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STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

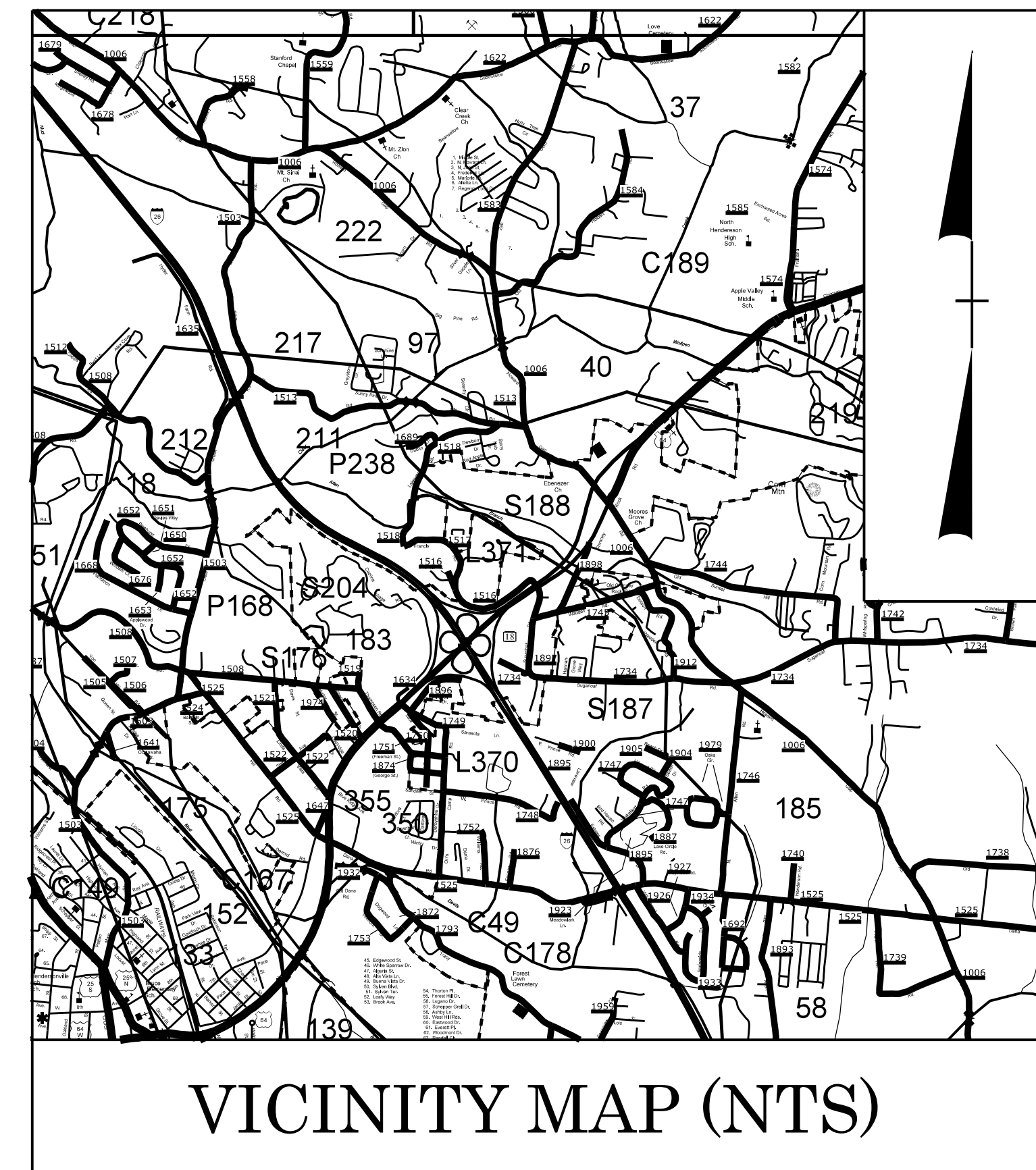
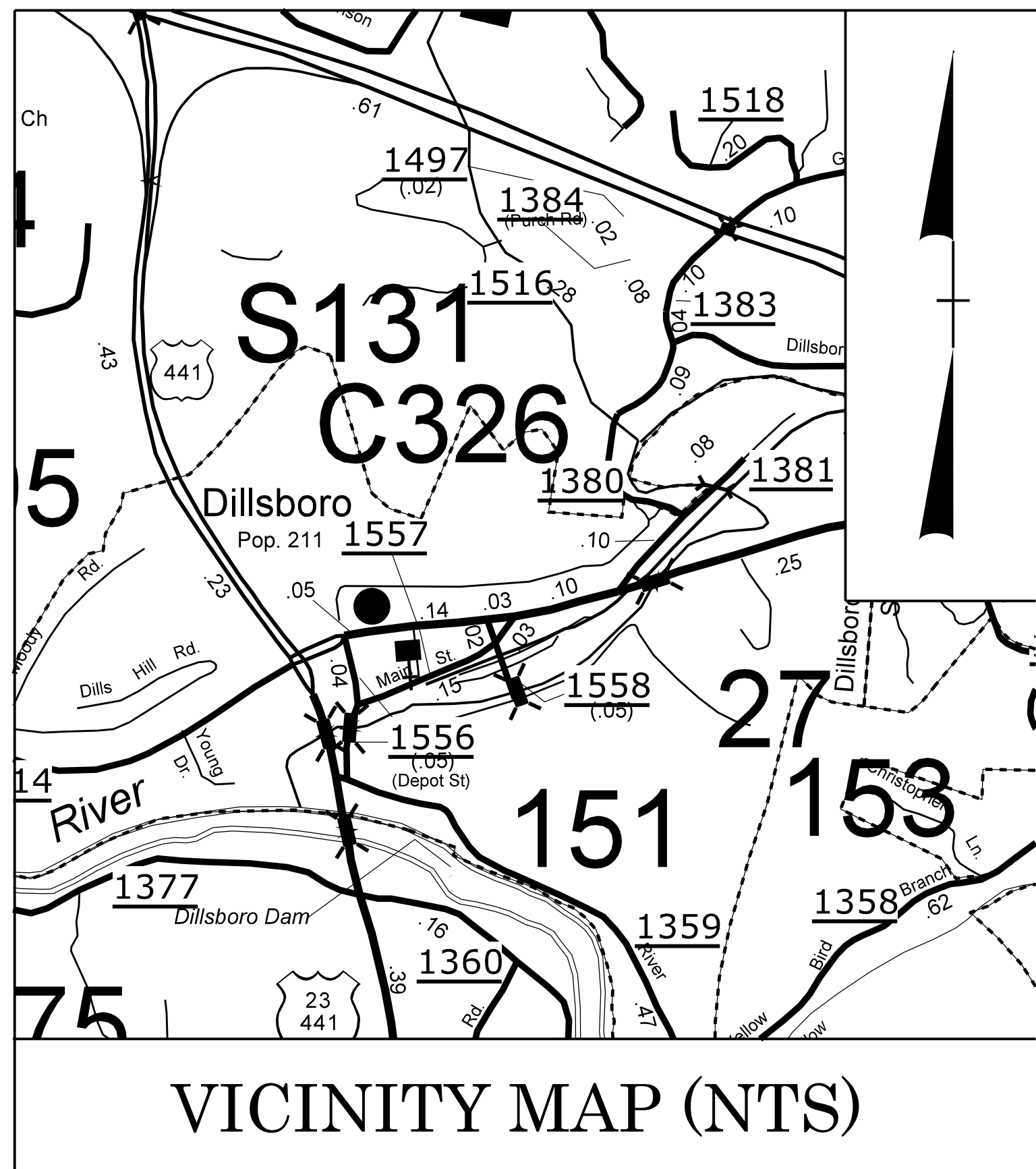
JACKSON/HENDERSON COUNTY

