PARKING SPACES, OR FRACTION THEREOF

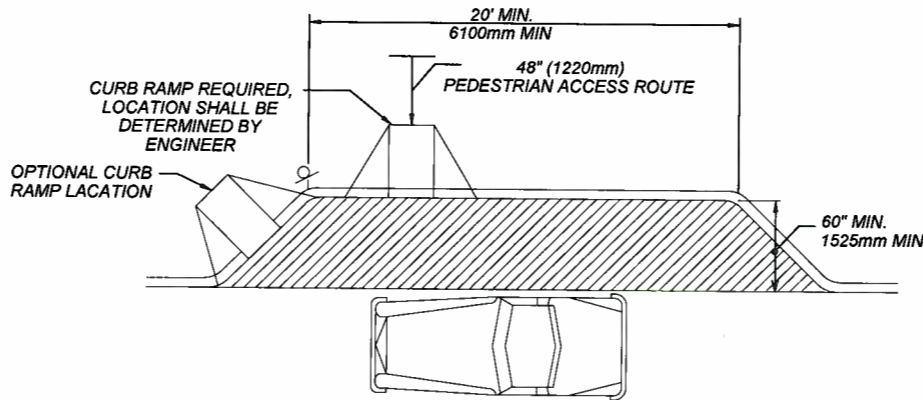
2. CAR SPACES SHALL BE 96 INCHES (2440 mm) WIDE MINIMUM AND VAN PARKING SPACES SHALL BE 132 INCHES AND SHALL HAVE AN ADJACENT ACCESS AISLE.
3. ACCESS AISLES SERVING PARKING SPACES SHALL CONNECT TO THE BUILDING OR FACILITY ENTRANCE BY AN ACCESSIBLE SIDEWALK. TWO PARKING SPACES SHALL BE PERMITTED TO SHARE A COMMON ACCESS AISLE. THE VAN ACCESS AISLE IS PREFERRED TO BE AT THE RIGHT SIDE (PASSENGER SIDE) OF THE PARKING SPACE. (AN ACCESSIBLE SIDEWALK IS 60 INCHES (1525mm) MINIMUM CLEAR WIDTH, 50:1 MAXIMUM CROSS SLOPE WITH A RUNNING SLOPE OF 20:1 MAXIMUM OR THE RUNNING SLOPE MAY FOLLOW THE ADJACENT ROAD PROFILE GRADE.) PARKED VEHICLE OVERHANGS SHALL NOT REDUCE THE MINIMUM 48 INCH CLEAR WIDTH OF AN ACCESSIBLE ROUTE.
4. ACCESS AISLES SERVING CAR PARKING SPACES SHALL BE 60 INCHES (1525mm) WIDE MINIMUM. ACCESS AISLES SERVING VAN PARKING SPACES SHALL BE 96 INCHES (2440mm) WIDE MINIMUM.
5. ACCESS AISLES SHALL EXTEND THE FULL LENGTH OF THE PARKING SPACES THEY SERVE.
6. PARKING SPACES AND ACCESS AISLES SHALL HAVE SURFACE SLOPES NOT STEEPER THAN 50:1. ACCESS AISLES SHALL BE AT THE SAME LEVEL AS THE PARKING SPACES THEY SERVE.
7. PARKING SPACES FOR VANS SHALL HAVE A VERTICAL CLEARANCE OF 98 INCHES (2490mm) MINIMUM AT THE SPACE AND ALONG THE VEHICULAR ROUTE THERETO.
8. EACH ACCESSIBLE PARKING SPACE SHALL BE IDENTIFIED BY A SIGN ON A POST. SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY. THE CLEARANCE TO THE BOTTOM OF THE SIGN (R7-8) SHALL BE AT LEAST 7 FEET (2100mm). LOCATED AT THE HEAD OF THE PARKING SPACE, VAN ACCESSIBLE PARKING SPACES SHALL HAVE AN ADDITIONAL SIGN (R7-8A) MOUNTED BELOW THE INTERNATIONAL SYMBOL OF ACCESS IDENTIFYING THE SPACE AS "VAN ACCESSIBLE." SIGNS MUST INCLUDE THE LANGUAGE "VIOLATORS ARE SUBJECT TO A FINE AND/OR TOWING."
9. PARKING SPACE AND ACCESS AISLES SHALL HAVE OSHA SAFETY BLUE STRIPING. STRIPING SHALL BE 4 INCHES (100mm) WIDE. ACCESS AISLES STRIPING SHALL BE 30 INCHES (760mm) ON CENTER. ACCESS AISLE SHALL HAVE THE WORDS "NO PARKING" IN CAPITAL LETTER OF WHICH SHALL BE AT LEAST ONE FOOT HIGH AND AT LEAST TWO INCHES WIDE PLACED AT THE REAR OF THE PARKING SPACE SO AS TO BE CLOSE TO WHERE AN ADJACENT VEHICLES REAR TIRES WOULD BE PLACED.
10. EACH ACCESSIBLE PARKING SPACE SHALL INCLUDE, CENTERED AT THE FOOT, A PAVEMENT MARKING OF THE INTERNATIONAL SYMBOL OF ACCESSIBILITY TO BE CLEARLY VISIBLE WHEN THE SPACE IS OCCUPIED.

SEE NOTE 9 DIMENSIONS OF PARKING SPACES



ACCESSIBLE PASSENGER LOADING ZONE REQUIREMENTS:

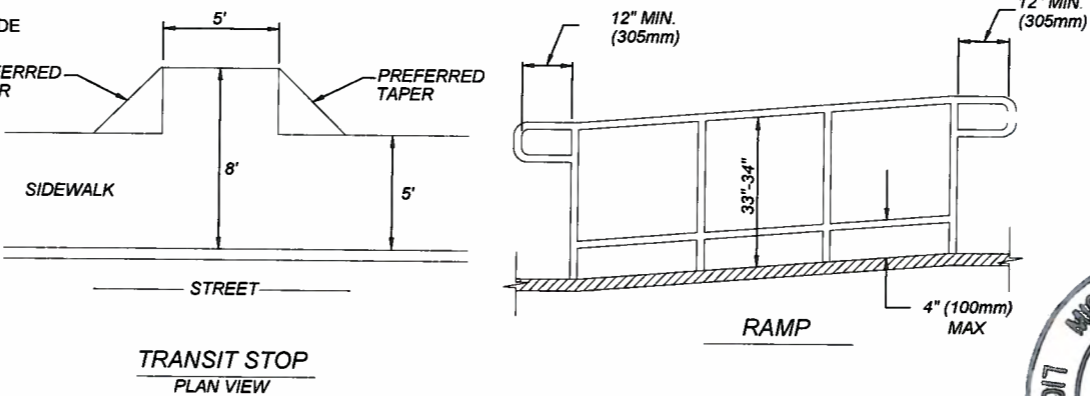
1. PASSENGER LOADING ZONES SHALL PROVIDE A 60 INCH (1525mm) WIDE ACCESS AISLE ADJACENT AND PARALLEL TO A VEHICLE PULL-UP SPACE. ACCESS AISLES SHALL BE 20 FEET (6100mm) LONG MINIMUM.
2. ACCESS AISLES SHALL BE PART OF THE ACCESSIBLE ROUTE TO THE BUILDING OR FACILITY ENTRANCE, AND MARKED TO DISCOURAGE PARKING.
3. VEHICLE PULL-UP SPACES IN PASSENGER LOADING ZONES AND ACCESS AISLES SHALL HAVE SURFACE SLOPES NOT STEEPER THAN 50:1. ACCESS AISLES SHALL BE AT THE SAME LEVEL AS THE VEHICLE PULL-UP SPACE THEY SERVE.
4. VERTICAL CLEARANCE OF 114 INCHES (2895mm) MINIMUM SHALL BE PROVIDED AT PASSENGER LOADING ZONES AND ALONG VEHICLE ACCESS ROUTES TO SUCH AREAS FROM SITE ENTRANCES.
5. EACH ACCESSIBLE PASSENGER LOADING ZONE SHALL BE IDENTIFIED BY A SIGN ON A POST. SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY.



