

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION 6

PLANS
JUNE 20, 2017

CONTRACT ID: DF00178

WBS ELEMENT NO.: 44916.3.2 & 44916.3.3

FEDERAL AID NO.: TAP-0620(035) & TAP-0620(036)

COUNTY: BLADEN, COLUMBUS & ROBESON

TIP NO.: R-5786A

LENGTH OF PROJECT: VARIOUS

ROUTE NO.: VARIOUS

LOCATION: VARIOUS

TYPE OF WORK: CURB RAMP INSTALLATIONS

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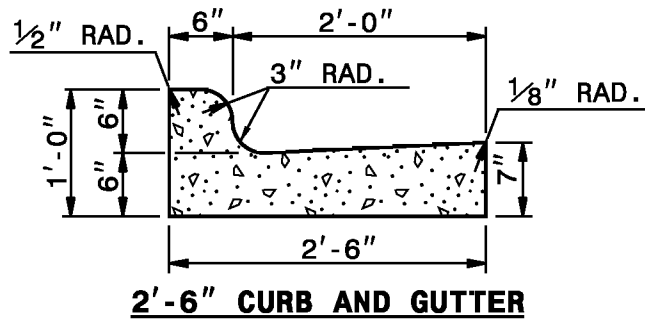
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SUMMARY OF QUANTITIES - BLADEN, COLUMBUS & ROBESON CO.

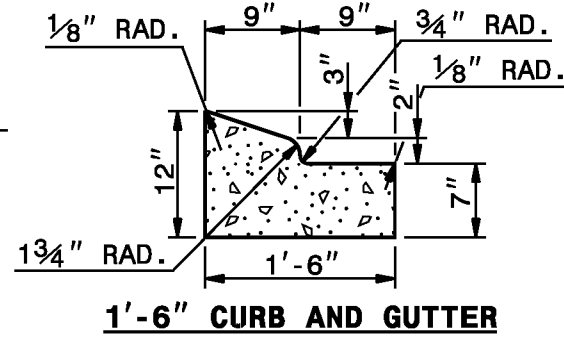
PROJECT NO	COUNTY	MUNICIPALITY	MAJOR ROUTE	MINOR ROUTE	0000100000-N	2549000000-E	2591000000-E	2600000000-N	2605000000-N	2800000000-N	2815000000-N	4697000000-E
					Mobilization LS	2'-6" Concrete Curb & Gutter LF	4" Concrete Sidewalk SY	Retrofit Existing Curb Ramp EA	Concrete Curb Ramp EA	Adjustments of Catch Basins EA	Adjustments of Drop Inlets EA	Thermoplastic Pavement Marking Lines (8", 120 mils) LF
44916.3.2	Columbus	Whiteville	US 74/76 Business	SR 1916	0.5							100
44916.3.2	Columbus	Whiteville	US 74/76 Business	McGougan Law D/W		10	10		2			
44916.3.2	Columbus	Whiteville	SR 1916	Wyche St								170
44916.3.2	Columbus	Whiteville	SR 1916	Whiteville HS - Bowers North		10	110		2			
44916.3.2	Columbus	Whiteville	SR 1916	Whiteville HS - Bowers South		10	110		2			
44916.3.2	Columbus	Whiteville	SR 1916	Williamson St								170
SUBTOTAL					0.5	30	230	0	6	0	0	440
44916.3.2	Robeson	Lumberton	NC 72 / NC 41	Seneca Ave.		15	15	1	3			
44916.3.2	Robeson	Lumberton	SR 1997	Boomerang/Highland		5	5	2	1			
44916.3.2	Robeson	Lumberton	SR 1997	Kimbrell's D/W		5	5	1	1			
44916.3.2	Robeson	Lumberton	NC 41	California/Marion		10	10	1	2			
44916.3.2	Robeson	Lumberton	NC 41	Spruce/Hay		5	5	3	1			
44916.3.2	Robeson	Lumberton	NC 72	Halsey St.		5	5	1	1			
44916.3.2	Robeson	Lumberton	NC 72 / NC 41	SR 1536 (Water St.)		10	10		2			
44916.3.2	Robeson	Lumberton	NC 72 / NC 41	Grace St.		10	10	1	2			
44916.3.2	Robeson	Lumberton	NC 72 / NC 41	Norwood St.		5	5	1	1			
44916.3.2	Robeson	Lumberton	NC 72 / NC 41	Carolina Ave.		5	5	1	1			
44916.3.2	Robeson	Lumberton	NC 72 / NC 41	Linwood/Hollywood		5	5	3	1			
44916.3.2	Robeson	Lumberton	NC 72 / NC 41	NC 41 (MLK)		5	5	3	1			
44916.3.2	Robeson	Lumberton	NC 72 / NC 41	SR 1997 (Pine St.)		5	5	3	1			
44916.3.2	Robeson	Lumberton	NC 41	Thompson/Oregon		5	5	3	1			
44916.3.2	Robeson	Lumberton	NC 41	Washington		5	5	2	1			
SUBTOTAL					0.0	100	100	26	20	0	0	0
TOTAL FOR WBS NO. 44916.3.2					0.5	130	330	26	26	0	0	440
44916.3.3	Bladen	Elizabethtown	SR 1145	Swanzy St	0.5	10	10		2	1		
44916.3.3	Bladen	Elizabethtown	SR 1145	Mill St		10	10		2	1		
44916.3.3	Bladen	Elizabethtown	SR 1145	Park D/W North		10	10		2			
44916.3.3	Bladen	Elizabethtown	SR 1145	Park D/W South		10	10		2			
44916.3.3	Bladen	Elizabethtown	SR 1145	Dunham St		10	10		2			
44916.3.3	Bladen	Elizabethtown	SR 1145	Gill St		20	20		4			
44916.3.3	Bladen	Elizabethtown	SR 1145	Scimon St		10	10		2			
44916.3.3	Bladen	Elizabethtown	SR 1145	Martin St		10	10		2			
44916.3.3	Bladen	Elizabethtown	SR 1145	Quail St		10	10		2			
44916.3.3	Bladen	Elizabethtown	SR 1145	Gum St		10	10		2			
44916.3.3	Bladen	Elizabethtown	SR 1145	McKoy St		10	10		2			
44916.3.3	Bladen	Elizabethtown	SR 1145	Charter School D/W		5	5		1			
SUBTOTAL					0.5	125	125	0	25	2	0	0
44916.3.3	Columbus	Chadbourn	NC 410	1st Ave		20	20		4			
44916.3.3	Columbus	Chadbourn	NC 410	SR 1425		10	10		2			
44916.3.3	Columbus	Chadbourn	NC 410	SR 1414		10	10		2			
44916.3.3	Columbus	Chadbourn	SR 1421	SR 1423		5	5		1			
44916.3.3	Columbus	Chadbourn	SR 1423	Chadbourn MS - East D/W		10	10		2			
44916.3.3	Columbus	Chadbourn	SR 1423	Chadbourn MS - West D/W		5	5		1		1	
44916.3.3	Columbus	Chadbourn	SR 1425	Wilson St		5	5		1			
SUBTOTAL					0.0	65	65	0	13	0	1	0

					0000100000-N	2549000000-E	2591000000-E	2600000000-N	2605000000-N	2800000000-N	2815000000-N	4697000000-E
PROJECT	COUNTY	MUNICIPALITY	MAJOR ROUTE	MINOR ROUTE	Mobilization	2'-6" Concrete Curb & Gutter	4" Concrete Sidewalk	Retrofit Existing Curb Ramp	Concrete Curb Ramp	Adjustments of Catch Basins	Adjustments of Drop Inlets	Thermoplastic Pavement Marking Lines (8", 120 mils)
44916.3.3	Columbus	Fair Bluff	US 76	NC 904 (River Bridge)		10	10		2			
44916.3.3	Columbus	Fair Bluff	US 76	Rogers St		10	10		2			
44916.3.3	Columbus	Fair Bluff	NC 904	Railroad St		10	10		2			
44916.3.3	Columbus	Fair Bluff	NC 904	Anderson St		10	10		2			
44916.3.3	Columbus	Fair Bluff	NC 904	Waddell St		10	10		2			
44916.3.3	Columbus	Fair Bluff	NC 904	SR 1004		5	5		1			
SUBTOTAL					0.0	55	55	0	11	0	0	0
44916.3.3	Columbus	Tabor City	US 701 Business	Jessie St		5	5		1			
44916.3.3	Columbus	Tabor City	US 701 Business	Shopping Center D/W		10	10		2			
44916.3.3	Columbus	Tabor City	US 701 Business	Williams St		5	5		1			
44916.3.3	Columbus	Tabor City	US 701 Business	Church D/W		10	10		2			
44916.3.3	Columbus	Tabor City	US 701 Business	Howard St		5	5		1			
44916.3.3	Columbus	Tabor City	US 701 Business	Suverying D/W		10	10		2			
44916.3.3	Columbus	Tabor City	US 701 Business	H&R Block D/W		5	5		1			
44916.3.3	Columbus	Tabor City	US 701 Business	US Post Office D/W		5	5		1			
44916.3.3	Columbus	Tabor City	US 701 Business	Wall St		10	10		2			
44916.3.3	Columbus	Tabor City	US 701 Business	NC 904		20	20		4	1		
44916.3.3	Columbus	Tabor City	US 701 Business	BB&T D/W North		10	10		2			
44916.3.3	Columbus	Tabor City	US 701 Business	BB&T D/W South		10	10		2			
44916.3.3	Columbus	Tabor City	US 701 Business	Garrell St		10	10		2	1		
44916.3.3	Columbus	Tabor City	US 701 Business	Bell St		10	10		2	1		
44916.3.3	Columbus	Tabor City	US 701 Business	Mallard St		10	10		2			
44916.3.3	Columbus	Tabor City	NC 410	3rd St		30	30		3			
44916.3.3	Columbus	Tabor City	NC 904	Orange St		20	20		4			
44916.3.3	Columbus	Tabor City	NC 904	Live Oak St		20	20		4	4		
44916.3.3	Columbus	Tabor City	NC 904	Garrell St		10	10		2			
44916.3.3	Columbus	Tabor City	SR 1300	Tabor City ES North		10	110		2			
44916.3.3	Columbus	Tabor City	SR 1300	Tabor City ES South		10	10		2			
44916.3.3	Columbus	Tabor City	SR 1301	Law Office		20	20		2			
44916.3.3	Columbus	Tabor City	SR 1301	4th St		20	20		2		2	
44916.3.3	Columbus	Tabor City	SR 1301	5th St		20	20		4			
44916.3.3	Columbus	Tabor City	SR 1301	6th St		20	20		4			
44916.3.3	Columbus	Tabor City	SR 1301	Chestnut St		20	20		2			
44916.3.3	Columbus	Tabor City	SR 1301	Grace St		20	20		2		2	
44916.3.3	Columbus	Tabor City	SR 1301	Queen St		20	20		2		2	
44916.3.3	Columbus	Tabor City	SR 1301	Reece St		10	10		1		1	
SUBTOTAL					0.0	385	485	0	63	7	7	0
44916.3.3	Robeson	Fairmont	SR 2442	Church St.		20	20		4			
44916.3.3	Robeson	Fairmont	NC 130 Bus.	Floyd				2				
44916.3.3	Robeson	Fairmont	NC 130 Bus.	Mitchell		5	5	1	1			
44916.3.3	Robeson	Fairmont	NC 130 Bus.	Trinity St.		15	15	1	3			
44916.3.3	Robeson	Fairmont	NC 130 Bus.	SR 2442		10	10	2	2			
44916.3.3	Robeson	Fairmont	NC 130 Bus.	Ivey		10	10		2			
SUBTOTAL					0.0	60	60	6	12	0	0	0
44916.3.3	Robeson	Maxton	US 74 Bus	S. Florence				4				
44916.3.3	Robeson	Maxton	US 74 Bus	S. Elm				4				
44916.3.3	Robeson	Maxton	US 74 Bus	S. McNair				4				
44916.3.3	Robeson	Maxton	US 74 Bus	S. Vann				4				
44916.3.3	Robeson	Maxton	US 74 Bus	Austin		5	5	3	1			
44916.3.3	Robeson	Maxton	US 74 Bus	Harris				2				
SUBTOTAL					0.0	5	5	21	1	0	0	0