LOCATION: *VARIOUS LOCATIONS ACROSS
JACKSON AND HENDERSON COUNTIES*

TYPE OF WORK: *SIDEWALK, CROSSWALK,
CURB RAMPS*

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	HS-2014H, HS-2014L	1	17
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
49336.3.9			
49336.3.12			

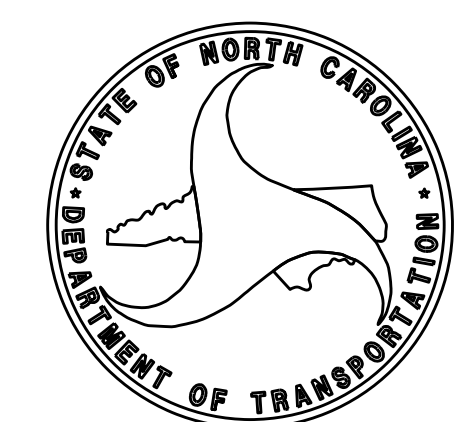
CONTRACT: DN01038 TIP PROJECT: HS-2014H/HS-2014L



Prepared in the Office of:
DIVISION OF HIGHWAYS
253 WEBSTER RD., SYLVA NC, 28779

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: N/A	GARRETT B HIGDON, P.E. PROJECT ENGINEER
LETTING DATE: SEPTEMBER 26, 2023	GARRETT B HIGDON, P.E. PROJECT DESIGN ENGINEER



INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES, AND STANDARD DRAWINGS
1B	CONVENTIONAL SYMBOLS
2B-1 THRU 2B-7	ROADWAY DETAILS
4 THRU 9	PLAN SHEETS

GENERAL NOTES:

2018 SPECIFICATIONS

CURB RAMPS AND SIDEWALK ARE SHOWN ON THE PLANS AT APPROXIMATE LOCATIONS. LOCATION OF SIDEWALK, CURB RAMP, AND CURB RAMP TYPE WILL BE DECIDED BY CONTRACTOR AND APPROVED BY RESIDENT ENGINEER. ALL CURB RAMPS AND SIDEWALK MUST BE ADA COMPLIANT AND FOLLOW ALL APPLICABLE NCDOT STANDARDS.

SIGNAL WORK WILL BE DONE BY NCDOT. UPON COMPLETION OF PROJECT, CURB RAMP AND CROSSWALK CLOSURE WILL BE PROVIDED BY NCDOT WHERE PROPOSED SIGNAL WORK IS PENDING.