ACCESSIBLE PASSENGER LOADING ZONE
PLAN VIEW

TRANSIT STOP REQUIREMENTS

1. TRANSIT STOPS SHOULD BE LOCATED SO THAT THERE IS A LEVEL AND STABLE SURFACE FOR BOARDING VEHICLES.
2. LOCATING TRANSIT STOPS AT SIGNALIZED INTERSECTIONS INCREASE THE USABILITY FOR PEDESTRIANS WITH DISABILITIES.
3. WHERE SECURITY BOLLARDS ARE INSTALLED AT TRANSIT STOPS, THEY MUST NOT OBSTRUCT THE CLEAR SPACE AT BOARDING AND ALIGHTING AREAS OR REDUCE THE REQUIRED CLEAR WIDTH OF PEDESTRIAN ACCESS ROUTES.
4. TRANSIT STOPS SHALL COMPLY WITH PROWAG SECTION R 308 TRANSIT STOPS AND TRANSIT SHELTERS.



RAMP REQUIREMENTS:

1. RAMP RUNS SHALL HAVE A RUNNING SLOPE GREATER THAN 1:20 AND NOT STEEPER THAN 1:12. THE EXCEPTION SHALL REMAIN AS SHOWN, INCLUDING THE TABLE FOR EXISTING BUILDINGS AND FACILITIES.
2. RAMP RUNS SHALL HAVE A RUNNING SLOPE NOT STEEPER THAN 12:1. EXCEPTION: RAMPS IN OR ON EXISTING BUILDINGS OR FACILITIES SHALL BE PERMITTED TO HAVE SLOPES STEEPER THAN 12:1 AND SHALL COMPLY WITH THE FOLLOWING TABLE WHERE SUCH SLOPES STEEPER THAN 8:1 SHALL NOT BE PERMITTED.

TABLE FOR EXISTING SITES, BUILDINGS AND FACILITIES

SLOPE	MAXIMUM RISE
STEEPER THAN 10:1 BUT NOT STEEPER THAN 8:1	3 INCHES (75mm)
STEEPER THAN 12:1 BUT NOT STEEPER THAN 10:1	6 INCHES (150mm)

3. CROSS SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 50:1.
4. FLOOR OR GROUND SURFACES OF RAMP RUN SHALL BE STABLE, FIRM, AND SLIP RESISTANT.
5. THE CLEAR WIDTH OF A RAMP RUN SHALL BE 48 INCHES (915mm) MINIMUM MEASURED BETWEEN HANDRAILS.
6. THE RISE FOR ANY RAMP RUN SHALL BE 30 INCHES (760mm) MAXIMUM.
7. RAMPS SHALL HAVE LANDINGS AT THE BOTTOM AND TOP OF EACH RUN. LANDINGS SHALL COMPLY WITH THE FOLLOWING:
- A. LANDINGS SHALL HAVE A SOPE NOT STEEPER THAN 50:1.
- B. CLEAR WIDTH OF LANDINGS SHALL BE AT LEAST AS WIDE AS THE WIDEST RAMP RUN LEADING TO THE LANDING.
- C. LANDING LENGTH SHALL BE 60 INCHES (1525mm) MINIMUM CLEAR.
- D. RAMPS THAT CHANGE DIRECTION AT LANDINGS SHALL HAVE A 60 INCH BY 60 INCH (1525mm) MINIMUM LANDING.
- E. WHERE DOORWAYS ARE ADJACENT TO A RAMP LANDING, MANEUVERING CLEARANCES SHALL COMPLY WITH 2010 AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN (2010 ADA) SECTION 404.
8. RAMPS WITH A RISE GREATER THAN 6 INCHES (150mm) SHALL HAVE HANDRAILS. HANDRAILS SHALL NOT REDUCE THE REQUIRED CLEARANCES OF A RAMP RUN OR LANDINGS.
9. EDGE PROTECTION SHALL BE PROVIDED ON EACH SIDE OF RAMP RUNS AND AT EACH SIDE OF RAMP LANDINGS.
- EXCEPTIONS:
- A. RAMPS NOT REQUIRED TO HAVE HANDRAILS WHERE SIDE FLARES ARE PROVIDED.
- B. SIDES OF RAMP LANDINGS SERVING AN ADJOINING RAMP RUN OR STAIRWAY.
- C. SIDES OF RAMP TURN SPACE HAVING A VERTICAL DROP-OFF OF 1/2 INCH (13mm) MAXIMUM WITHIN 10 INCHES (255mm) HORIZONTALLY OF THE MINIMUM LANDING AREA.
10. EDGE PROTECTION MAY BE PROVIDED BY EXTENDING A FLOOR OR GROUND SURFACE, OF THE RAMP RUN OR LANDING, 12 INCHES (305mm) MINIMUM BEYOND THE INSIDE FACE OF A HANDRAIL OR AN EDGE PROTECTION CURB OR BARRIER SHALL BE PROVIDED THAT PREVENTS THE PASSAGE OF A 4-INCH (100mm) DIAMETER SPHERE BELOW A HEIGHT OF 4 INCHES (100mm).
11. OUTDOOR RAMPS AND APPROACHES TO RAMPS SHALL BE DESIGNED SO THAT WATER WILL NOT ACCUMULATE ON WALKING SURFACES.



NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
PEDESTRIAN ACCESS DETAILS PARKING AND PASSENGER LOADING ZONES			
APPROVED	DESIGN ENGINEER		DATE 1-13-15
608-001-12		608-12 of 12	

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Appendix B

Elements of 2011 Proposed PROW Guidelines that Apply to Curb Ramps, Crosswalks, and Sidewalks

Elements of 2011 Proposed PROW Guidelines that Apply to Curb Ramps, Crosswalks, and Sidewalks

Table B-1: Summary of Chapter R2 – Scoping Requirements

Chapter/ Section	Element	Summary of Proposed Guideline
R2	R2 - Scoping Requirements	
R204	Pedestrian Access Routes	Required to comply with R302: <ul style="list-style-type: none"> • Within sidewalks and pedestrian circulation paths located in public right-of-way • Connecting to accessible elements, spaces, facilities and accessible routes • Within pedestrian street crossings, including medians and pedestrian refuge islands, and pedestrian at-grade rail crossings • Connecting departure and arrival sidewalks • Within overpasses, underpasses, bridges, and similar structures that contain pedestrian circulation paths
R206	Pedestrian Street Crossings	Required to comply with R306
R207	Curb Ramps and Blended Transitions	Required to comply with R304: <ul style="list-style-type: none"> • Shall connect pedestrian access routes at each pedestrian street crossing • Ramp (excluding flared sides) or blended transition shall be contained wholly within width of pedestrian street crossing served • In alterations where existing physical constraints prevent one ramp for each crossing, a single diagonal curb ramp can serve both crossings.
R208	Detectable Warning Surfaces	Required to comply with R305: <ul style="list-style-type: none"> • Curb ramps and blended transitions at pedestrian street crossings • Pedestrian refuge islands • Pedestrian at-grade rail crossings not located within a street or highway • Boarding platforms at transit stops for buses and rail vehicles where the edges of the boarding platform are not protected by screens or guards • Boarding and alighting areas at sidewalk or street level transit stops for rail vehicles where side of the boarding and alighting areas facing rail vehicles is not protected by screens or guards. <p>Not required at pedestrian refuge islands that are cut-through at street level and less than 6 feet in length in direction of pedestrian travel.</p>
R209	Accessible Pedestrian Signals and Pedestrian Pushbuttons	Where pedestrian signals are provided at pedestrian street crossings, they shall include accessible pedestrian signals and pedestrian pushbuttons complying with sections 4E.08 through 4E.13 of the MUTCD. Shall comply when signal controller and software are altered, or signal head is replaced.
R210	Protruding Objects	Required to comply with R402. Cannot reduce the clear width required for pedestrian access routes.

Chapter/ Section	Element	Summary of Proposed Guideline
R213	Transit Stops and Transit Shelters	Required to comply with R308.

* Not addressed in ADAAG, or differs from ADAAG

Table B-2: Summary of Chapters R3 and R4 Technical Requirements

Chapter/ Section	Element	Summary of Proposed Guideline
R3	R302 - Pedestrian Access Routes	
	Components*	<p>R302.2 Components.</p> <p>Pedestrian access routes shall consist of one or more of:</p> <ul style="list-style-type: none"> • Sidewalks and other pedestrian circulation paths, or portion of, complying with R302.3 through R302.7 • Pedestrian street crossings and at-grade rail crossings complying with R302.3 through R302.7, and R306 • Pedestrian overpasses and underpasses and similar structures complying with R302.3 through R302.7 • Curb ramps and blended transitions complying with R302.7 and R304 • Ramps complying with R407 • Elevators complying with sections 407 or 408 of Appendix D to 36 CFR part 1191 • Platform lifts complying with section 410 of Appendix D to 36 CFR part 1191 • Doors, doorways, and gates complying with section 404 of Appendix D to 36 CFR part 1191
	Continuous Width – In general*	<p>R302.3 Minimum Continuous Width: 4 feet</p> <p><i>(In 2004 ADAAG, minimum 3 feet; allowed to be reduced to 32 inches for a length of 24 inches maximum provided that reduced width segments are separated by segments that are minimum 48 inches long and 36 inches wide)</i></p>
	Clear Width - Medians and Pedestrian Refuge Islands*	<p>R302.3.1 Medians and Pedestrian Refuge Islands</p> <p>Minimum: 5 feet</p> <p><i>(In 2004 ADAAG, minimum clear width is not defined differently for medians/islands, thus minimum: 3 feet)</i></p>
	Clear Width - Passing Spaces*	<p>R302.4 Passing Spaces - required where route width is less than 5 feet</p> <p>Minimum: 5 feet by 5 feet, at intervals of maximum 200 feet</p> <p><i>(In 2004 ADAAG, at T-shaped intersection of two walking spaces, minimum 4 feet by 4 feet. 2011 Proposed Guidelines do not make an exception for T-shaped intersection.)</i></p>

Chapter/ Section	Element	Summary of Proposed Guideline
	Grade (Slope)*	<p>R302.5 Grade</p> <ul style="list-style-type: none"> • In general, maximum: 5 percent • Pedestrian access routes contained within street or highway right-of-way (except street crossings) can be general grade established for adjacent street or highway • Pedestrian street crossings, maximum: 5 percent (2004 ADAAG only addressed in general, with no allowance for street slope)
	Cross Slope*	<p>R302.6 Cross Slope</p> <ul style="list-style-type: none"> • In general, maximum: 2 percent • Pedestrian street crossings without yield or stop control, maximum: 5 percent • Midblock crossings can equal street or highway grade (2004 ADAAG only addressed in general, with no allowance for street slope)
	Surfaces – In general	R302.7 Surfaces. Surfaces of pedestrian access routes and elements and spaces required to comply with R302.7 that connect to pedestrian access routes shall be firm, stable, and slip resistant
	Surfaces – Vertical Alignment*	<p>R302.7.1 Vertical Alignment</p> <ul style="list-style-type: none"> • Shall be generally planar within pedestrian access routes. • Grade breaks shall be flush. • At rail crossings: outer edges: level and flush with top of rail • At rail crossings: between rails: aligned with top of rail (Not addressed in 2004 ADAAG)
	Surfaces – Vertical Surface Discontinuities	<p>R302.7.2 Vertical Surface Discontinuities</p> <ul style="list-style-type: none"> • Maximum: 0.5 inch • Between 0.25-0.5 inch, shall be beveled with maximum 50 percent slope
	Surfaces – Horizontal Openings	<p>R302.7.3 Horizontal Openings</p> <ul style="list-style-type: none"> • Maximum: 0.5 inch • Elongated openings shall be placed so that long dimension is perpendicular to dominant direction of travel
	Surfaces – Flange Way Gaps at Pedestrian At- Grade Rail Crossings	<p>R302.7.4 Flange Way Gaps</p> <ul style="list-style-type: none"> • Maximum 2.5 inches on non-freight rail track • Maximum 3 inches on freight rail track (2004 ADAAG did not make an allowance for freight rail track)
R3	R304 - Curb Ramps and Blended Transitions	
	General*	<p>Advisory R304.1 defines perpendicular, parallel, and combination ramps, as well as blended transitions. Perpendicular can be provided where sidewalk is at least 12 feet wide, parallel where at least 4 feet wide, and combination at least 6 feet wide. (2004 ADAAG only addressed perpendicular and diagonal ramps)</p>