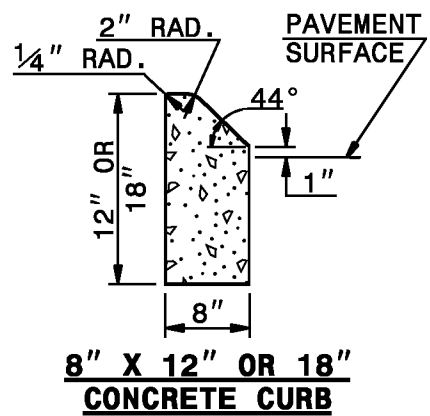
PROJECT	COUNTY	MUNICIPALITY	MAJOR ROUTE	MINOR ROUTE	0000100000-N	2549000000-E	2591000000-E	2600000000-N	2605000000-N	2800000000-N	2815000000-N	4697000000-E
					Mobilization	2'-6" Concrete Curb & Gutter	4" Concrete Sidewalk	Retrofit Existing Curb Ramp	Concrete Curb Ramp	Adjustments of Catch Basins	Adjustments of Drop Inlets	Thermoplastic Pavement Marking Lines (8", 120 mils)
44916.3.3	Robeson	Pembroke	NC 711	The Stable		10	10		2			
44916.3.3	Robeson	Pembroke	NC 711	Vance		15	15	1	3			
44916.3.3	Robeson	Pembroke	NC 711	Jones				2				
44916.3.3	Robeson	Pembroke	NC 711	Lamber bank				2				
44916.3.3	Robeson	Pembroke	NC 711	Walmart				2				
44916.3.3	Robeson	Pembroke	NC 711	Walmart				2				
44916.3.3	Robeson	Pembroke	SR 1561	Courtyard Arts				1				
44916.3.3	Robeson	Pembroke	SR 1561	APT Dr.				2				
44916.3.3	Robeson	Pembroke	SR 1561	Collage terrace				2				
SUBTOTAL					0.0	25	25	14	5	0	0	0
44916.3.3	Robeson	Red Springs	NC 71	Vance		5	5	1	1			
44916.3.3	Robeson	Red Springs	SR 1776	Cross St.		10	10		2			
44916.3.3	Robeson	Red Springs	SR 1776	Collage St.		5	5	3	1			
44916.3.3	Robeson	Red Springs	SR 1776	Peachtree St.		10	10	1	2			
44916.3.3	Robeson	Red Springs	NC 710	5th Ave.		10	10		2			
44916.3.3	Robeson	Red Springs	NC 211	3rd Ave.		10	10	2	2			
44916.3.3	Robeson	Red Springs	NC 211	2nd. Ave.				2				
44916.3.3	Robeson	Red Springs	SR 1324	2nd Ave.		5	5	1	1			
SUBTOTAL					0.0	55	55	10	11	0	0	0
44916.3.3	Robeson	Rowland	SR 1185	Jackson		10	10		2			
44916.3.3	Robeson	Rowland	SR 1185	Church St.		10	10		2			
44916.3.3	Robeson	Rowland	SR 1185	Mccormick		10	10		2			
44916.3.3	Robeson	Rowland	SR 1185	Leach		10	10		2			
44916.3.3	Robeson	Rowland	NC 130	McCallum				1				
44916.3.3	Robeson	Rowland	NC 130	Canal					1			
44916.3.3	Robeson	Rowland	NC 301	Elm		5	5		1			
44916.3.3	Robeson	Rowland	NC 301	Leach				3				
44916.3.3	Robeson	Rowland	NC 301	Mccormick				2				
44916.3.3	Robeson	Rowland	NC 301	Jackson		10	10	2	2			
44916.3.3	Robeson	Rowland	NC 301	Chapel				4				
44916.3.3	Robeson	Rowland	NC 301	Mill				1				
SUBTOTAL					0.0	55	55	13	12	0	0	0
44916.3.3	Robeson	St. Pauls	NC 20	Old Stage rd.				2				
44916.3.3	Robeson	St. Pauls	NC 20	S. 5th St.				4				
44916.3.3	Robeson	St. Pauls	NC 20	S. 4th St.				4				
44916.3.3	Robeson	St. Pauls	NC 20	S. 3rd St.				4				
44916.3.3	Robeson	St. Pauls	NC 301	Blue St.				1				
SUBTOTAL					0.0	0	0	15	0	0	0	0
44916.3.3	Robeson	Proctorville	SR 2232	Sterling		5	5		1			
44916.3.3	Robeson	Proctorville	SR 2232	N. Church St.		5	5		1			
SUBTOTAL					0.0	10	10	0	2	0	0	0
TOTAL FOR WBS NO. 44916.3.3					0.5	840	940	79	155	9	8	0
GRAND TOTAL					1.0	970	1,270	105	181	9	8	440



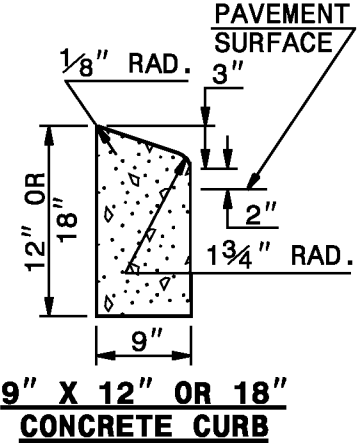
2'-6" CURB AND GUTTER



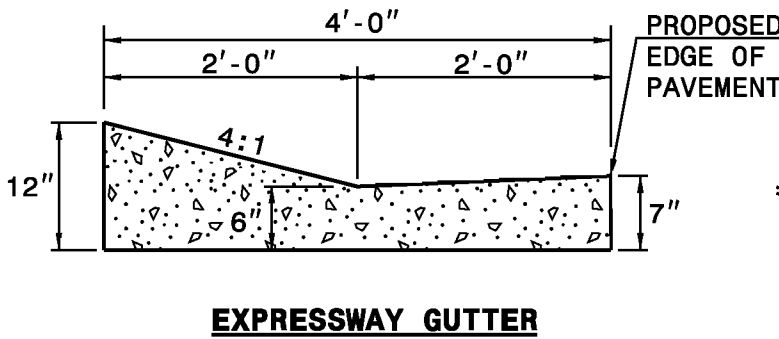
1'-6" CURB AND GUTTER



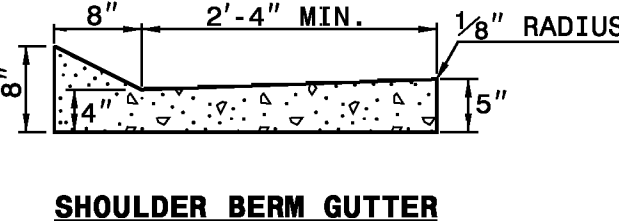
8" X 12" OR 18" CONCRETE CURB



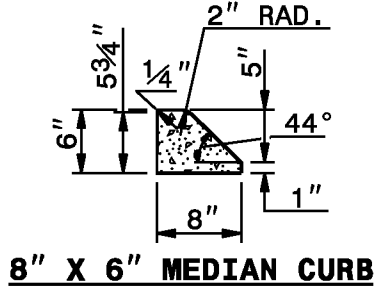
9" X 12" OR 18" CONCRETE CURB



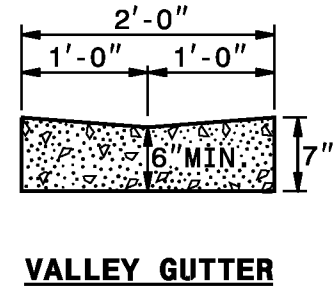
EXPRESSWAY GUTTER



SHOULDER BERM GUTTER



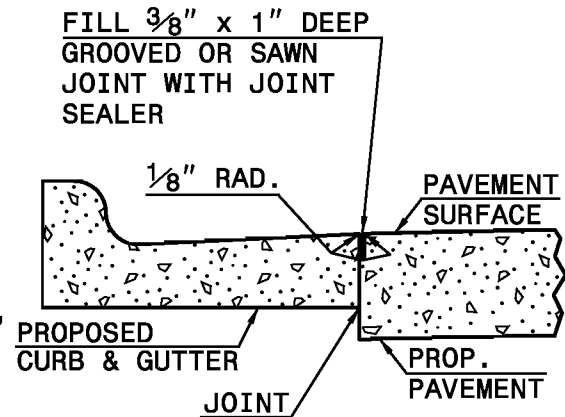
8" X 6" MEDIAN CURB



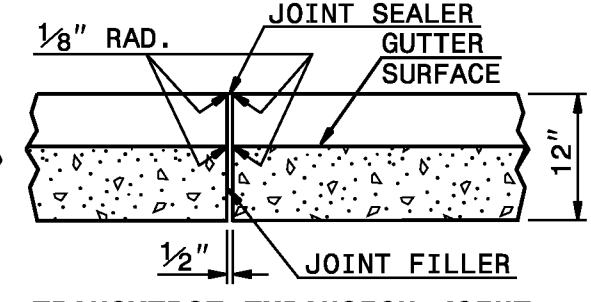
VALLEY GUTTER

SECTION VIEW OF CURBS OR CURBS AND GUTTERS

GENERAL NOTES:
-PLACE CONTRACTION JOINTS AT 10' INTERVALS, EXCEPT THAT A 15' SPACING MAY BE USED WHEN A MACHINE IS USED OR WHEN SATISFACTORY SUPPORT FOR THE FACE FORM CAN BE OBTAINED WITHOUT THE USE OF TEMPLATES AT 10' INTERVALS.
-JOINT SPACING MAY BE ALTERED IF REQUIRED BY THE ENGINEER.
-CONTRACTION JOINTS MAY BE INSTALLED WITH THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS.
-CONSTRUCT NON-TEMPLATE FORMED JOINTS A MIN. OF 1 1/2" DEEP.
-FILL ALL CONSTRUCTION JOINTS, EXCEPT IN 8"x6" MEDIAN CURB, WITH JOINT FILLER AND SEALER.
-SPACE EXPANSION JOINTS AT 90' INTERVALS AND ADJACENT TO ALL RIGID OBJECTS.



LONGITUDINAL JOINT

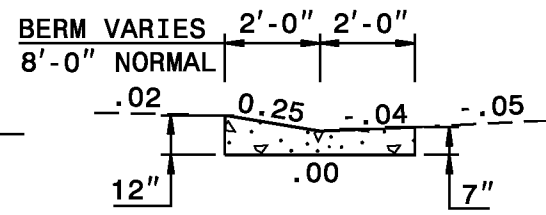
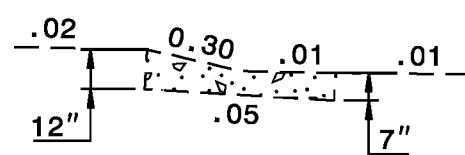
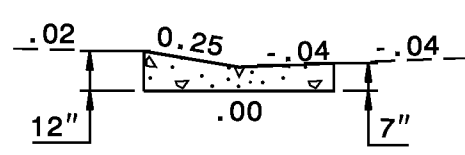
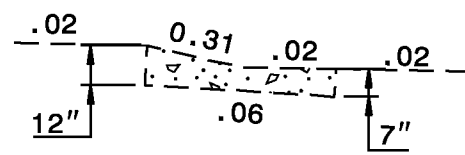
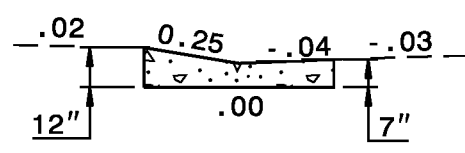
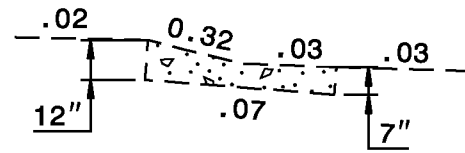
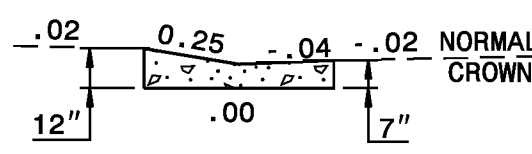
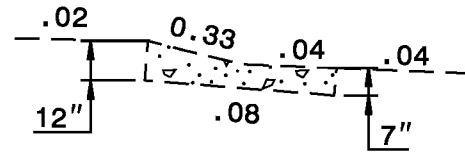
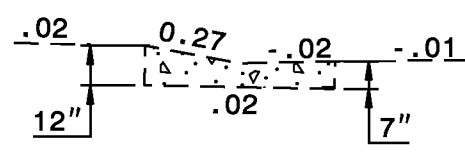
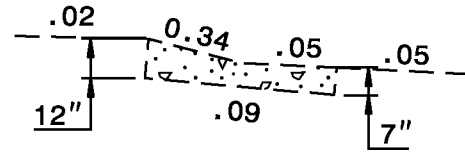
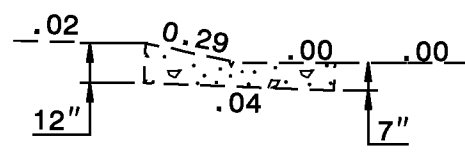
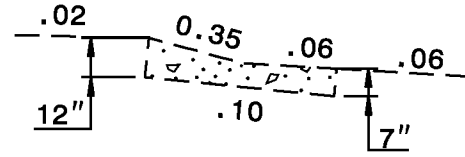