USE SHOULDER RECONSTRUCTION WHEN NEEDED -SEE SPECIAL PROVISION-

2018 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated January, 2018 are applicable to this project and by reference hereby are considered a part of these plans:

STD.NO.	TITLE
DIVISION 8 - INCIDENTALS	
846.01	Concrete Curb, Gutter and Curb & Gutter
848.01	Concrete Sidewalk
848.05	Curb Ramp - Proposed Curb & Gutter
848.06	Curb Ramp - Existing Curb & Gutter

DIVISION 11 - WORK ZONE TRAFFIC CONTROL
REFER TO TRAFFIC CONTROL SPECIAL PROVISION

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS CONVENTIONAL PLAN SHEET SYMBOLS

Note: Not to Scale

BOUNDARIES AND PROPERTY:

State Line	-----
County Line	-----
Township Line	-----
City Line	-----
Reservation Line	-----
Property Line	-----
Existing Iron Pin (EIP)	----- ○ EIP
Computed Property Corner	----- X
Existing Concrete Monument (ECM)	----- □ ECM
Parcel / Sequence Number	----- (23)
Existing Fence Line	----- x-x-x-x
Proposed Woven Wire Fence	----- ○
Proposed Chain Link Fence	----- □
Proposed Barbed Wire Fence	----- ◇
Existing Wetland Boundary	----- -MLB-
Proposed Wetland Boundary	----- MLB
Existing Endangered Animal Boundary	----- -EAB-
Existing Endangered Plant Boundary	----- -EPB-
Existing Historic Property Boundary	----- -HPB-
Known Contamination Area: Soil	----- -s-s-
Potential Contamination Area: Soil	----- -s-s-
Known Contamination Area: Water	----- -w-w-
Potential Contamination Area: Water	----- -w-w-
Contaminated Site: Known or Potential	----- ☠ ☠

BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap	----- ○
Sign	----- ○
Well	----- ○
Small Mine	----- X
Foundation	----- □
Area Outline	----- □
Cemetery	----- □
Building	----- □
School	----- □
Church	----- □
Dam	----- ▬

HYDROLOGY:

Stream or Body of Water	-----
Hydro, Pool or Reservoir	----- □
Jurisdictional Stream	----- JS
Buffer Zone 1	----- BZ 1
Buffer Zone 2	----- BZ 2
Flow Arrow	----- ←
Disappearing Stream	----- >
Spring	----- ○
Wetland	----- ↓
Proposed Lateral, Tail, Head Ditch	----- ▬
False Sump	----- ▽

RAILROADS:

Standard Gauge	-----
RR Signal Milepost	----- ○ MILEPOST 35
Switch	----- □ SWITCH
RR Abandoned	----- - - - -
RR Dismantled	----- - - - -

RIGHT OF WAY & PROJECT CONTROL:

Primary Horiz Control Point	----- ○
Primary Horiz and Vert Control Point	----- ●
Secondary Horiz and Vert Control Point	----- ◆
Vertical Benchmark	----- ⊠
Existing Right of Way Monument	----- △
Proposed Right of Way Monument (Rebar and Cap)	----- ▲
Proposed Right of Way Monument (Concrete)	----- ●
Existing Permanent Easement Monument	----- ◇
Proposed Permanent Easement Monument (Rebar and Cap)	----- ◇
Existing C/A Monument	----- ▲
Proposed C/A Monument (Rebar and Cap)	----- ▲
Proposed C/A Monument (Concrete)	----- ●
Existing Right of Way Line	----- ▬
Proposed Right of Way Line	----- ▬
Existing Control of Access Line	----- (C/A)
Proposed Control of Access Line	----- (C/A)
Proposed ROW and CA Line	----- ▬
Existing Easement Line	----- E
Proposed Temporary Construction Easement	----- E
Proposed Temporary Drainage Easement	----- TDE
Proposed Permanent Drainage Easement	----- PDE
Proposed Permanent Drainage/Utility Easement	----- DUE
Proposed Permanent Utility Easement	----- PUE
Proposed Temporary Utility Easement	----- TUE
Proposed Aerial Utility Easement	----- AUE

ROADS AND RELATED FEATURES:

Existing Edge of Pavement	-----
Existing Curb	-----
Proposed Slope Stakes Cut	----- C
Proposed Slope Stakes Fill	----- F
Proposed Curb Ramp	----- CR
Existing Metal Guardrail	----- ▬
Proposed Guardrail	----- ▬
Existing Cable Guiderail	----- ▬
Proposed Cable Guiderail	----- ▬
Equality Symbol	----- ⊕
Pavement Removal	----- ▬

VEGETATION:

Single Tree	----- ○
Single Shrub	----- ○
Hedge	----- ▬

Woods Line	-----
Orchard	----- ○
Vineyard	----- ▬

EXISTING STRUCTURES:

MAJOR:	
Bridge, Tunnel or Box Culvert	----- CONC
Bridge Wing Wall, Head Wall and End Wall	-----) CONC WW (
MINOR:	
Head and End Wall	----- CONC HW
Pipe Culvert	-----
Footbridge	-----
Drainage Box: Catch Basin, DI or JB	----- □ CB
Paved Ditch Gutter	-----
Storm Sewer Manhole	----- ⊕
Storm Sewer	----- s

UTILITIES:

* SUE - Subsurface Utility Engineering
LOS - Level of Service - A,B,C or D (Accuracy)

POWER:	
Existing Power Pole	----- ●
Proposed Power Pole	----- ○
Existing Joint Use Pole	----- ●
Proposed Joint Use Pole	----- ○
Power Manhole	----- ⊕
Power Line Tower	----- ⊠
Power Transformer	----- ⊠
U/G Power Cable Hand Hole	----- □
H-Frame Pole	----- ●
U/G Power Line Test Hole (SUE - LOS A)*	----- ⊕
U/G Power Line (SUE - LOS B)*	----- P
U/G Power Line (SUE - LOS C)*	----- P
U/G Power Line (SUE - LOS D)*	----- P