Chapter/ Section	Element	Summary of Proposed Guideline
	Perpendicular Curb Ramps – Turning Space at Top of Ramp*	<p>R304.2.1 Turning Space</p> <ul style="list-style-type: none"> • Minimum: 4 feet by 4 feet • Shall be permitted to overlap other turning spaces and clear spaces • Where constrained by back-of-sidewalk: minimum: 4 feet by 5 feet, with 5-foot dimension in direction of ramp run <p><i>(In 2004 ADAAG, minimum: 3 feet by 3 feet, at least as wide as curb ramp. In alterations, allowed instead of top landing flares with maximum slope 1:12 (8.3 percent))</i></p>
	Perpendicular Curb Ramps – Ramp Running Slope*	<p>R304.2.2 Running Slope</p> <ul style="list-style-type: none"> • Minimum: 5 percent • Maximum: 8.3 percent <p><i>(2004 ADAAG did not indicate minimum running slope, and permitted in existing sites, buildings, and facilities, to have running slopes steeper than 1:12 (8.3%) complying with below where such slopes are necessary due to space limitations:</i></p> <ul style="list-style-type: none"> • 8.3%-10% for rise up to 6 inches • 10%-12.5% for rise up to 3 inches)
	Perpendicular Curb Ramps – Ramp Running Slope Direction in Relation to Curb*	<p>R304.2.2 Running Slope</p> <p>Shall cut through or be built up to curb at right angles or meet gutter grade break at right angles where curb is curved</p> <p><i>(Not addressed for perpendicular ramps in 2004 ADAAG; however required diagonal or corner type curb ramps with returned curbs or other well-defined edges to have edges parallel to direction of pedestrian flow.)</i></p>
	Perpendicular Curb Ramps – RAMP RUNNING SLOPE DIRECTION in RELATION to Curb	<p>R304.2.2 Running Slope</p> <p>Shall cut through or be built up to curb at right angles or meet gutter grade break at right angles where curb is curved</p>
	Perpendicular Curb Ramps – Ramp Length*	<p>R304.2.2 Running Slope</p> <p>Maximum: 15 feet</p> <p><i>(No maximum length for curb ramps specified in 2004 ADAAG, but allowed ramps in general to rise up to 30 inches, which translates to 30 feet for 8.3% slope, longer for a shallower slope)</i></p>
	Perpendicular Curb Ramps – Turning Space Running Slope*	<p>R304.2.2 Running Slope</p> <p>Maximum: 2 percent</p> <p><i>(2004 ADAAG did not indicate running slope for curb ramp turning areas, but allowed maximum 1:48 (2.08%) for landing areas for other types of ramps)</i></p>
	Perpendicular Curb Ramps – Flared Sides Slope	<p>R304.2.3 Flared Sides</p> <p>Where a pedestrian circulation path crosses the curb ramp, maximum: 10 percent, measured parallel to the curb line</p>

Chapter/ Section	Element	Summary of Proposed Guideline
	Parallel Curb Ramps – Turning Space at Bottom of Ramp – General*	<p>R304.3.1 Turning Space</p> <ul style="list-style-type: none"> • Shall be provided at the bottom of the curb ramp • Permitted to overlap other turning spaces and clear spaces • Minimum: 4 feet by 4 feet • Where constrained by 2 or more sides: minimum: 4 feet by 5 feet, with 5-foot dimension in direction of pedestrian street crossing <p><i>(2004 ADAAG did not address parallel curb ramps; however, for ramps in general, required landing areas at least as wide as widest ramp run leading to landing with minimum 5 feet clear length.)</i></p>
	Parallel Curb Ramps – Ramp Running Slope*	<p>R304.3.2 Running Slope</p> <ul style="list-style-type: none"> • Minimum: 5 percent • Maximum: 8.3 percent <p><i>(2004 ADAAG did not indicate minimum running slope, and did not address parallel curb ramps. Permitted in existing sites, buildings, and facilities, to have running slopes steeper than 1:12 (8.3%) complying with below where such slopes are necessary due to space limitations:</i></p> <ul style="list-style-type: none"> • 8.3%-10% for rise up to 6 inches • 10%-12.5% for rise up to 3 inches)
	Parallel Curb Ramps – Ramp Running Slope Direction in Relation to Curb*	<p>R304.3.2 Running Slope</p> <p>Shall be in-line with the direction of sidewalk travel</p> <p><i>(Not in 2004 ADAAG)</i></p>
	Parallel Curb Ramps – Ramp Length*	<p>R304.3.2 Running Slope</p> <p>Maximum: 15 feet</p> <p><i>(No maximum length for curb ramps specified in 2004 ADAAG, but allowed ramps in general to rise up to 30 inches, which translates to 30 feet for 8.3% slope, longer for a shallower slope)</i></p>
	Parallel Curb Ramps – Turning Space Running Slope*	<p>R304.3.2 Running Slope</p> <p>Maximum: 2 percent</p> <p><i>(2004 ADAAG did not indicate running slope for curb ramp turning areas, but allowed maximum 1:48 (2.08%) for landing areas for other types of ramps)</i></p>
	Blended Transitions – Running Slope	<p>R304.4.1 Running Slope</p> <p>Maximum: 5 percent</p> <p><i>(2004 ADAAG did not address blended transitions)</i></p>
	Common Requirements – General	<p>R304.5 Common Requirements. Curb ramps and blended transitions shall comply with R304.5.</p>
	Common Requirements – Width*	<p>R304.5.1 Width</p> <p>Minimum: 4 feet (excluding any flared sides)</p> <p><i>(2004 ADAAG: minimum 3 feet)</i></p>

Chapter/ Section	Element	Summary of Proposed Guideline
	Common Requirements – Grade Breaks*	<p>R304.5.2 Grade Breaks</p> <ul style="list-style-type: none"> • Shall be perpendicular to direction of ramp run at top and bottom of curb ramp runs • Not permitted on ramp runs and turning spaces • Surface slopes that meet at grade breaks shall be flush. <p><i>(2004 ADAAG did not address direction, flush meeting, advised against compound slopes)</i></p>
	Common Requirements – Cross Slope	<p>R304.5.3 Cross Slope</p> <ul style="list-style-type: none"> • Maximum: 2 percent • At pedestrian street crossings without yield or stop control and at midblock pedestrian street crossings, permitted to equal the street or highway grade <p><i>(2004 ADAAG only addressed in general, allowed up to 1:48 (2.08%), with no allowance for street slope)</i></p>
	Common Requirements – Counter Slope - of Gutter or Street at Foot of Curb Ramp Runs, Blended Transitions, and Turning Spaces	<p>R304.5.4 Counter Slope</p> <p>Maximum: 5 percent</p>
	Common Requirements – Clear Space - Beyond the Bottom Grade Break*	<p>R304.5.5 Clear Space</p> <p>Minimum: 4 feet by 4 feet, provided within width of pedestrian street crossing and wholly outside parallel vehicle travel lane</p> <p><i>(2004 ADAAG: Curb ramps and flared sides shall be located to not project into vehicular traffic lanes, parking spaces, or parking access aisles. Curb ramps at marked crossings shall be wholly contained within markings, excluding flared sides. Diagonal curb ramps require minimum 4 feet by 4 feet. Diagonal ramps with flares require with segment of curb 24 inches long minimum located on each side of curb ramp and within marked crossing)</i></p>
R3	R305 - Detectable Warning Surfaces	
	Visual Contrast	<p>R305.1.3 Contrast</p> <p>Shall contrast visually with adjacent gutter, street or highway, or pedestrian access route surface, either light-on-dark or dark-on-light</p>