TRANSVERSE EXPANSION JOINT IN CURB AND GUTTER

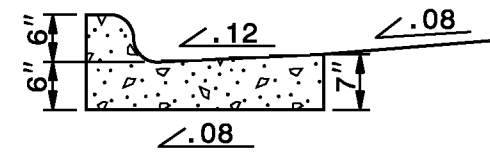
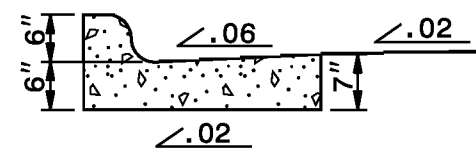
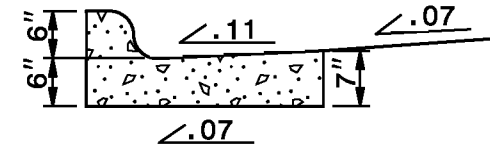
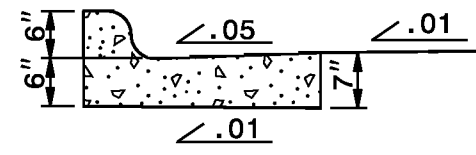
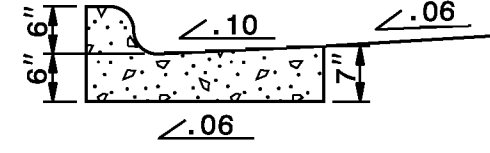
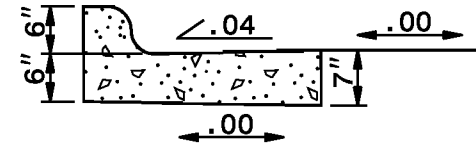
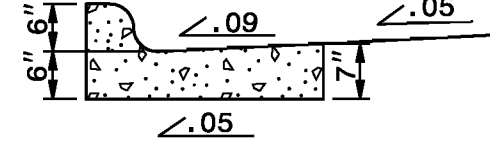
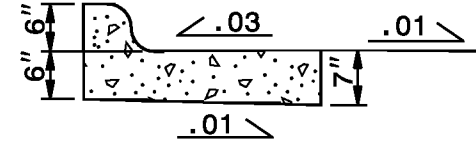
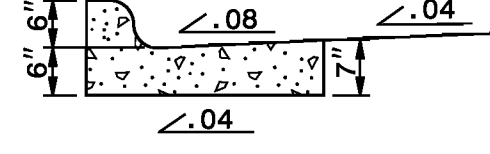
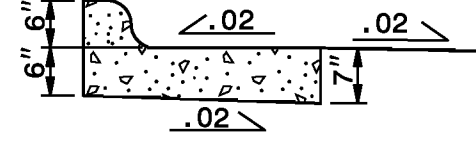
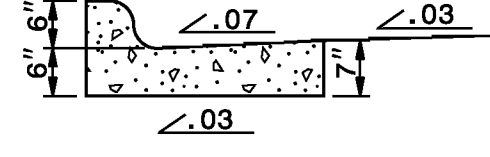
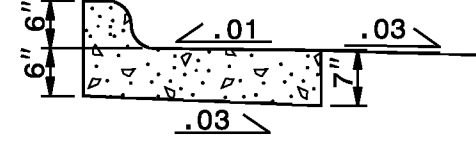
SECTION VIEW OF JOINTS

1-12

ENGLISH STANDARD DRAWING FOR
**CONCRETE CURB, GUTTER
AND CURB & GUTTER**



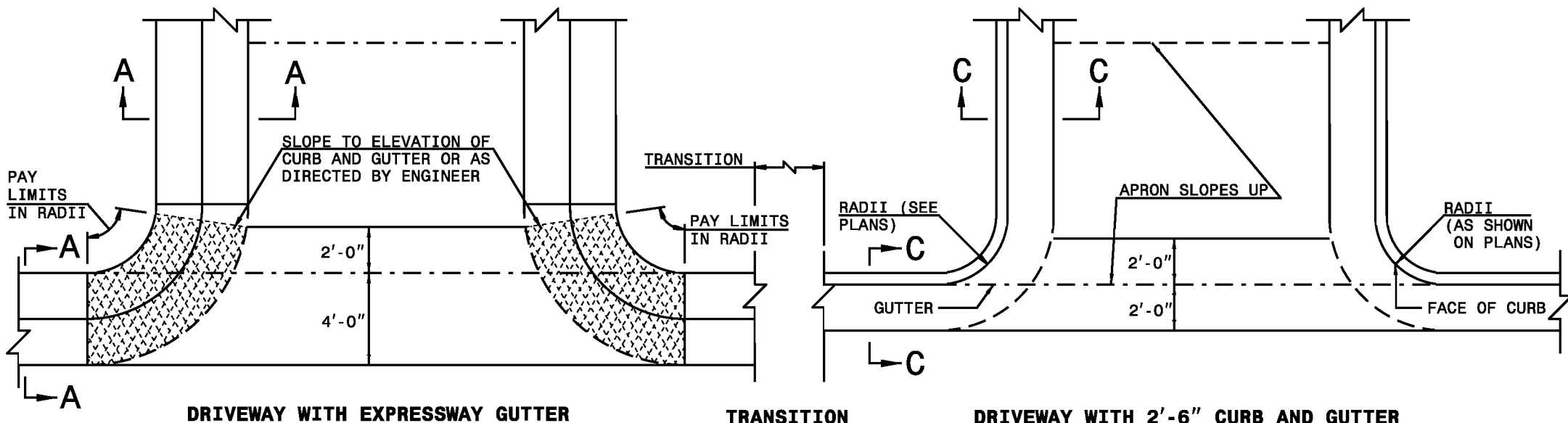
**SECTION VIEWS OF
EXPRESSWAY GUTTER IN SUPER ELEVATION**



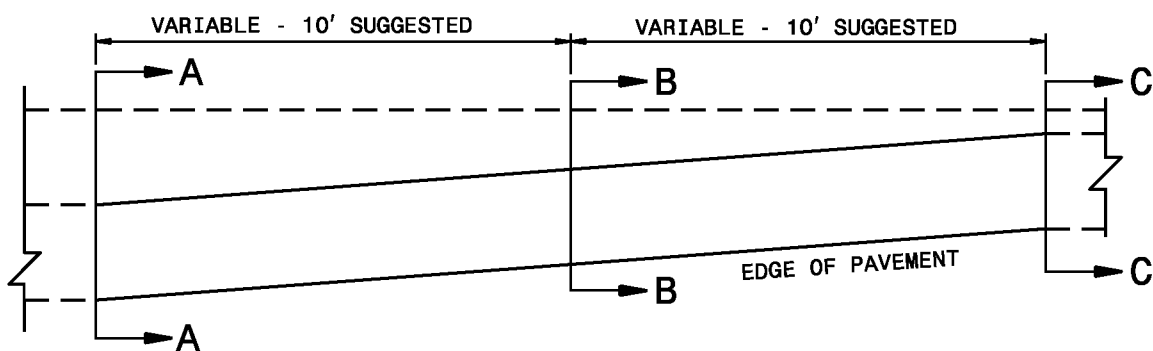
**SECTION VIEWS OF
2'-6" CURB AND GUTTER SUPERELEVATION RATES**

1-12

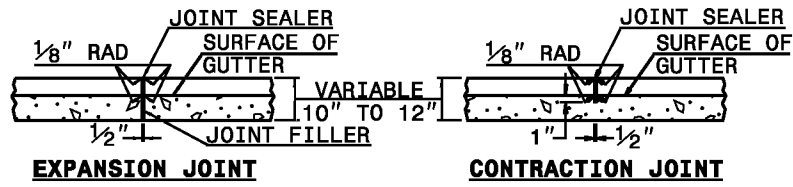
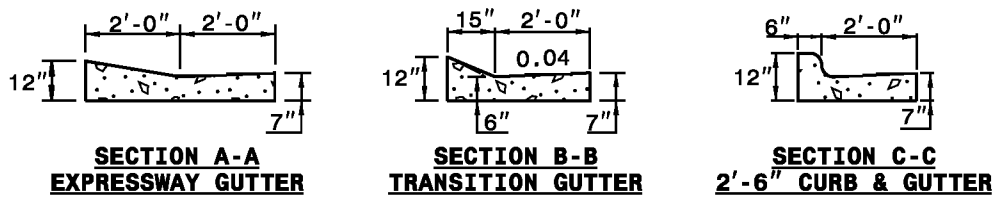
ENGLISH STANDARD DRAWING FOR
**CONCRETE CURB, GUTTER
AND CURB & GUTTER**



DRIVEWAY WITH EXPRESSWAY GUTTER TRANSITION DRIVEWAY WITH 2'-6" CURB AND GUTTER
PLAN VIEW OF TYPICAL CURB AND GUTTER OCCURENCES



PLAN VIEW OF TRANSITION
EXPRESSWAY GUTTER TO 2'-6" CURB AND GUTTER



NOTES:
 - IN THE TRANSITION FROM 4'-0" CONCRETE EXPRESSWAY GUTTER TO 2'-6" CONCRETE CURB AND GUTTER, PLACE 1/2" EXPANSION JOINTS AT 25' INTERVALS.
 - PLACE GROOVE JOINTS 1" DEEP AT 12'-6" INTERVALS BETWEEN EXPANSION JOINTS.
 - FILL AND SEAL THE TOP 1/2" OF THE EXPANSION JOINTS AND 1" OF CONTRACTION JOINTS WITH APPROVED JOINT SEALING COMPOUND.

ENGLISH STANDARD DRAWING FOR
**CONCRETE CURB, GUTTER
AND CURB & GUTTER**

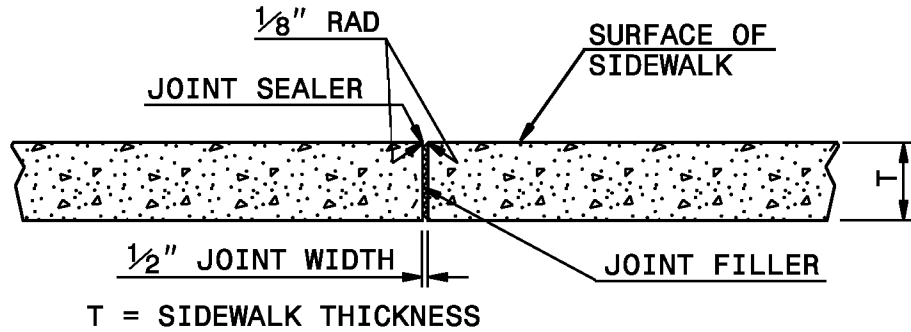
ENGLISH STANDARD DRAWING FOR
**CONCRETE CURB, GUTTER
AND CURB & GUTTER**

NOTES:

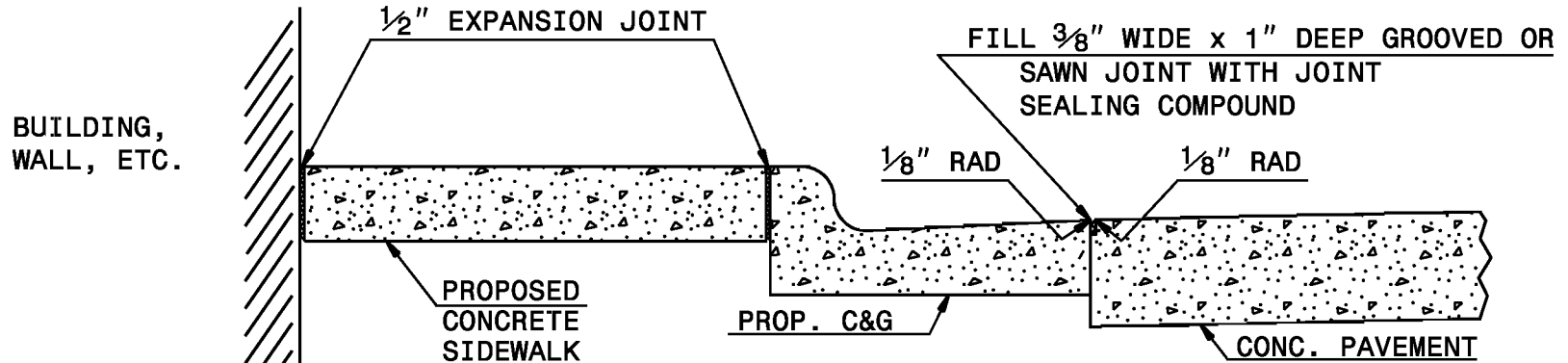
CONSTRUCT STANDARD SIDEWALK 5' WIDE AND 4" THICK UNLESS OTHERWISE DENOTED ON PLANS.

PLACE A GROOVE JOINT 1" DEEP WITH 1/8" RADII IN THE CONCRETE SIDEWALK AT 5' INTERVALS. ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 50' INTERVALS. A 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK JOINS ANY RIGID STRUCTURE.