TELEPHONE:

Existing Telephone Pole	----- ●
Proposed Telephone Pole	----- ○
Telephone Manhole	----- ⊕
Telephone Pedestal	----- ⊠
Telephone Cell Tower	----- ⊠
U/G Telephone Cable Hand Hole	----- □
U/G Telephone Test Hole (SUE - LOS A)*	----- ⊕
U/G Telephone Cable (SUE - LOS B)*	----- T
U/G Telephone Cable (SUE - LOS C)*	----- T
U/G Telephone Cable (SUE - LOS D)*	----- T
U/G Telephone Conduit (SUE - LOS B)*	----- TC
U/G Telephone Conduit (SUE - LOS C)*	----- TC
U/G Telephone Conduit (SUE - LOS D)*	----- TC
U/G Fiber Optics Cable (SUE - LOS B)*	----- T FO
U/G Fiber Optics Cable (SUE - LOS C)*	----- T FO
U/G Fiber Optics Cable (SUE - LOS D)*	----- T FO

WATER:

Water Manhole	----- ⊕
Water Meter	----- ○
Water Valve	----- ⊗
Water Hydrant	----- ⊕
U/G Water Line Test Hole (SUE - LOS A)*	----- ⊕
U/G Water Line (SUE - LOS B)*	----- P
U/G Water Line (SUE - LOS C)*	----- P
U/G Water Line (SUE - LOS D)*	----- P
Above Ground Water Line	----- A/G Water

TV:

TV Pedestal	----- □
TV Tower	----- ⊗
U/G TV Cable Hand Hole	----- □
U/G TV Test Hole (SUE - LOS A)*	----- ⊕
U/G TV Cable (SUE - LOS B)*	----- TV
U/G TV Cable (SUE - LOS C)*	----- TV
U/G TV Cable (SUE - LOS D)*	----- TV
U/G Fiber Optic Cable (SUE - LOS B)*	----- TV FO
U/G Fiber Optic Cable (SUE - LOS C)*	----- TV FO
U/G Fiber Optic Cable (SUE - LOS D)*	----- TV FO

GAS:

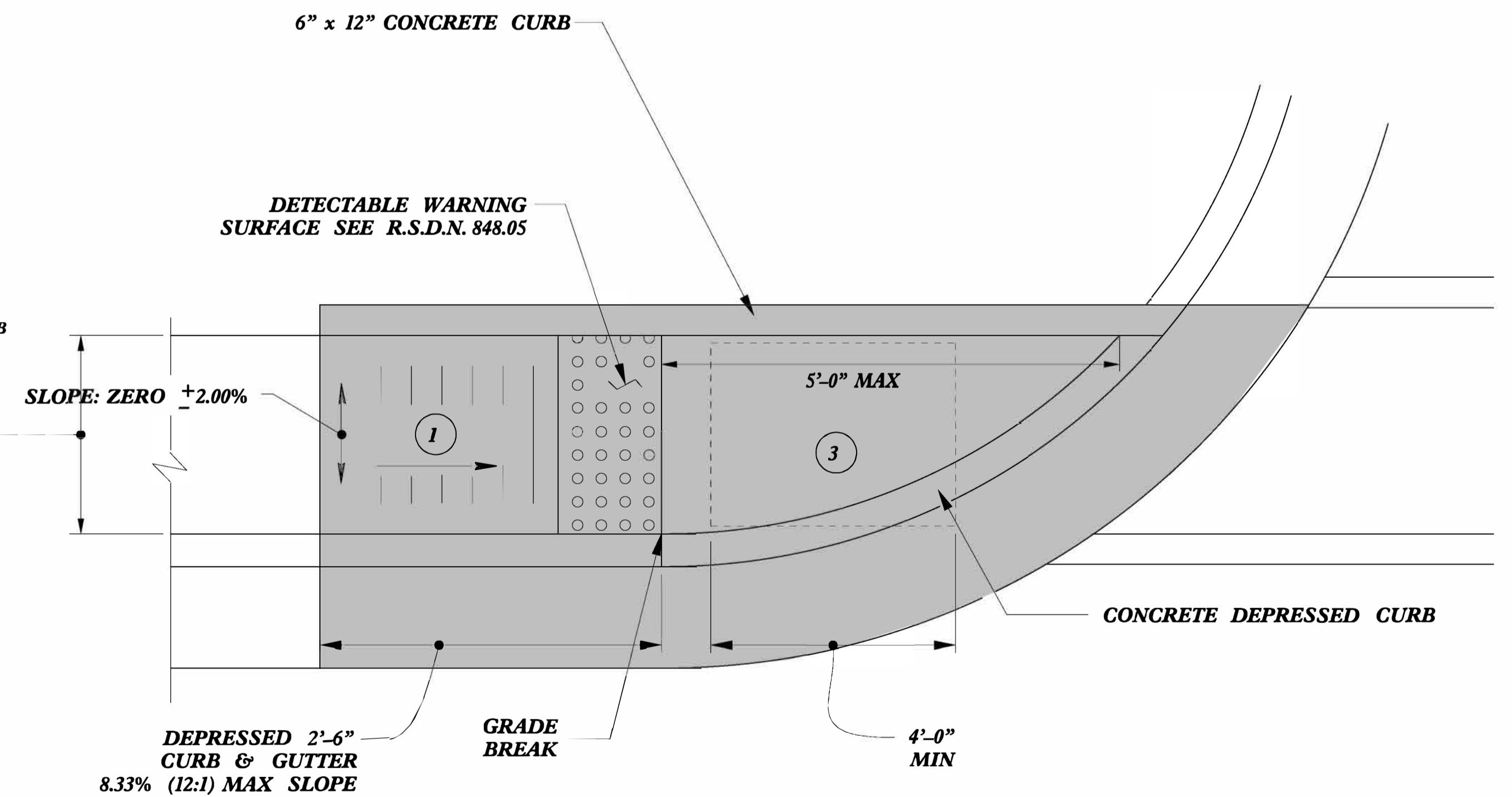
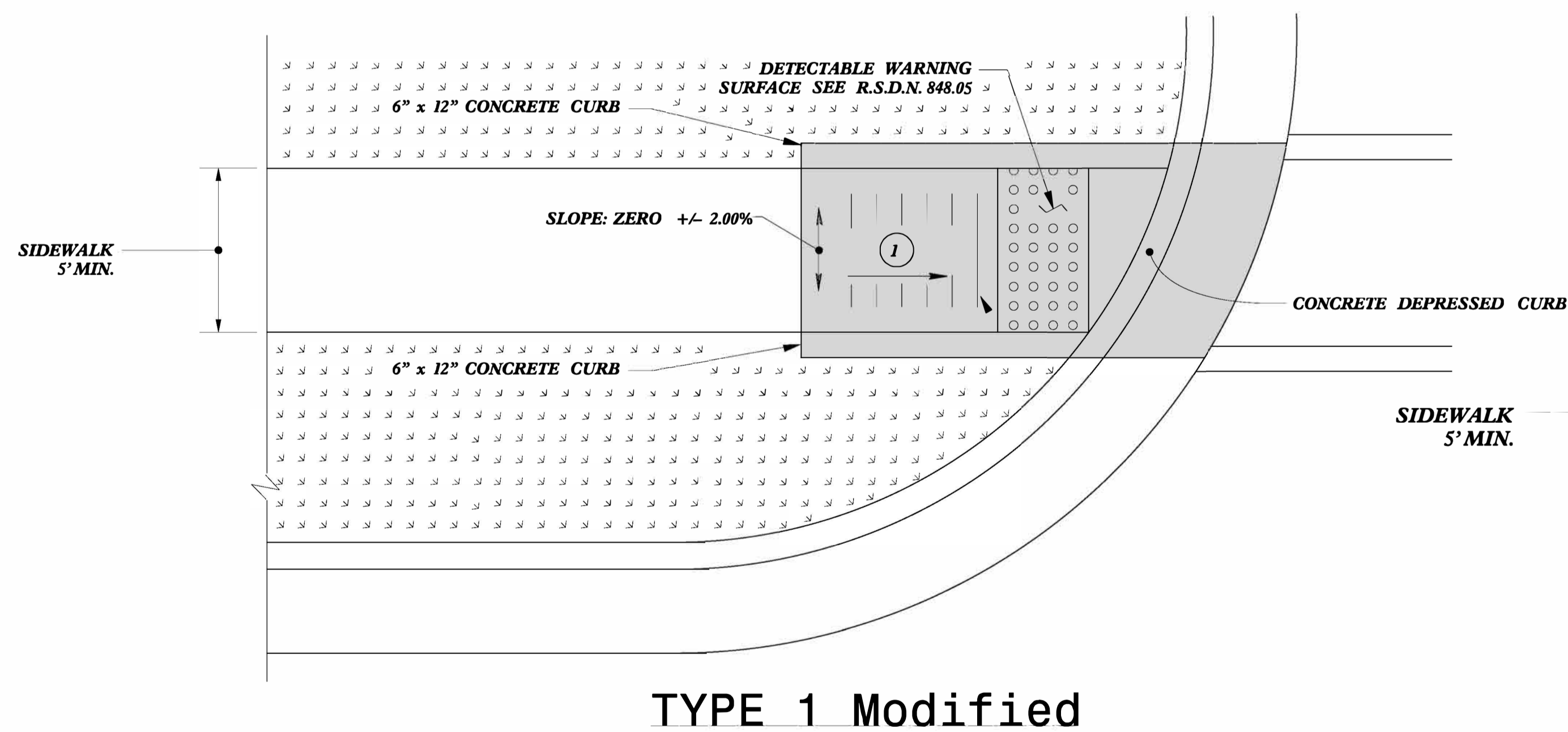
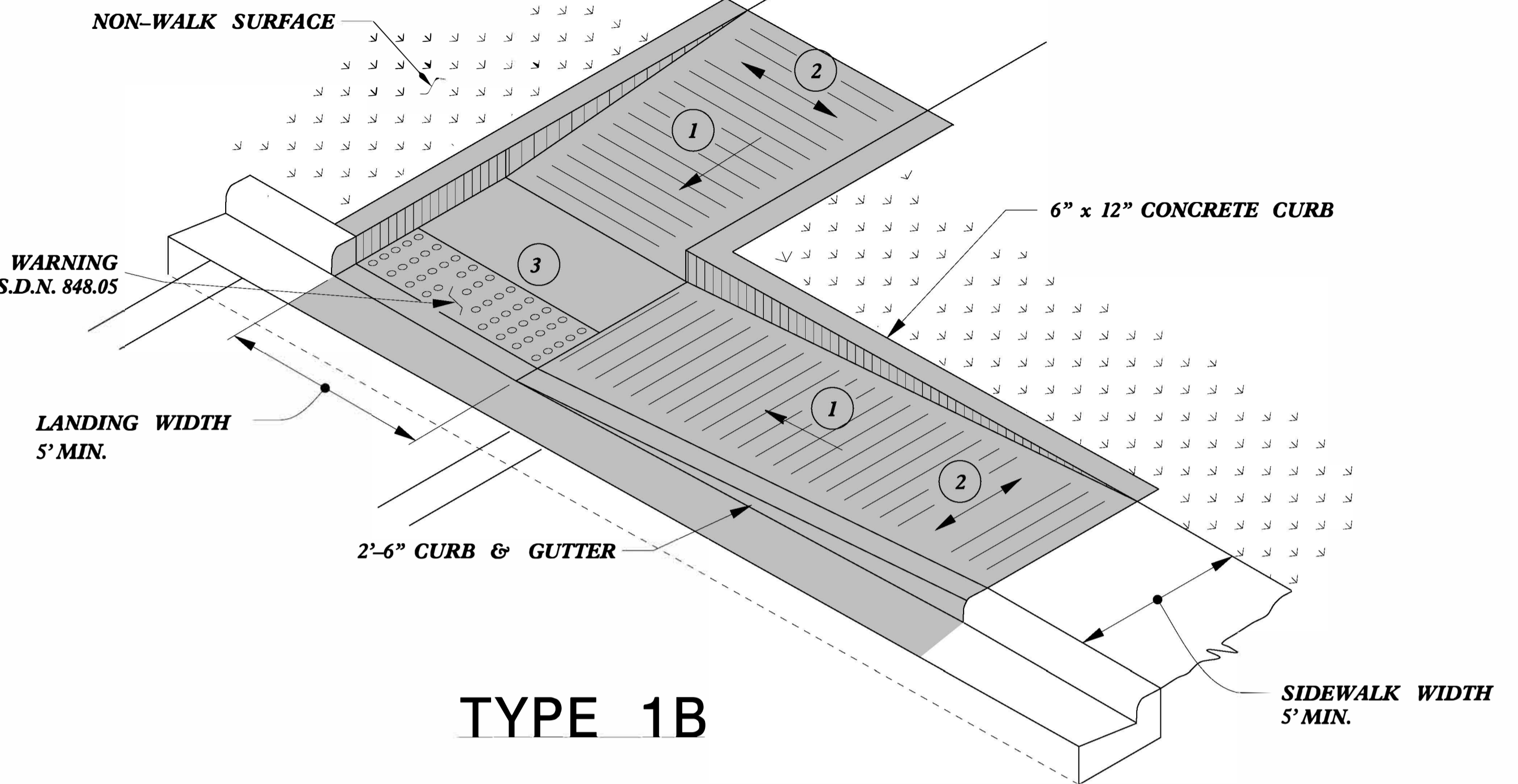