Chapter/ Section	Element	Summary of Proposed Guideline
	Size*	<p>R305.1.4 Size</p> <p>Depth: Minimum: 2 feet in direction of pedestrian travel</p> <p>Width:</p> <ul style="list-style-type: none"> • At curb ramps and blended transitions, shall extend full width of ramp run (perpendicular ramp), blended transition, or turning space (parallel ramp) • At pedestrian at-grade rail crossings not located within street or highway, shall extend full width of crossing • At boarding platforms for buses and rail vehicles, shall extend full length of public use areas of platform • At boarding and alighting areas at sidewalk or street level transit stops for rail vehicles, shall extend full length of transit stop <p><i>(2004 ADAAG specified, at curb ramps, either the full depth of the curb ramp or 24 inches deep minimum measured from the back of the curb on the ramp surface. Did not address at-grade rail crossings or street-level transit stops)</i></p>
	Placement – Perpendicular Curb Ramps*	<p>R305.2.1 Perpendicular Curb Ramps</p> <p>Where ends of bottom grade break are:</p> <ul style="list-style-type: none"> • in front of back of curb, shall be placed at the back of curb • behind back of curb and distance from either end of bottom grade brake to back of curb is 5 feet or less, shall be placed on ramp run within one dome spacing of bottom grade break • behind back of curb and distance from either end of bottom grade brake to back of curb is over 5 feet, shall be placed on lower landing at back of curb <p><i>(2004 ADAAG indicated, in reference to depth measurement, placement at back of curb, without variation)</i></p>
	Placement – Parallel Curb Ramps*	<p>R305.2.2 Parallel Curb Ramps</p> <p>Shall be placed on turning space at flush transition between street and sidewalk</p> <p><i>(2004 ADAAG indicated, in reference to depth measurement, placement at back of curb; did not address parallel ramps)</i></p>
	Placement – Blended Transitions*	<p>R305.2.3 Blended Transitions</p> <p>Shall be placed at back of curb.</p> <p>Where level pedestrian street crossings are provided (e.g. raised pedestrian street crossings, depressed corners), shall be placed at flush transition between street and sidewalk</p> <p><i>(2004 ADAAG indicated, in reference to depth measurement, placement at back of curb; did not address blended transitions or level pedestrian crossings)</i></p>
	Placement – Pedestrian Refuge Islands – Cut-Through*	<p>R305.2.4 Pedestrian Refuge Islands</p> <p>Shall be placed at edges of pedestrian island, separated by 2 feet minimum length of surface without detectable warnings</p> <p><i>(2004 ADAAG did not address pedestrian island cut-throughs)</i></p>

Chapter/ Section	Element	Summary of Proposed Guideline
	Placement – Pedestrian At-Grade Rail Crossings – Not Located Within a Street or Highway*	R305.2.5 Pedestrian At-Grade Rail Crossings Shall be placed on each side of rail crossing <ul style="list-style-type: none"> • Edge nearest rail crossing shall be 6 to 15 feet from centerline of nearest rail • Where pedestrian gates are provided, detectable warning surfaces shall be placed on side of gates opposite rail. <i>(2004 ADAAG did not address at-grade rail crossings)</i>
	Placement – Boarding Platforms for Buses and Rail Vehicles	R305.2.6 Boarding Platforms Shall be placed at boarding edge of platform
	Placement – Boarding and Alighting Areas at Sidewalk or Street Level Transit Stops for Rail Vehicles*	R305.2.7 Boarding and Alighting Areas Shall be placed at the side of boarding and alighting area facing rail vehicles <i>(2004 ADAAG did not address street-level transit stops)</i>
R3	R306 - Pedestrian Street Crossings	
	Roundabouts – Separation Where Sidewalks Are Flush Against Curb And Pedestrian Street Crossing is Not Intended*	R306.3.1 Separation <ul style="list-style-type: none"> • A continuous and detectable edge treatment shall be provided along street side of sidewalk. • Detectable warning surfaces shall not be used for edge treatment. • Where chains, fencing, or railings are used for edge treatment, shall have bottom edge 15 inches maximum above sidewalk <i>(2004 ADAAG did not address roundabouts)</i>
	Pedestrian Activated Signals at Roundabouts with Multi-Lane Crossings, and Roundabouts and Other Signalized Intersections with Channelized Turn Lanes*	R306.3.2 Pedestrian Activated Signals R306.4 Channelized Turn Lanes at Roundabouts R306.5 Channelized Turn Lanes at Other Signalized Intersections <ul style="list-style-type: none"> • Shall comply with R209 • At roundabouts: Shall be provided for each multi-lane segment of each pedestrian street crossing, including splitter island • At roundabouts: Shall clearly identify which pedestrian street crossing segment signal serves <i>(2004 ADAAG did not address roundabouts or channelized tune lanes)</i>
R3	R308 - Transit Stops and Transit Shelters	
	Boarding and Alighting Areas - Dimensions	R308.1.1.1 Dimensions <ul style="list-style-type: none"> • Parallel to street or highway, minimum 5 (60 inches) feet • Perpendicular to curb or street or highway edge, minimum 8 feet (96 inches)

Chapter/ Section	Element	Summary of Proposed Guideline
	Boarding and Alighting Areas - Grade	<p>R308.1.1.2 Grade</p> <ul style="list-style-type: none"> • Parallel to street or highway, the same as street or highway, to extent practicable • Perpendicular to street or highway, maximum 2 percent (2004 ADAAG allows up to 1:48 (2.08 percent) perpendicular to street highway)
	Boarding Platforms - Platform and Vehicle Floor Coordination	<p>R308.1.2.1 Platform and Vehicle Floor Coordination</p> <p>Shall be positioned to coordinate with vehicles in accordance with applicable requirements in 49 CFR parts 37 and 38</p>
	Boarding Platforms - Slope	<p>R308.1.2.2 Slope</p> <ul style="list-style-type: none"> • Maximum 2 percent in any direction • Where boarding platforms serve vehicles operating on existing track or existing street or highway, slope of platform parallel to track or street or highway is permitted to be equal to grade of track or street or highway (2004 ADAAG allows up to 1:48 (2.08 percent))
	Common Requirements - Surfaces	<p>R308.1.3.1 Surfaces</p> <p>Shall comply with R302.7</p>
	Common Requirements - Connection	<p>R308.1.3.2 Connection</p> <p>Shall be connected to streets, sidewalks, or pedestrian circulation paths by compliant pedestrian access routes</p>
	Transit Shelters - Connection	<p>R308.2 Transit Shelters</p> <p>Shall be connected to boarding and alighting areas or boarding platforms by compliant pedestrian access routes</p>
	Transit Shelters – Clear Space*	<p>R308.2 Transit Shelters</p> <ul style="list-style-type: none"> • Shall provide a clear space within shelter that complies with R404, including: minimum 2.5 feet (30 inches) by 4 feet (48 inches), adjoining a pedestrian access route or other clear space, with additional maneuvering space if confined on three sides. • If seating is provided in shelter, shall be either at one end of seat or at least 1.5 feet (18 inches) from front edge of seat. (2004 ADAAG did not address clear space placement in relation to seating)
R4	R402 - Protruding Objects	
	Protrusion Limits*	<p>R402.2 Protrusion Limits</p> <p>Objects with leading edges between 2.25 feet (27 inches) and 6.7 feet (80 inches) above finish surface shall protrude 4 inches maximum horizontally into pedestrian circulation paths. (2004 ADAAG allows handrails to protrude up to 1.5 inches)</p>