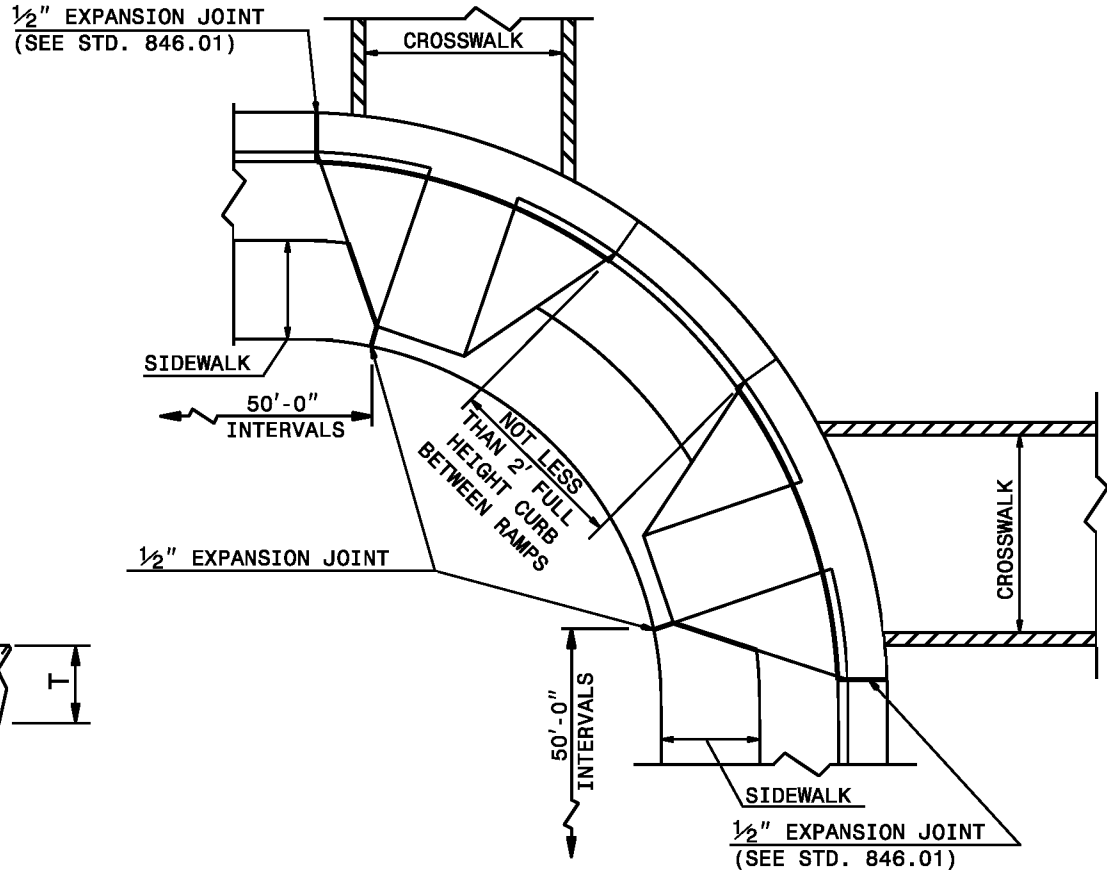
SEE STD. DWG. 848.05 FOR WHEELCHAIR RAMP LOCATION REQUIREMENTS AND CONSTRUCTION GUIDELINES.



**TRANSVERSE EXPANSION JOINT
IN SIDEWALK**

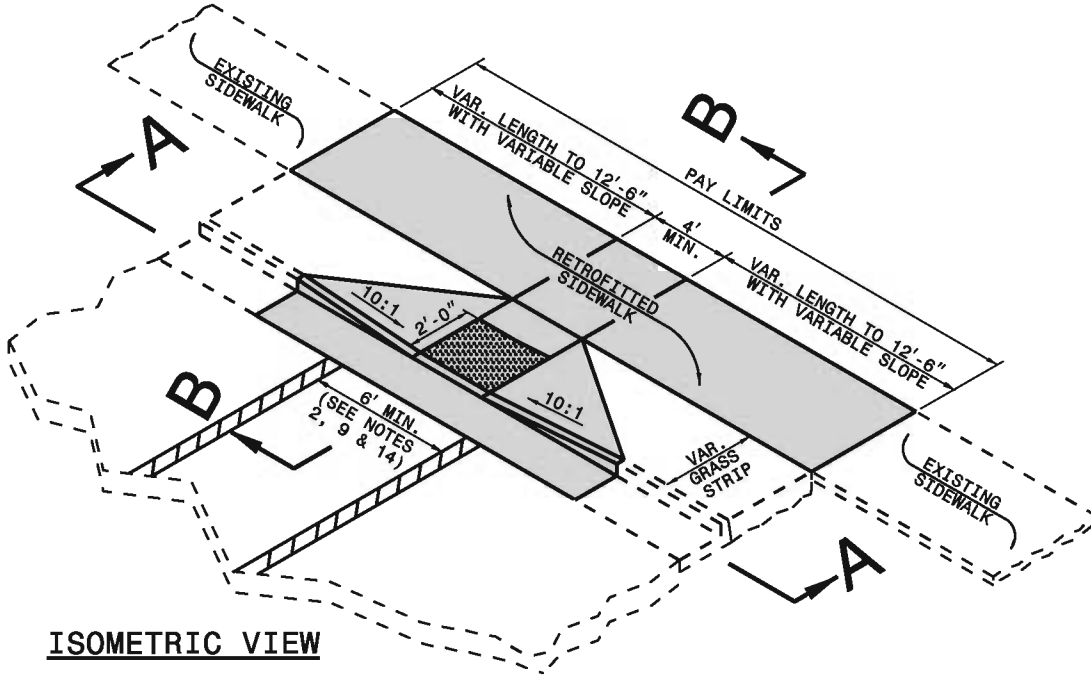


DETAILS SHOWING JOINTS IN CONCRETE SIDEWALK



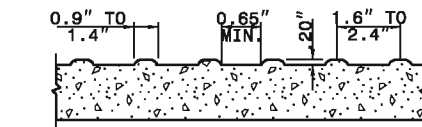
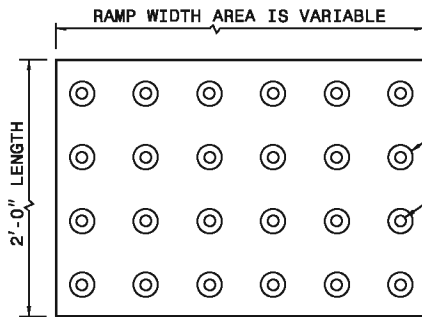
PLAN VIEW

CURB RAMP AND EXISTING SIDEWALK WITH GRASS STRIP

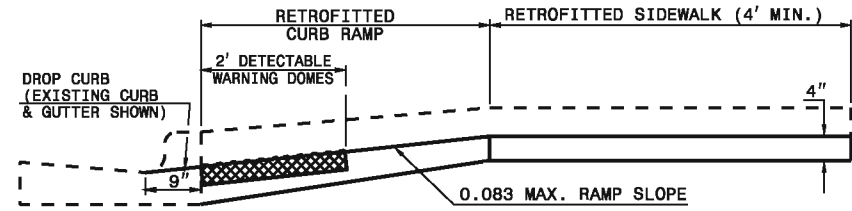


ISOMETRIC VIEW

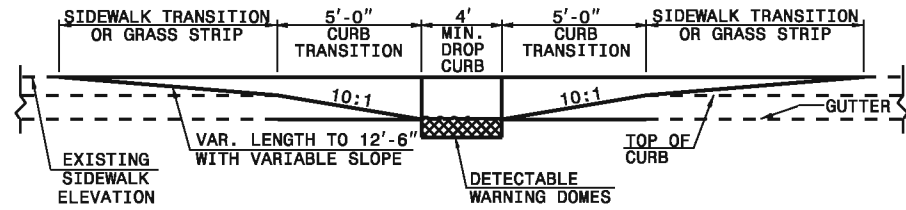
PAY LIMITS OF CURB RAMP



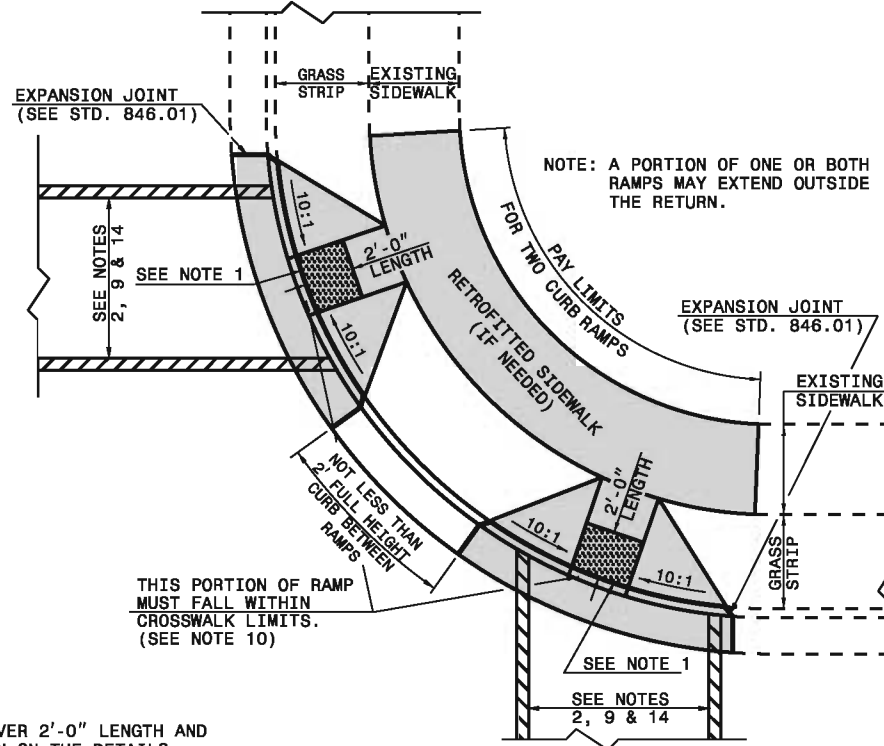
DETECTABLE WARNING DOMES



SECTION B-B



SECTION A-A

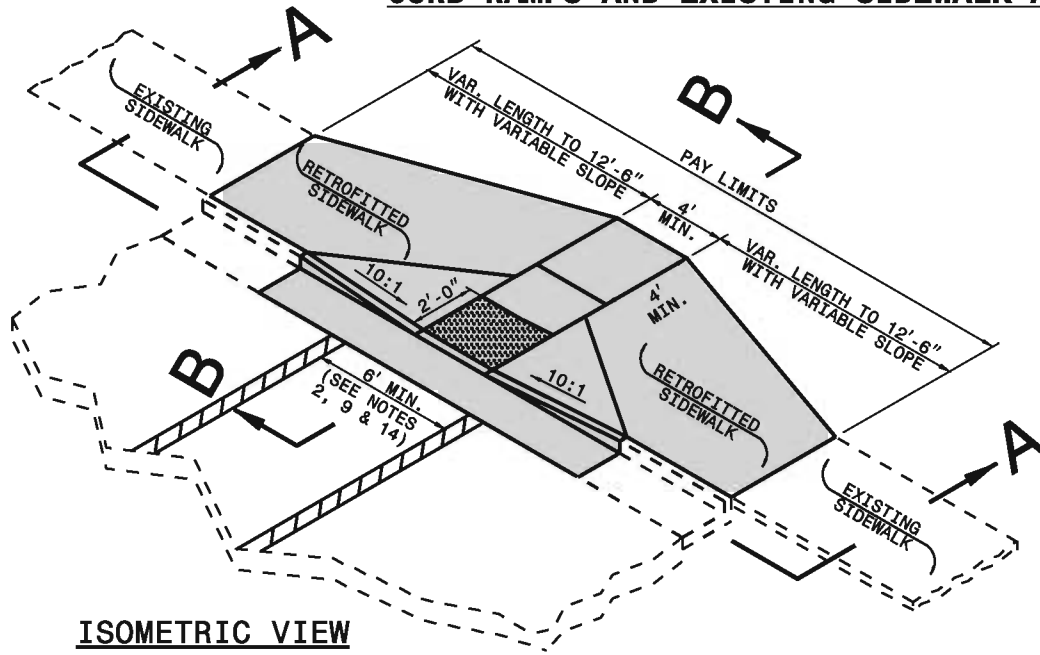


PLAN VIEW

DUAL RAMPS
ANY RADII
(40" MIN. FLOOR WIDTH)

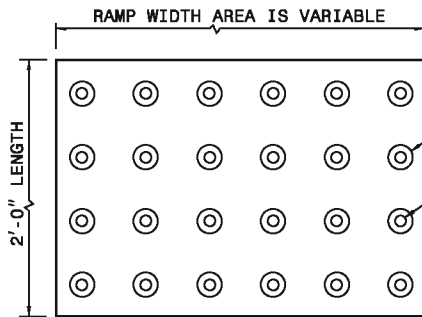
- NOTES:
1. PLACE DETECTABLE WARNING DOMES TO COVER 2'-0" LENGTH AND FULL WIDTH OF THE RAMP FLOOR AS SHOWN ON THE DETAILS.
 2. OBTAIN VISIBLE CONTRAST WITH ADJOINING SURFACE, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT SEQUENCE COVERING THE ENTIRE RAMP.