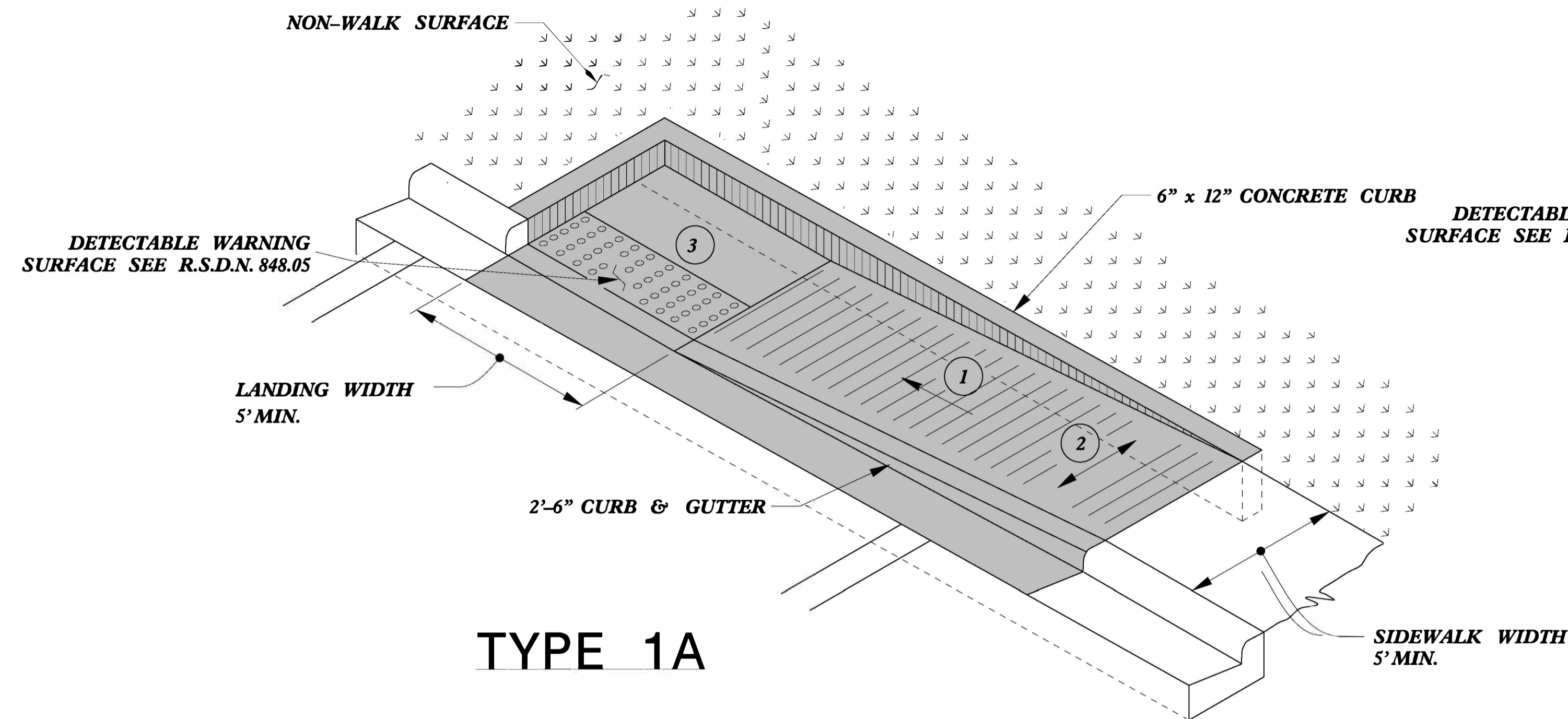
Gas Valve	----- ◇
Gas Meter	----- ⊕
U/G Gas Line Test Hole (SUE - LOS A)*	----- ⊕
U/G Gas Line (SUE - LOS B)*	----- G
U/G Gas Line (SUE - LOS C)*	----- G
U/G Gas Line (SUE - LOS D)*	----- G
Above Ground Gas Line	----- A/G Gas