Chapter/ Section	Element	Summary of Proposed Guideline
	Post-Mounted Objects – Mounted on Free-Standing Posts or Pylons*	<p>R402.3 Post-Mounted Objects</p> <ul style="list-style-type: none"> • Objects mounted between 2.25 feet (27 inches) and 6.7 feet (80 inches) above finish surface shall overhang pedestrian circulation paths 4 inches maximum measured horizontally from post or pylon base. Base dimension shall be 2.5 in thick minimum. • Where mounted between posts or pylons and clear distance between posts or pylons exceeds 1 foot, lowest edge of object shall be between 2.25 feet (27 inches) and 6.7 feet (80 inches) above finish surface. <p><i>(2004 ADAAG does not require sloping handrails serving stairs and ramps to comply)</i></p>
	Reduced Vertical Clearance*	<p>R402.4 Reduced Vertical Clearance</p> <p>Guardrails or other barriers to pedestrian travel shall be provided where vertical clearance is less than 6.7 feet (80 inches) high. Leading edge of guardrail or barrier shall be located 2.25 feet (27 inches) maximum above finish surface</p> <p><i>(2004 ADAAG allows door closers and door stops to be 78 inches minimum above finish floor or ground)</i></p>
R4	R403 - Operable Parts	
	Clear Space	<p>R403.2 Clear Space</p> <p>Shall provide a clear space at operate parts that complies with R404</p>
	Height	<p>R403.3 Height</p> <p>Shall be placed within one or more of reach ranges specified in R406</p>
	Operation	<p>R403.4 Operation</p> <p>Shall be operable with one hand and not require tight grasping, pinching, or twisting of wrist. Force required to activate: 5 pounds (22 N) maximum.</p>
R4	R404 - Clear Spaces	
	Surfaces	<p>R404.2 Surfaces.</p> <p>Shall comply with R302.7, with running slope consistent with grade of adjacent pedestrian access route and cross slope of 2 percent maximum.</p> <p><i>(2004 ADAAG allows up to 1:48 (2.08 percent) slope)</i></p>
	Size	<p>R404.3 Size</p> <p>Minimum 2.5 feet (30 inches) by 4 feet (48 inches)</p>
	Knee and Toe Clearance	<p>R404.4 Knee and Toe Clearance</p> <p>Unless otherwise specified, shall be permitted to include knee and toe clearance complying with R405</p>
	Position	<p>R404.5.Position</p> <p>Unless otherwise specified, shall be positioned for either forward or parallel approach to an element</p>

Chapter/ Section	Element	Summary of Proposed Guideline
	Approach	R404.6 Approach One full unobstructed side of clear space shall adjoin pedestrian access route or another clear space
	Maneuvering Space	R404.7 Maneuvering Space Where clear space is confined on all or part of three sides, additional maneuvering space shall be provided: <ul style="list-style-type: none"> • Forward Approach: minimum 3 feet wide where depth exceeds 2 feet • Parallel Approach: minimum 5 feet wide where depth exceeds 1.25 feet (15 inches)
R4	R406 - Reach Ranges	
	Unobstructed Forward Reach	R406.2 Unobstructed Forward Reach Between 1.25 feet (15 inches) and 4 feet (48 inches) above finish surface
	Unobstructed Side Reach	R406.3 Unobstructed Side Reach Between 1.25 feet (15 inches) and 4 feet (48 inches) above finish surface (An obstruction with depth maximum 10 inches shall be permitted between clear space and element.)
	Unobstructed Side Reach	R406.3 Unobstructed Side Reach Between 1.25 feet (15 inches) and 4 feet (48 inches) above finish surface (An obstruction with depth maximum 10 inches shall be permitted between clear space and element.)
R4	R407 – Ramps	
	Running Slope*	R407.2 Running Slope Minimum: 5 percent Maximum: 8.3 percent <i>(2004 ADAAG did not specify a minimum, and allowed ramps in existing sites, buildings, and facilities, to have the following running slopes where necessary due to space limitations: 8.3%-10% for rise up to 6 inches, 10%-12.5% for rise up to 3 inches.)</i>
	Cross Slope	R407.3 Cross Slope Maximum: 2 percent <i>(2004 ADAAG allows up to 1:48 (2.08 percent))</i>
	Width	R407.4 Width Minimum: 3 feet (including clear width between hand rails where provided)
	Rise	R407.5 Rise Maximum: 2.5 feet (30 inches)
	Landings – Location	R407.6 Landings Shall be at top and bottom of each ramp run
	Landings – Slope	R407.6.1 Slope Maximum: 2 percent in any direction <i>(2004 ADAAG allows up to 1:48 (2.08 percent))</i>
	Landings – Width	R407.6.2 Width Minimum: as wide as widest ramp run leading to landing

Chapter/ Section	Element	Summary of Proposed Guideline
	Landings – Length	R407.6.3 Length Minimum: 5 feet
	Landings – Change in Direction between Runs	R407.6.4 Change in Direction Minimum: 5 feet by 5 feet
	Surfaces	R407.7 Surfaces Shall comply with R302.7
	Handrails	R407.8 Handrails Ramp runs with rise greater than 6 inches shall have handrails complying with R409

* Not addressed in ADAAG, or differs significantly from ADAAG.

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Appendix C

Rating System

Rating System

INTRODUCTION

To aide in categorizing the non-compliant assets, a rating system was developed for curb ramps, intersections and sidewalk segments. This appendix provides the scoring system for each pedestrian element and the scoring results.

CURB RAMP RATING SYSTEM

As referenced in Chapter 2, non-compliant curb ramps have been rated in priority as high, medium, or low. Curb ramps included in the high priority category have a deficiency that render the ramp unusable for a mobility device user. The medium and low priority curb ramps were delineated based on the following rating system.

The curb ramp rating system was developed based on a simple point system which can be seen in Table C-1. For each non-compliant element, one point was assessed. The more severe the non-compliant element, the more points assessed. For example, if the ramp running slope has a measurement of less than 8.3% no points are recorded, if the running slope ranges between 8.3% and 12.5% one point is recorded, and if the running slope is greater than 12.5%, two points are recorded. A surveyed curb ramp that meets all ADA guidelines will receive a score of zero. The more points a curb ramp earns the more deficiencies the curb ramp contains.