CURB RAMPS AND EXISTING SIDEWALK ADJACENT TO CURB

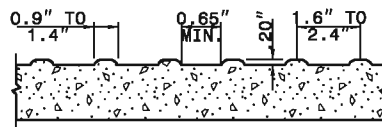


ISOMETRIC VIEW

PAY LIMITS OF CURB RAMP

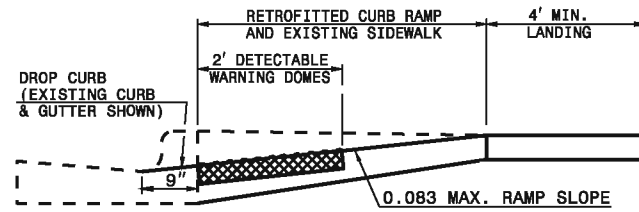


BASE DIAMETER
0.90"R TO 1.40"R
TOP DIAMETER OF NO LESS
THAN 50% TO NO MORE
THAN 65% OF THE BASE
DIAMETER

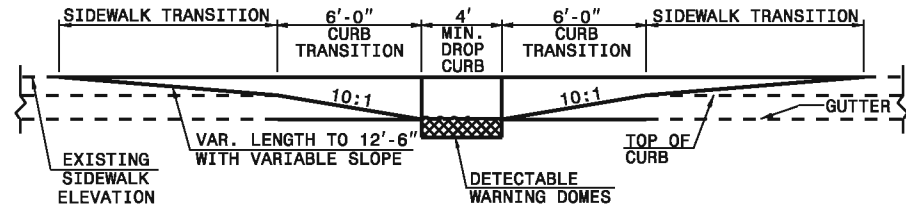


DETECTABLE WARNING DOMES

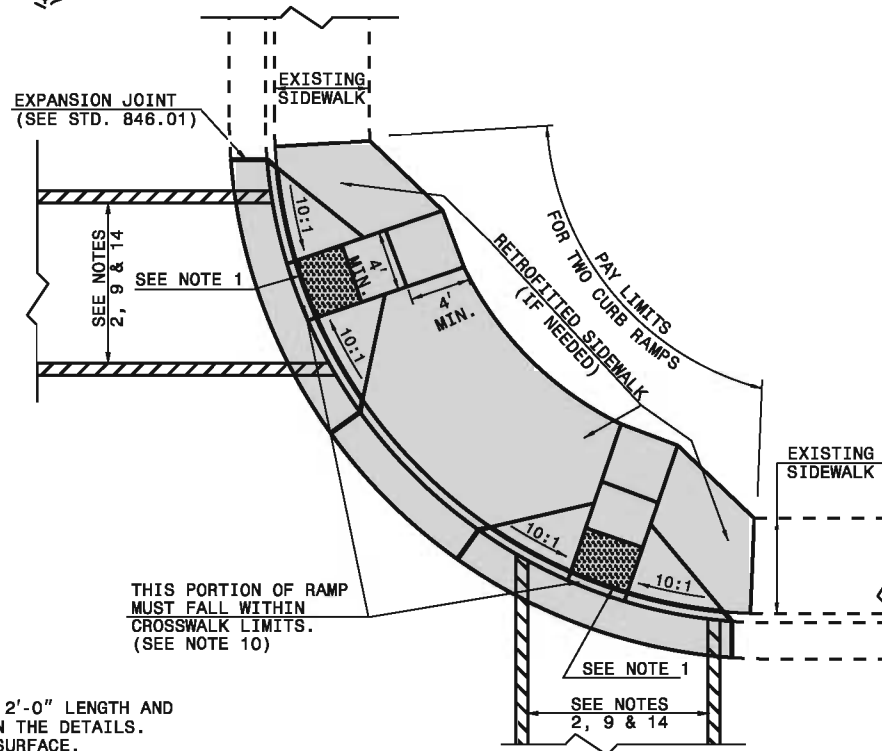
- NOTES:
1. PLACE DETECTABLE WARNING DOMES TO COVER 2'-0" LENGTH AND FULL WIDTH OF THE RAMP FLOOR AS SHOWN ON THE DETAILS.
 2. OBTAIN VISIBLE CONTRAST WITH ADJOINING SURFACE, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT SEQUENCE COVERING THE ENTIRE RAMP.



SECTION B-B



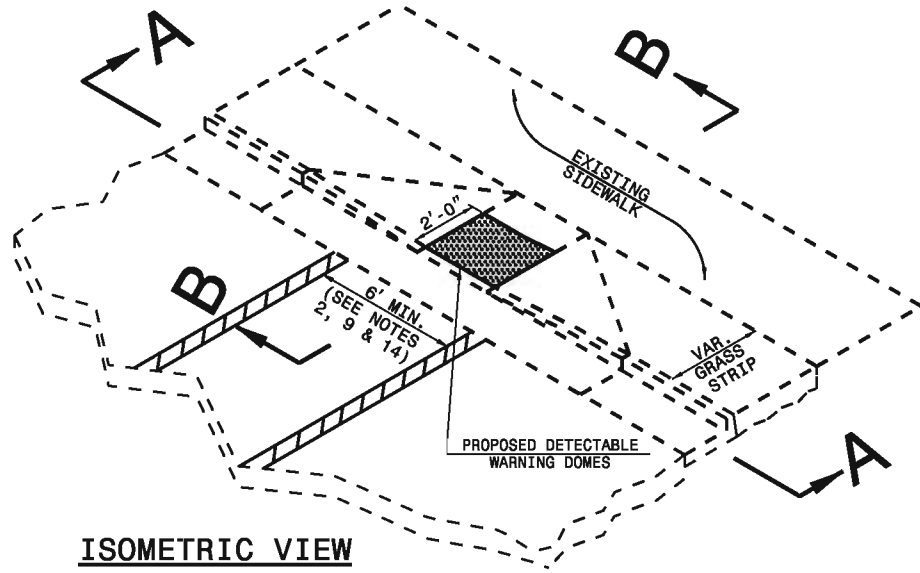
SECTION A-A



PLAN VIEW

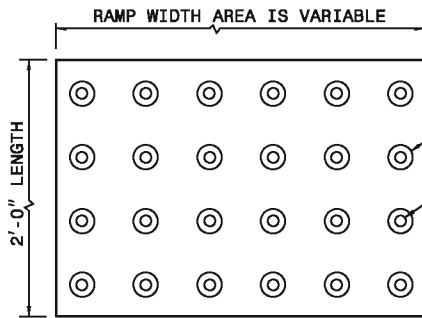
DUAL RAMPS
ANY RADII
(40" MIN. FLOOR WIDTH)

RETROFITTING DETECTABLE WARNING DOMES ONTO EXISTING CURB RAMP



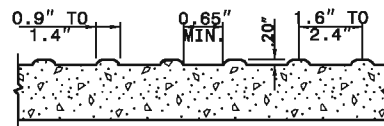
ISOMETRIC VIEW

PAY LIMITS OF RETROFIT CURB RAMP



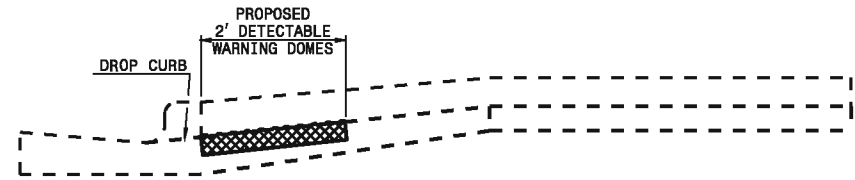
BASE DIAMETER
0.90" R TO 1.40" R

TOP DIAMETER OF NO LESS
THAN 50% TO NO MORE
THAN 65% OF THE BASE
DIAMETER

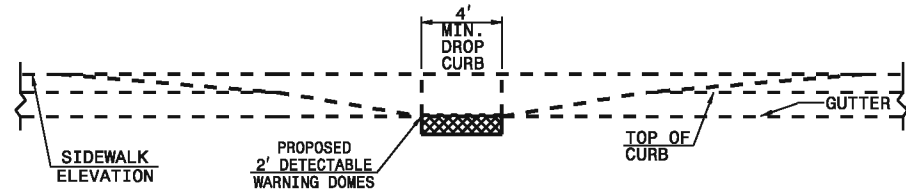


- NOTES:**
1. PLACE DETECTABLE WARNING DOMES TO COVER 2'-0" LENGTH AND FULL WIDTH OF THE RAMP FLOOR AS SHOWN ON THE DETAILS.
 2. OBTAIN VISIBLE CONTRAST WITH ADJOINING SURFACE, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT SEQUENCE COVERING THE ENTIRE RAMP.

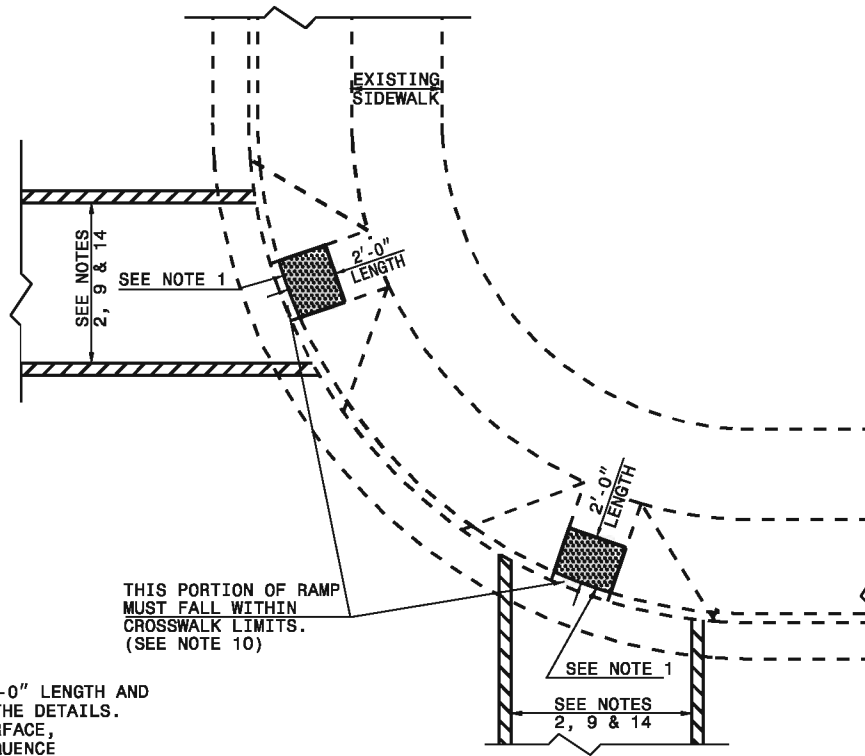
DETECTABLE WARNING DOMES



SECTION B-B



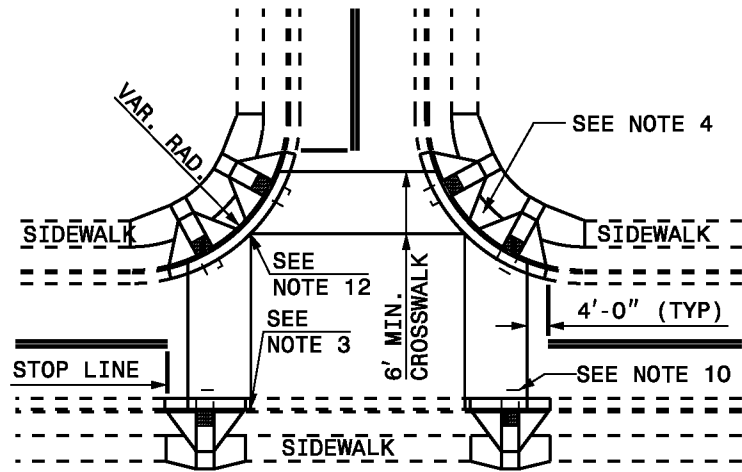
SECTION A-A



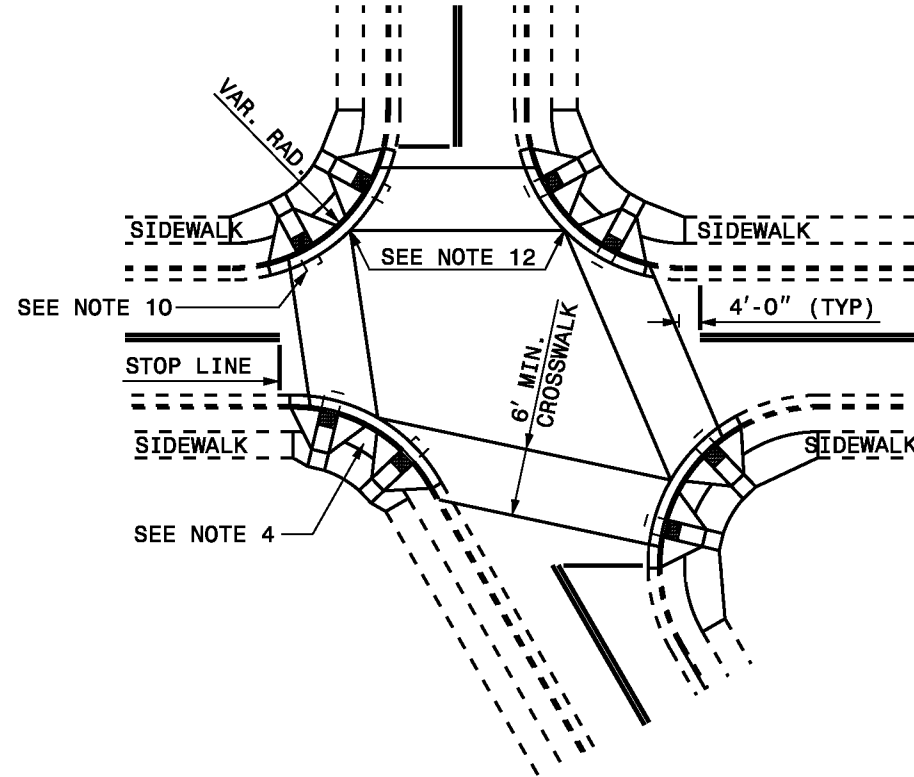
PLAN VIEW

DUAL RAMPS
ANY RADII
(40" MIN. FLOOR WIDTH)

CURB RAMPS AND EXISTING SIDEWALK

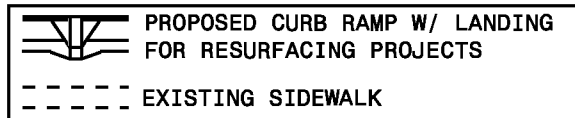


DETAIL SHOWING TYPICAL LOCATION OF CURB RAMPS,
 PEDESTRIAN CROSSWALKS AND STOP LINES FOR TEE INTERSECTIONS



DETAIL SHOWING TYPICAL LOCATION OF CURB
 RAMPS, PEDESTRIAN CROSSWALKS AND STOP LINES

RESURFACING PROJECTS



ALLOWABLE LOCATIONS
 DUAL RAMP RADII.....ANY

CURB RAMP AND EXISTING SIDEWALK

NOTES:

1. CONSTRUCT THE RAMP SURFACE TO BE STABLE, FIRM, AND SLIP RESISTANT. CONSTRUCT THE CURB RAMP TYPE AS SHOWN IN THE PAVEMENT MARKING PLANS OR AS DIRECTED BY THE ENGINEER.
2. LOCATE CURB RAMPS AND PLACE PEDESTRIAN CROSSWALK MARKINGS AS SHOWN IN THE PAVEMENT MARKING PLANS. WHEN FIELD ADJUSTMENTS REQUIRE MOVING CURB RAMPS OR MARKINGS AS SHOWN, CONTACT THE SIGNING AND DELINEATION UNIT OR LOCATE AS DIRECTED BY THE ENGINEER.
3. COORDINATE THE CURB RAMP AND THE PEDESTRIAN CROSSWALK MARKINGS SO A 4'x4' CLEAR SPACE AT THE BASE OF THE CURB RAMP WILL FALL WITHIN THE PEDESTRIAN CROSSWALK LINES.
4. SET BACK DISTANCE FROM INSIDE CROSSWALK MARKING TO NEAREST EDGE OF TRAVEL LANE IS 4' MINIMUM.
5. REFER TO THE PAVEMENT MARKING PLANS FOR STOP BAR LOCATIONS AT SIGNALIZED INTERSECTIONS. IF A PAVEMENT MARKING PLAN IS NOT PROVIDED, CONTACT THE SIGNAL DESIGN SECTION FOR THE STOP BAR LOCATIONS OR LOCATE AS DIRECTED BY THE ENGINEER.
6. TERMINATE PARKING A MINIMUM OF 20' BACK OF A PEDESTRIAN CROSSWALK.
7. CONSTRUCT CURB RAMPS A MINIMUM OF 4' WIDE.
8. CONSTRUCT THE RUNNING SLOPE OF THE RAMP 8.33% MAXIMUM.
9. ALLOWABLE CROSS SLOPE ON SIDEWALKS AND CURB RAMPS WILL BE 2% MAXIMUM.
10. CONSTRUCT THE SIDE FLARE SLOPE A MAXIMUM OF 10% MEASURED ALONG THE CURB LINE.
11. CONSTRUCT THE COUNTER SLOPE OF THE GUTTER OR STREET AT THE BASE OF THE CURB RAMP A MAXIMUM OF 5% AND MAINTAIN A SMOOTH TRANSITION.
12. CONSTRUCT LANDINGS FOR SIDEWALK A MINIMUM OF 4'x4' WITH A MAXIMUM SLOPE OF 2% IN ANY DIRECTION. CONSTRUCT LANDINGS FOR MEDIAN ISLANDS A MINIMUM OF 5'x5' WITH A MAXIMUM SLOPE OF 2% IN ANY DIRECTION.
13. TO USE A MEDIAN ISLAND AS A PEDESTRIAN REFUGE AREA, MEDIAN ISLANDS WILL BE A MINIMUM OF 6' WIDE. CONSTRUCT MEDIAN ISLANDS TO PROVIDE PASSAGE OVER OR THROUGH THE ISLAND.
14. SMALL CHANNELIZATION ISLANDS THAT CAN NOT PROVIDE A 5'x5' LANDING AT THE TOP OF A RAMPS, WILL BE CUT THROUGH LEVEL WITH THE SURFACE STREET.
15. CURB RAMPS WITH RETURNED CURBS MAY BE USED ONLY WHERE PEDESTRIANS WOULD NOT NORMALLY WALK ACROSS THE RAMP. THE ADJACENT SURFACE IS PLANTING OR OTHER NON-WALKING SURFACE OR THE SIDE APPROACH IS SUBSTANTIALLY OBSTRUCTED.
16. PLACE A 1/2" EXPANSION JOINT WHERE THE CONCRETE CURB RAMP JOINS THE CURB AS SHOWN IN ROADWAY STANDARD DRAWING 848.01
17. PLACE ALL PEDESTRIAN PUSH BUTTON ACTUATORS AND CROSSING SIGNALS AS SHOWN IN THE PLANS OR AS SHOWN IN THE MUTCD.
18. CURB RAMPS THROUGH MEDIAN ISLANDS, SINGLE RAMPS AT DUAL CROSSWALKS OR LIMITED R/W SITUATIONS, WILL BE HANDLED BY SPECIAL DETAILS. CONTACT THE CONTRACT STANDARDS AND DEVELOPMENT UNIT FOR THE DETAILS OR FOR A SPECIAL DESIGN.

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-12

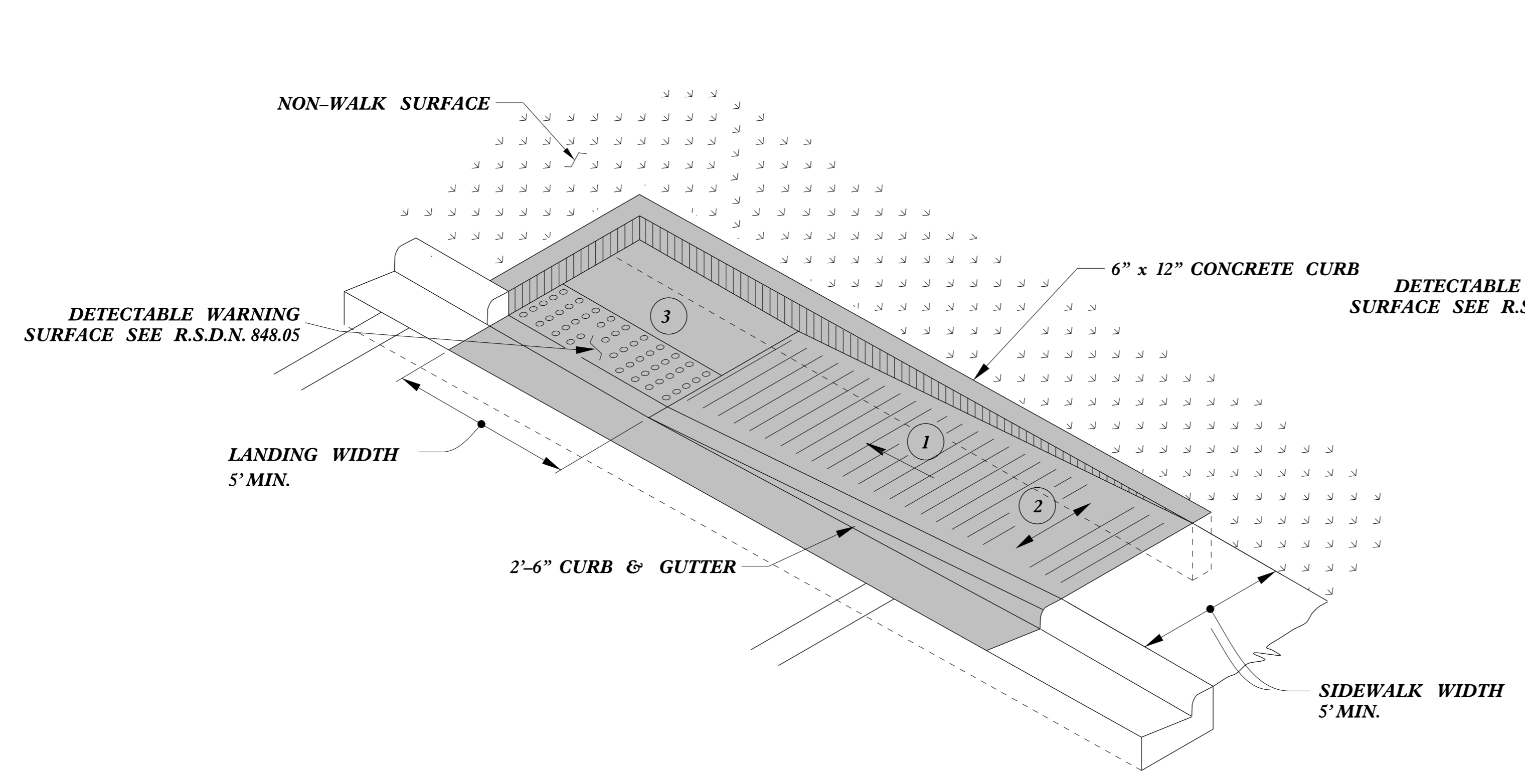
ENGLISH STANDARD DRAWING FOR
CURB RAMP
EXISTING CURB AND GUTTER

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

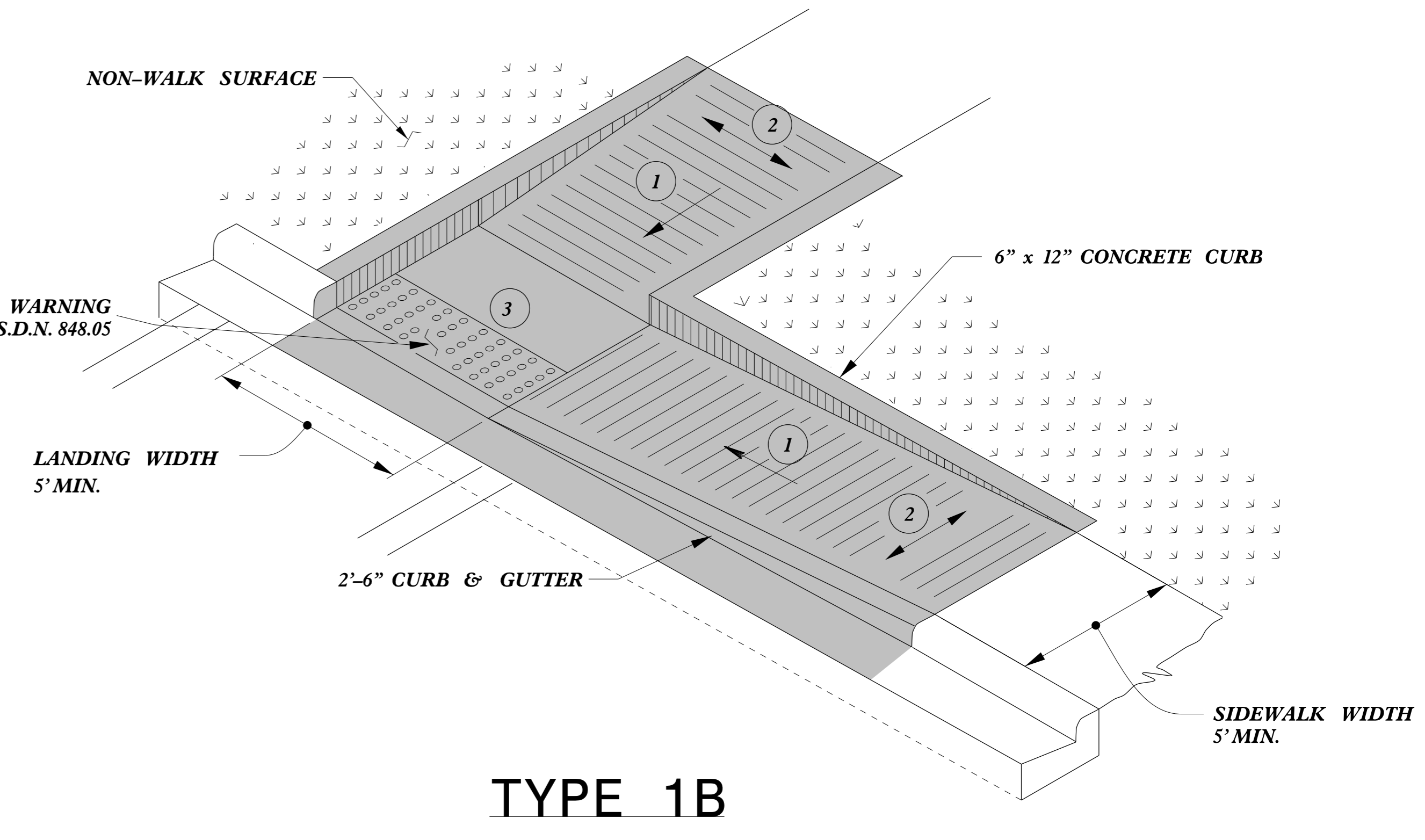
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ENGLISH STANDARD DRAWING FOR
CURB RAMP
EXISTING CURB AND GUTTER