Table C-1: Curb Ramp Scoring System

Curb Ramp Element	Categorical Rating Score		
Ramp Width	$\geq 48'' = 0$	$< 48'' = 1$	
Ramp Running Slope	$< 8.33\% = 0$	$8.3\% \text{ to } 12.5\% = 1$	$> 12.5\% = 2$
Ramp Cross Slope	$< 2\% = 0$	$2\% \text{ to } 4\% = 1$	$> 4\% = 2$
Flare Slope	$\leq 10\% = 0$	$> 10\% = 1$	
Top Landing Size	$\geq 48'' \times 48'' = 0$	$< 48'' \times 48'' = 1$	
Top Landing Run Slope	$< 2\% = 0$	$2\% \text{ to } 4\% = 1$	$> 4\% = 2$
Top Landing Cross Slope	$< 2\% = 0$	$2\% \text{ to } 4\% = 1$	$> 4\% = 2$
Lower Landing Depth (Parallel Only)	$\geq 48'' = 0$	$< 48'' = 1$	
Lower Landing Width (Parallel Only)	$\geq 60'' = 0$	$< 60'' = 1$	
Lower Landing Run Slope (Parallel Only)	$< 2\% = 0$	$2\% \text{ to } 4\% = 1$	$> 4\% = 2$
Lower Landing Cross Slope (Parallel Only)	$< 2\% = 0$	$2\% \text{ to } 4\% = 1$	$> 4\% = 2$
Sidewalk Connection	Yes = 0	No = 1	
Tactile Surface	Yes = 0	No = 1	

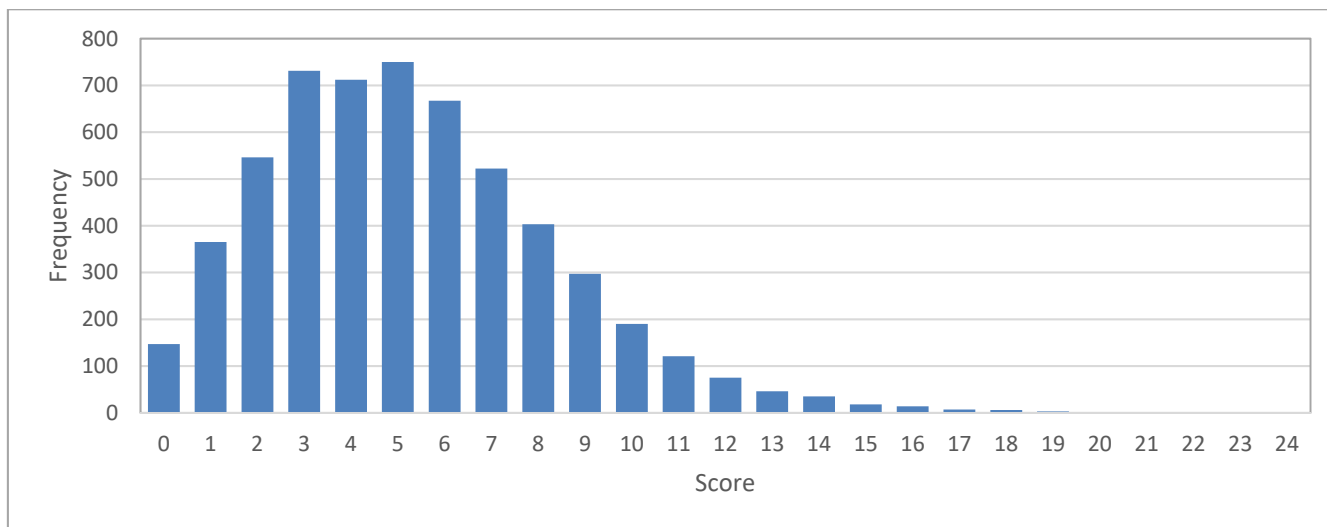
Curb Ramp Element	Categorical Rating Score		
Tactile Surface Correctly Installed	Yes = 0	No = 1	
Within Crosswalk*	Yes = 0	No = 1	
Barrier or Obstruction**	No = 0	Yes = 1	
Bottom Counter Slope	$\leq 5\% = 0$	$> 5\% = 1$	
Top Landing Transition	Flush = 0	Not Flush = 1	
Bottom Landing Transition	Flush = 0	Not Flush = 1	
Top Landing Perpendicular	Yes = 0	No = 1	
Bottom Landing Perpendicular	Yes = 0	No = 1	

*If marked crosswalk is present

**Points assigned per instance (maximum of 3)

The rating system provided a minimum score of zero and a maximum score of 28. The score totals and results for all curb ramps are displayed below in Figure C-1.

Figure C-1: Curb Ramp Categorical Rating System Results



The results show a scoring range of zero to 24 with an average score of 5.27 and a median and mode of five. Curb ramps with a score of five or less were included in the low priority category and curb ramps with a score of six to 24 were included in the medium priority category.

INTERSECTION RATING SYSTEM

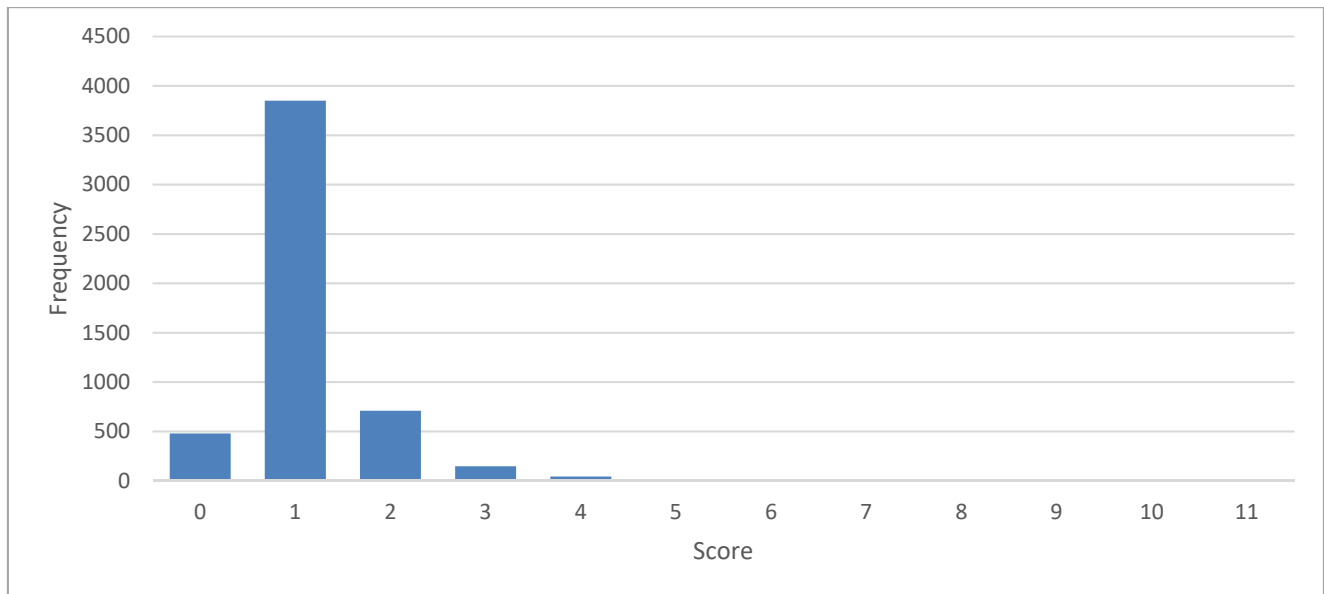
Non-compliant intersections were also rated in priority levels of high, medium, and low. High priority intersections were selected based on major accessibility issues such as obstructions and missing curb ramps. The medium and low priority ratings are based on the following rating system.