5/14/99



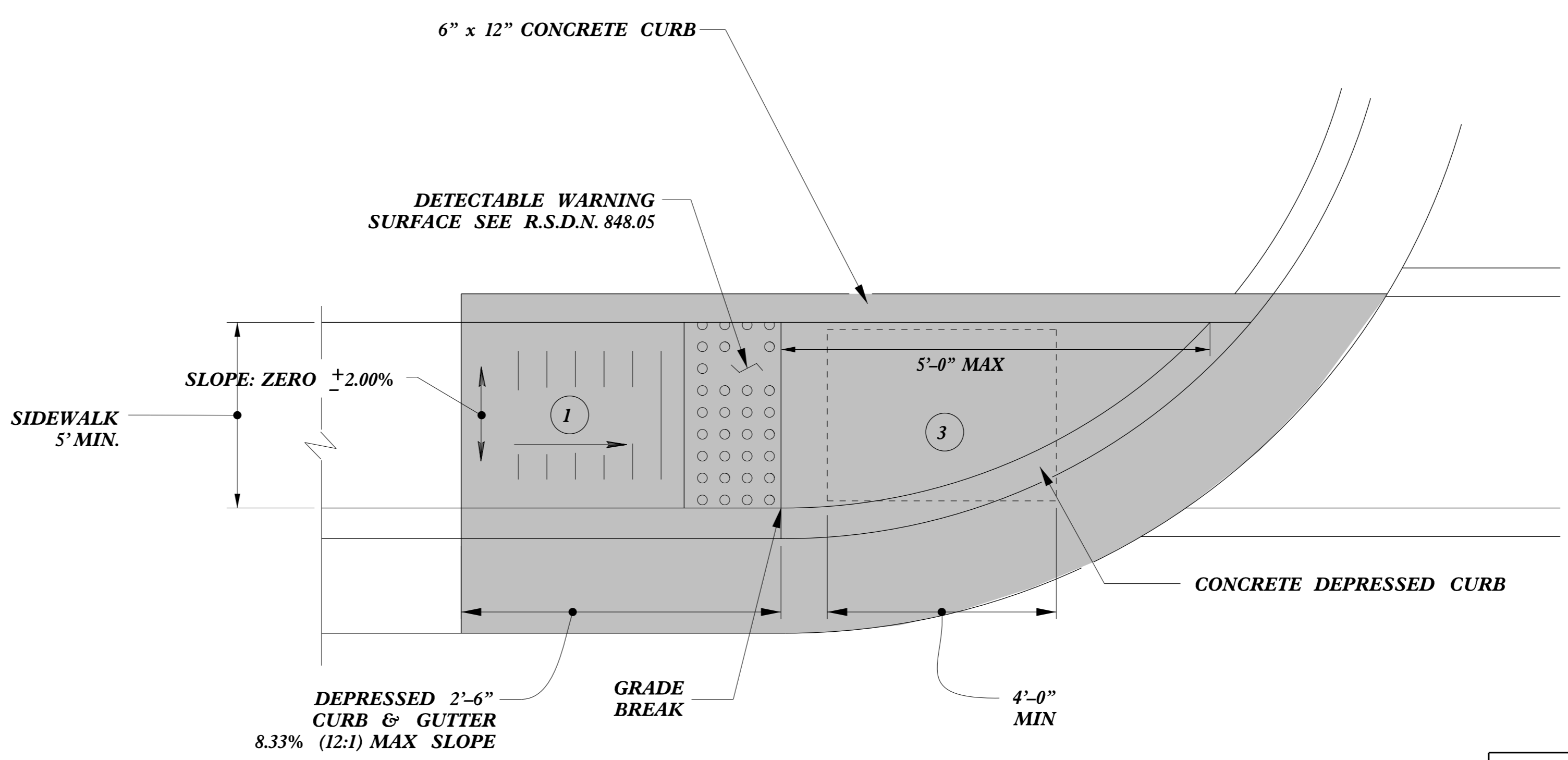
TYPE 1A



TYPE 1B

PAY LIMITS FOR 1 CURB RAMP

- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.



TYPE 1

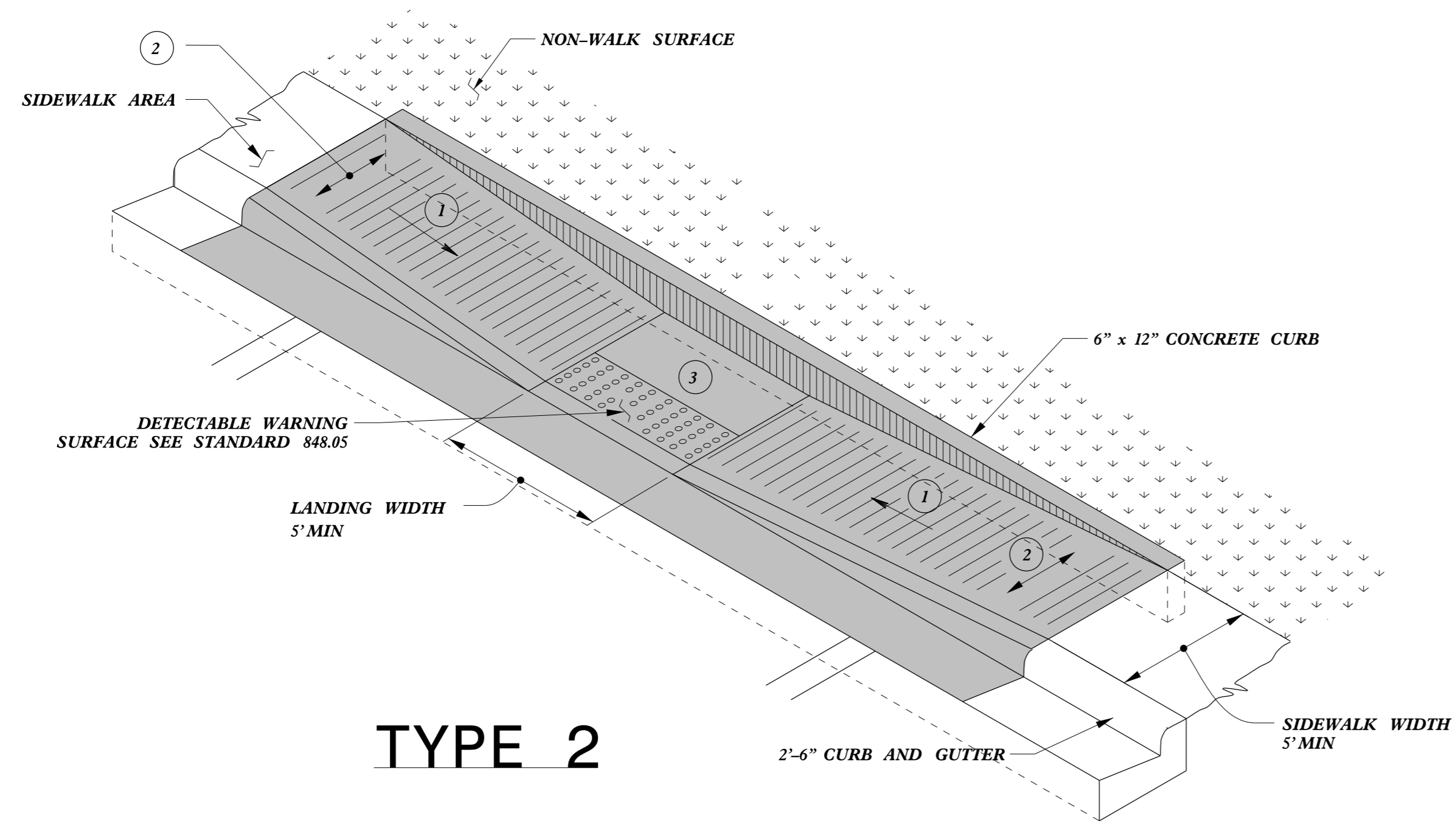


DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950	FAX 919-250-4119
CURB RAMPS	
Directional Ramps	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC: stds/2012CurbRamp/CurbRampDetails.dgn	

REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

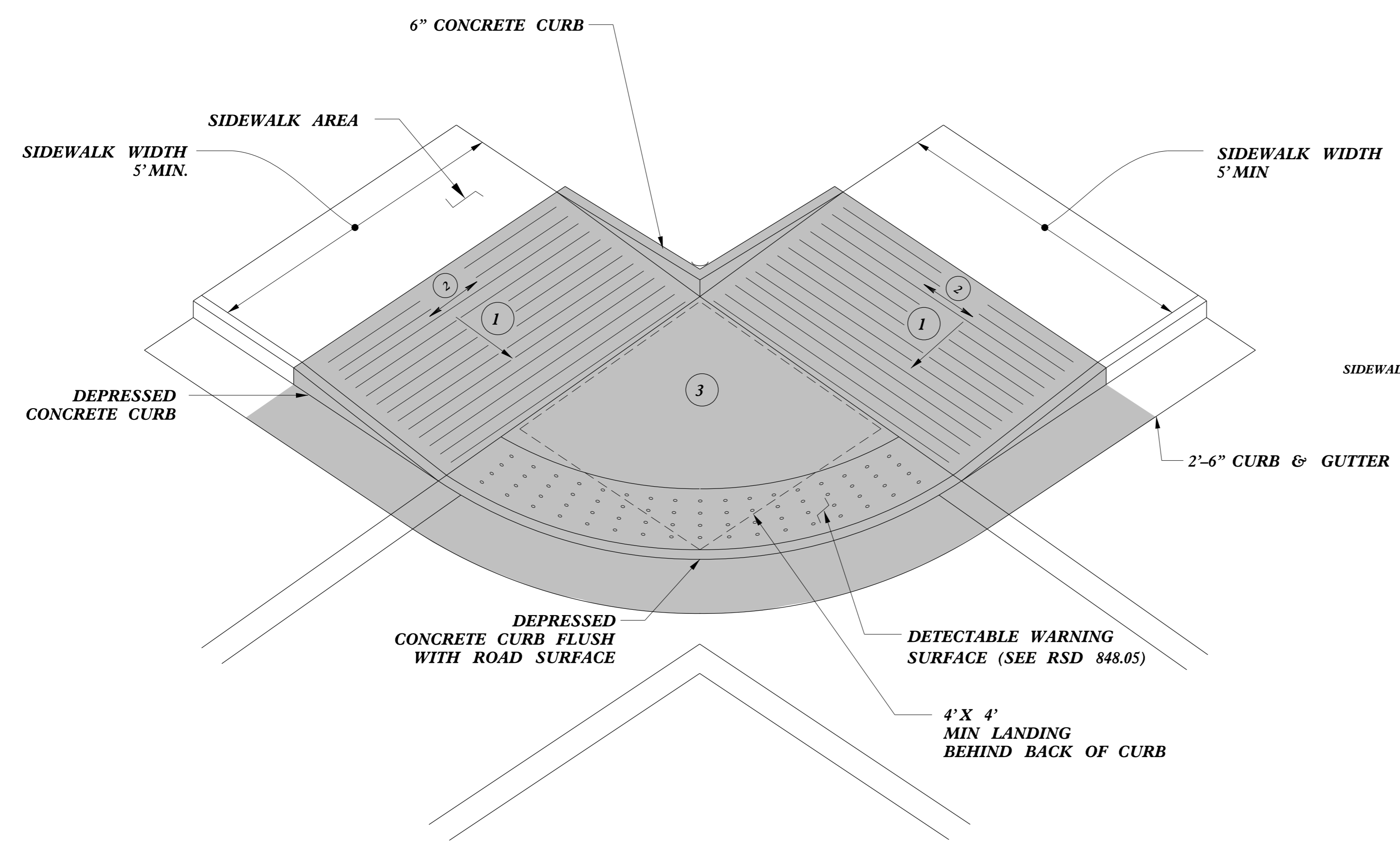
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 USER: J.S. HOWERTON
 DATE: 7/7/11 10:58 AM
 PLOT: 7/7/11 10:58 AM
 PLOTTER: HP DesignJet 2500



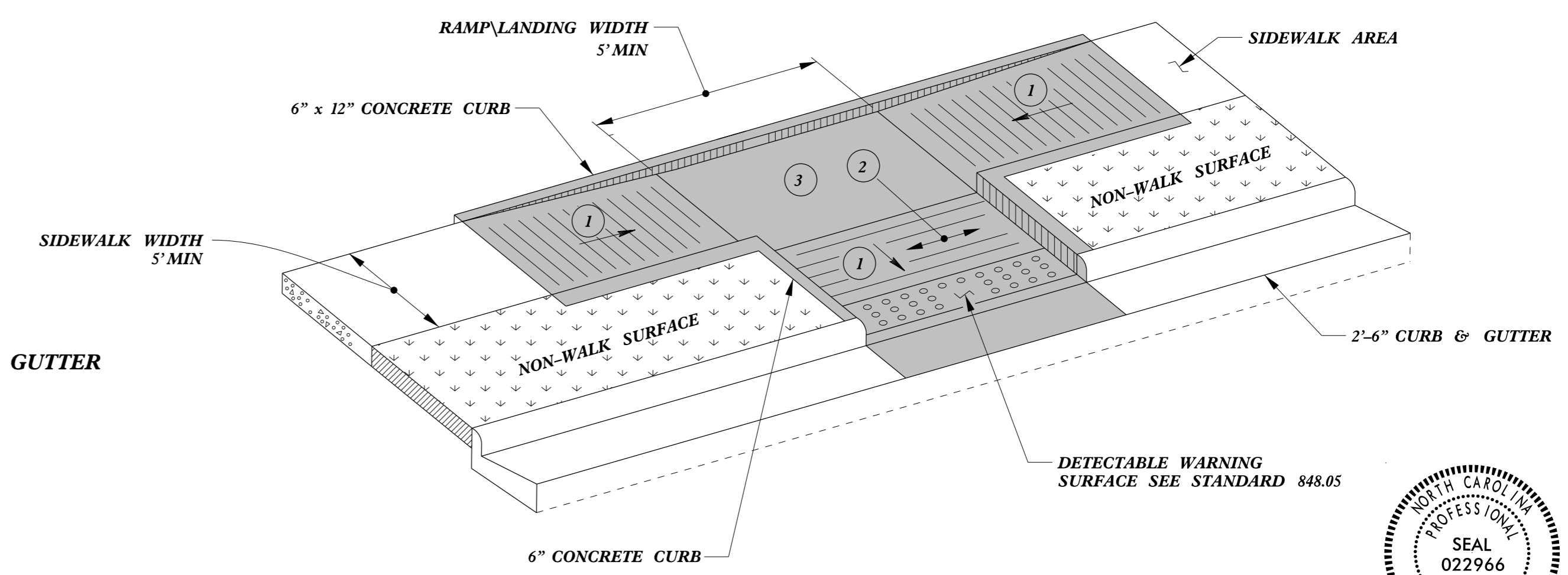
TYPE 2

PAY LIMITS FOR 1 CURB RAMP

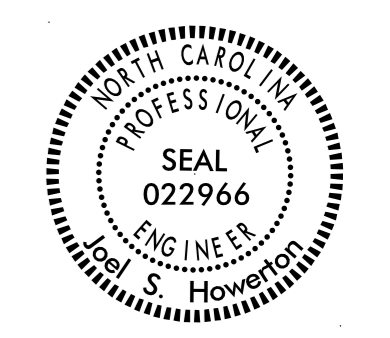
- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.