The intersection rating system is based on a point system which can be seen in Table C-2. Each non-compliant element received a score of one. A fully compliant intersection will receive a score of zero. The more compliance issues, the higher the intersection rating score. The highest possible intersection score, assuming the intersection has two side islands and a median, is 18.

Table C-2: Intersection Scoring System

Intersection Element	Categorical Rating Score	
Marked Crosswalk	Yes = 0	No = 1
Barrier or Obstruction	No = 0	Yes = 1
Median Width	$\geq 60'' = 0$	$< 60'' = 1$
Median Tactile Surface (Only If Median is $\geq 6'$ in Length)	Yes = 0	No = 1
Median Tactile Surface Correctly Installed	Yes or N/A = 0	No = 1
Side Island Width	$\geq 60'' = 0$	$< 60'' = 1$
Side Island Tactile Surface (Only If Side Island is $\geq 6'$ in Length)	Yes = 0	No = 1
Side Island Tactile Surface Correctly Installed	Yes = 0	No = 1
Pedestrian Signal Countdown	Yes = 0	No = 1
Pedestrian Button Accessible	Yes = 0	No = 1
Pedestrian Button Height	15" to 48" = 0	$< 15''$ or $> 48'' = 1$

The rating system provided a minimum score of zero and high score of 11. The results of the scoring system are shown in Figure C-2.

Figure C-2: Intersection Categorical Rating System Results

The results show a scoring range of zero to eleven with an average score of 1.13 and a median and mode of one. Curb ramps with a score of one were included in the low priority category and curb ramps with a score of two to 11 were included in the medium priority category.

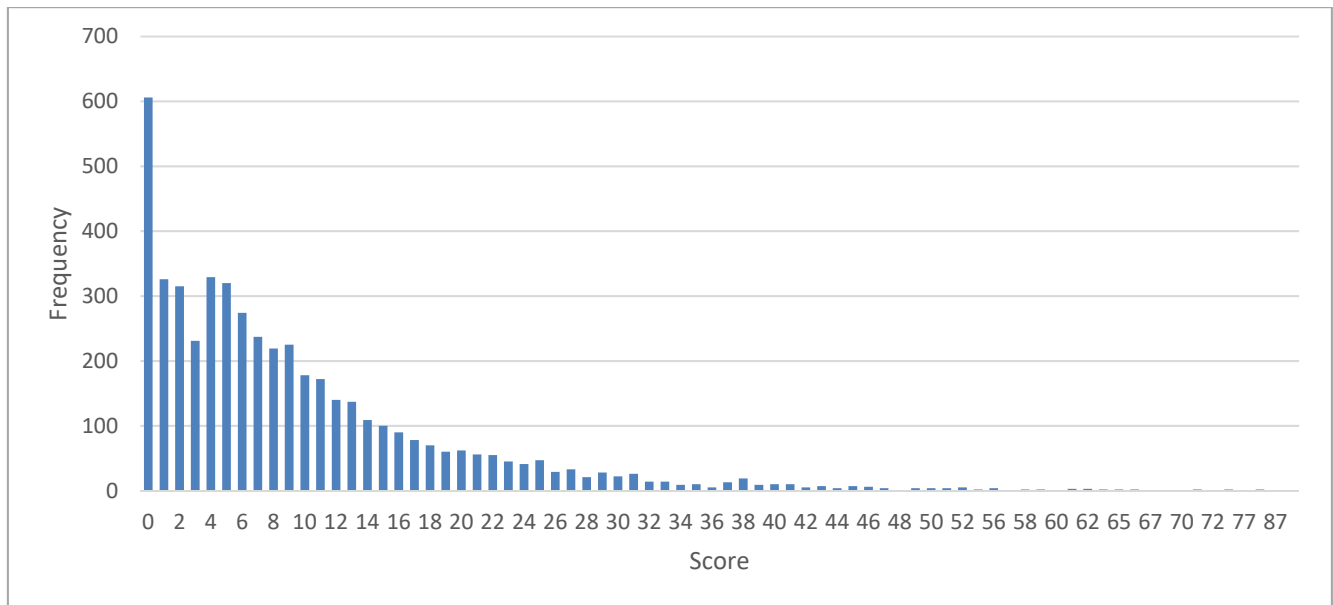
SIDEWALK RATING SYSTEM

The sidewalk rating system used the three tiers of high, medium, and low priority for non-compliant sidewalk segments. High priority sidewalks were selected based on significant compliance issues such as extremely narrow sidewalks and non-continuous sidewalk segments. Both medium and low priority sidewalks were based on the scoring system seen in Table C-3.

Table C-3: Sidewalk Scoring System

Sidewalk Element	Categorical Rating Score	
Sidewalk Width	$\geq 48'' = 0$	$< 48'' = 1$
Sidewalk Continuous	Yes = 0	No = 1
Running Slope	Matches Street = 0	Does Not Match St. = 1
Obstruction	None = 0	Each Instance = 1
Surface Obstruction	None = 0	Based on Percentage of Length 0-25% = 1 26-50% = 2 51-75% = 3 76-100% = 4
Removable Barrier	None = 0	Based on Percentage of Length 0-25% = 1 26-50% = 2 51-75% = 3 76-100% = 4
Cross Slope	$\leq 2\% = 0$	Based on Percentage of Length 0-25% = 1 26-50% = 2 51-75% = 3 76-100% = 4
Driveway	$\leq 2\% = 0$	$> 2\%$ (Each Instance) = 1 Signalized w/o Tactile (Each Instance) = 1
Protrusion	None = 0	Each Instance = 1

The rating system provided a minimum score of zero and high score of 88. The results of the scoring system are shown in Figure C-3.

Figure C-3: Sidewalk Categorical Rating System Results

The results show a scoring range of zero to 88 with an average score of 9.67, a median score of seven, and a mode of zero. Sidewalk segments with a score of one to nine were included in the low priority category and curb ramps with a score of ten to 88 were included in the medium priority category.

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