TYPE 2A



TYPE 3

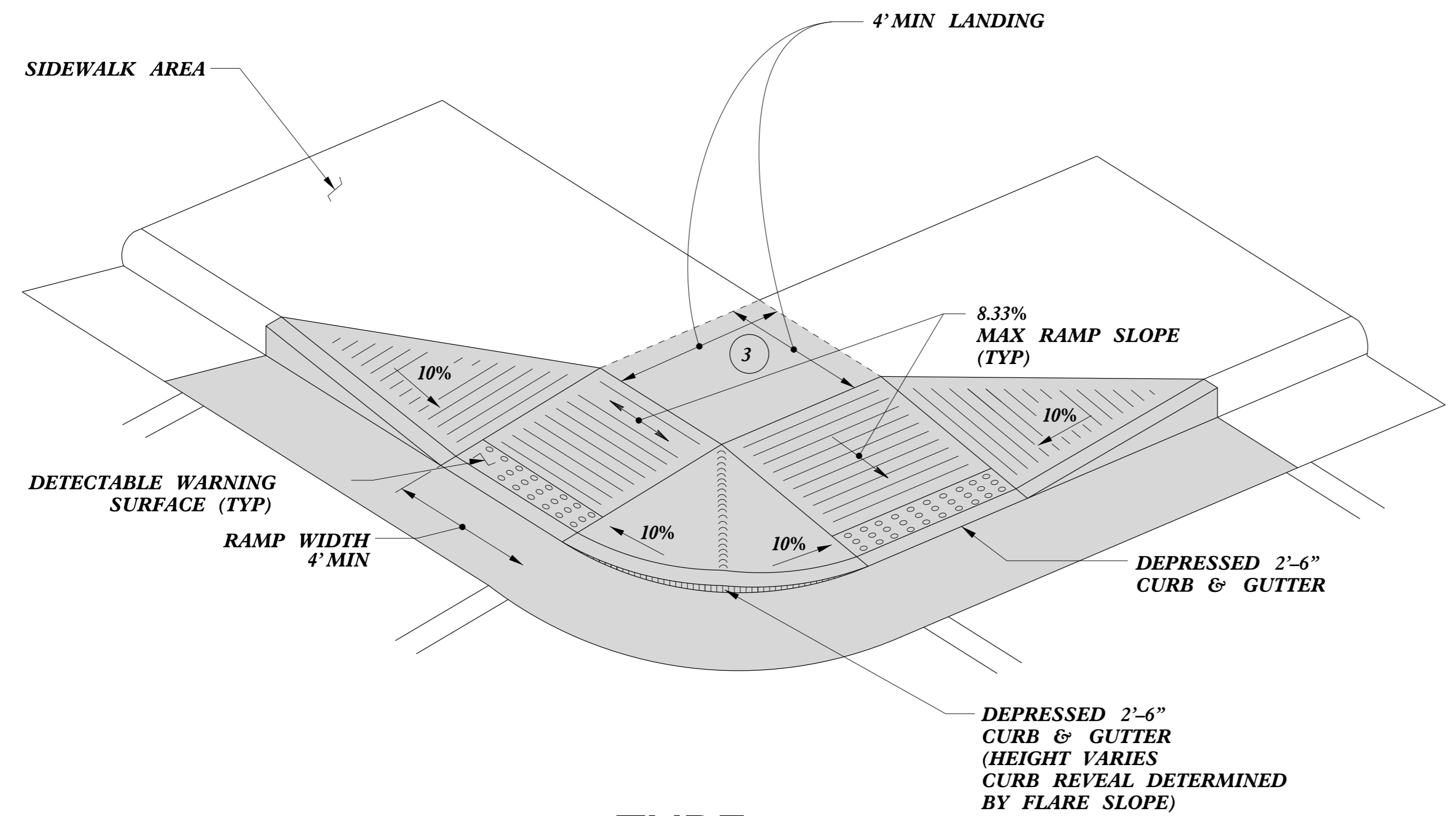


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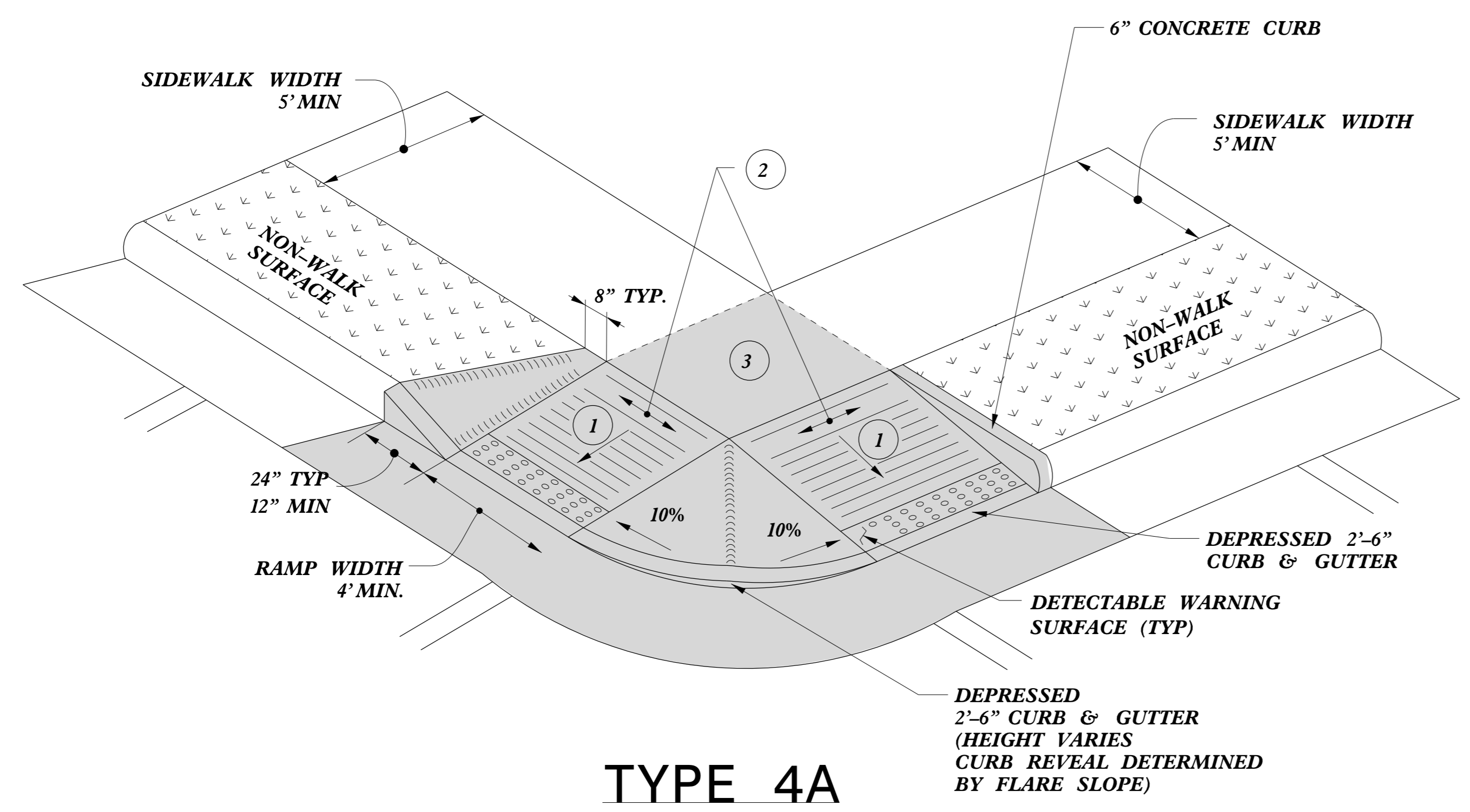
CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950	FAX 919-250-4119
CURB RAMPS	
Parallel Ramps	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC. :stds/2012CurbRamp/CurbRampDetails.dgn	

REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

5/14/99
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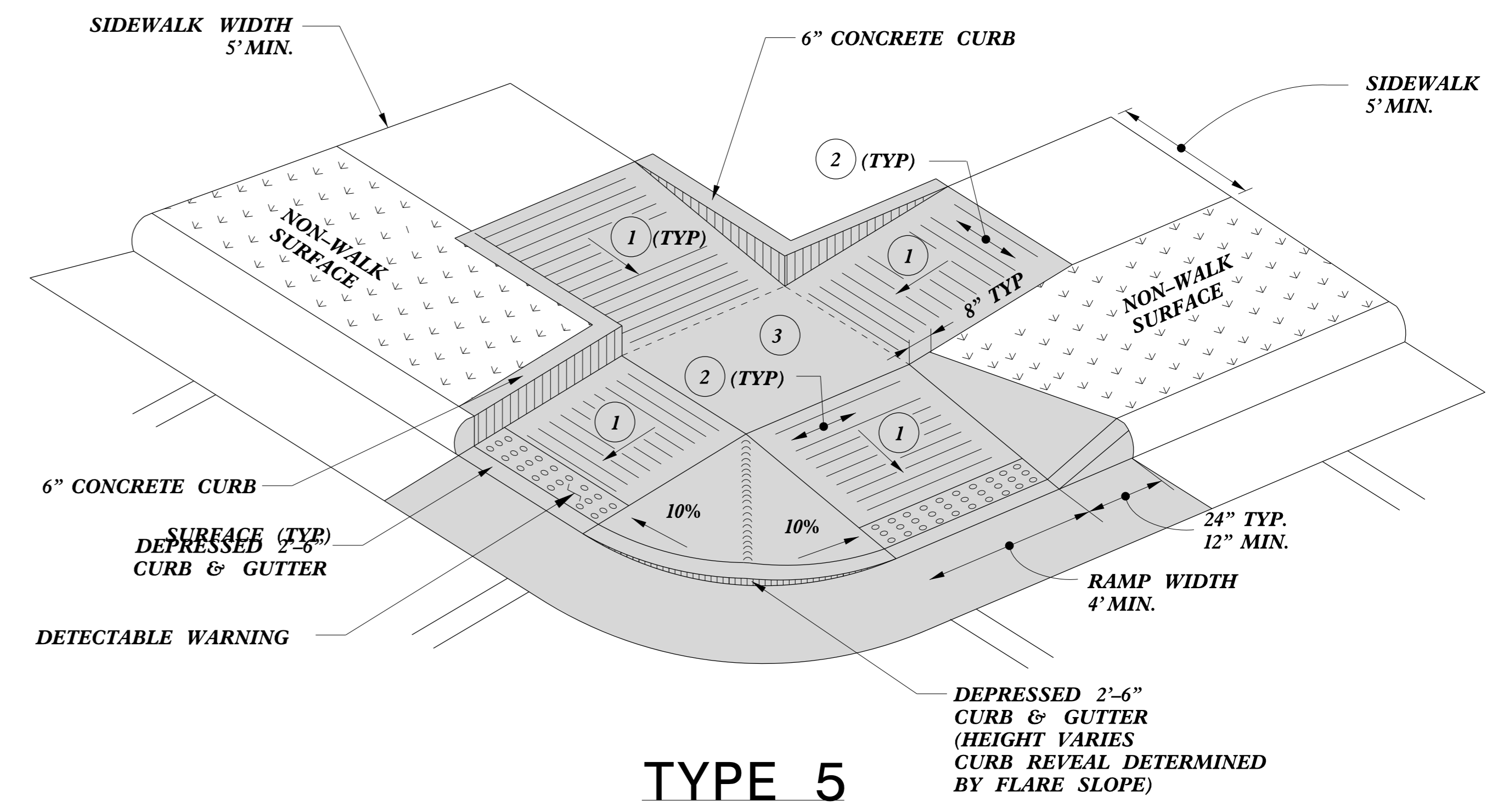


TYPE 4



TYPE 4A

PAY LIMITS FOR 2 CURB RAMPS



TYPE 5

- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950	FAX 919-250-4119
CURB RAMPS	
Shared Landing	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
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REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

5/14/99
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