SANITARY SEWER:

Sanitary Sewer Manhole	----- ⊕
Sanitary Sewer Cleanout	----- ⊕
U/G Sanitary Sewer Line	----- SS
Above Ground Sanitary Sewer	----- A/G Sanitary Sewer
SS Force Main Line Test Hole (SUE - LOS A)*	----- ⊕
SS Force Main Line (SUE - LOS B)*	----- FSS
SS Force Main Line (SUE - LOS C)*	----- FSS
SS Force Main Line (SUE - LOS D)*	----- FSS

MISCELLANEOUS:

Utility Pole	----- ●
Utility Pole with Base	----- □
Utility Located Object	----- ○
Utility Traffic Signal Box	----- ⊠
Utility Unknown U/G Line (SUE - LOS B)*	----- TUL
U/G Tank; Water, Gas, Oil	----- □
Underground Storage Tank, Approx. Loc.	----- UST
A/G Tank; Water, Gas, Oil	----- □
Geoenvironmental Boring	----- ⊕
Abandoned According to Utility Records	----- AATUR
End of Information	----- E.O.I.



- 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.

PAY LIMITS FOR 1 CURB RAMP

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



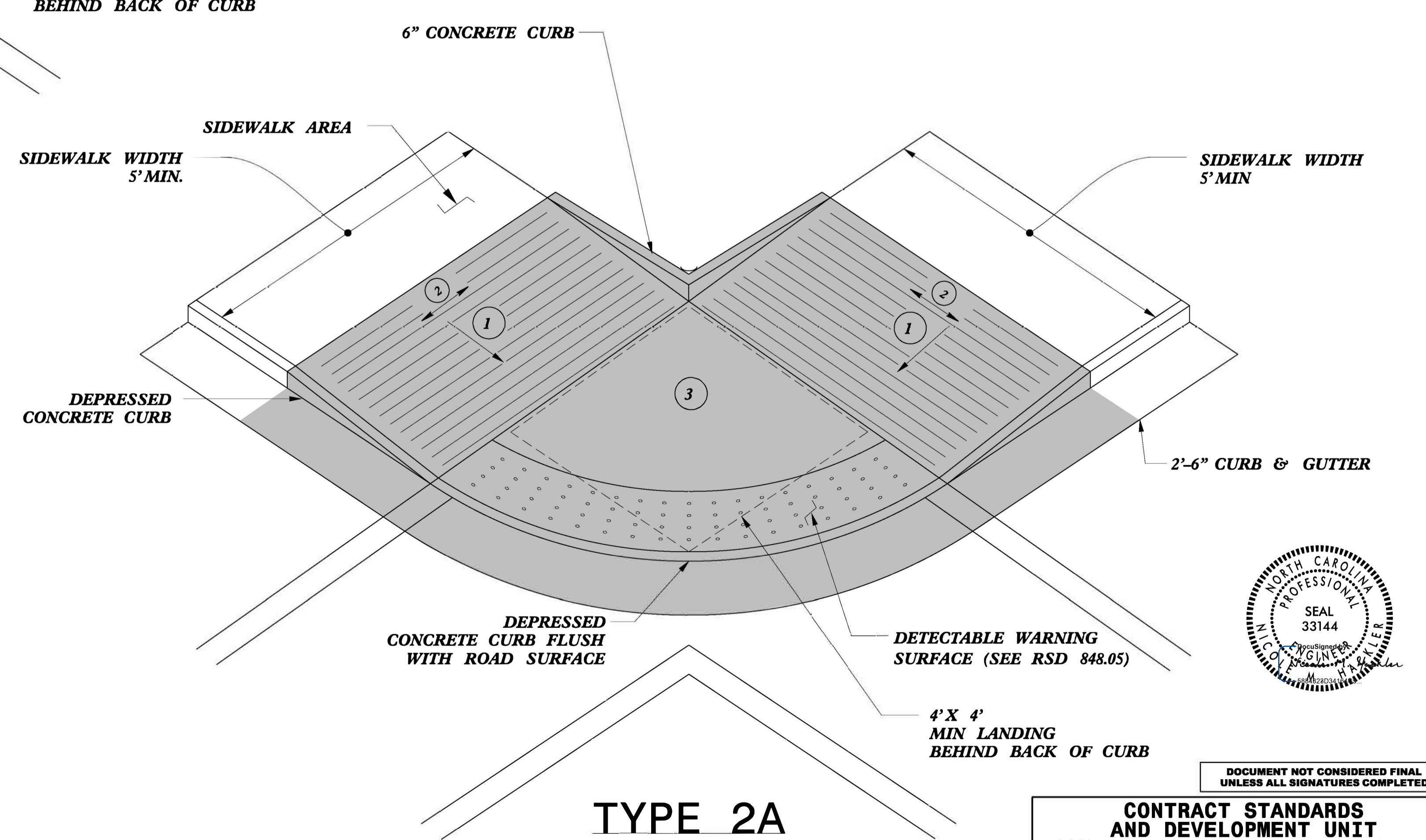
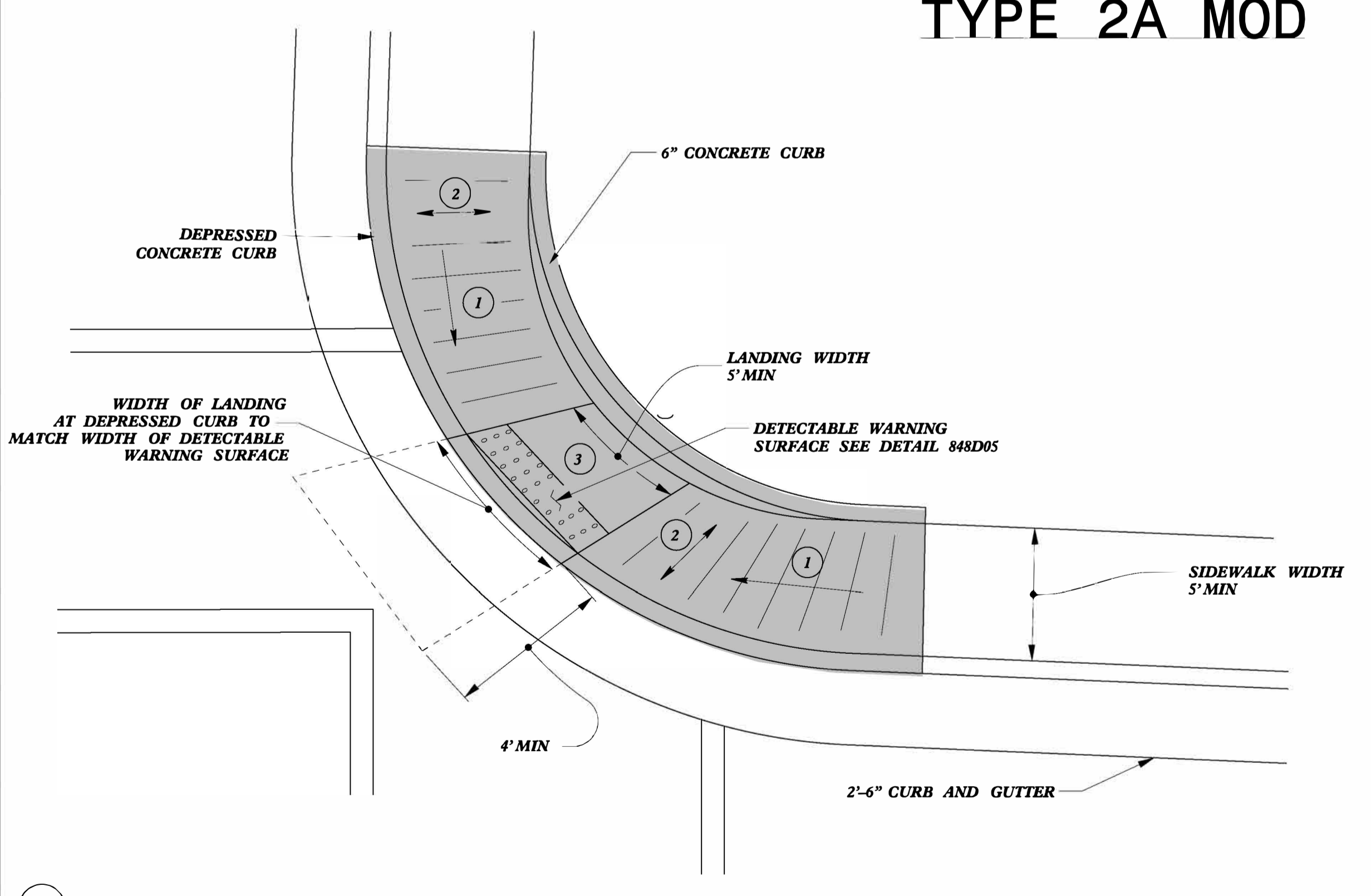
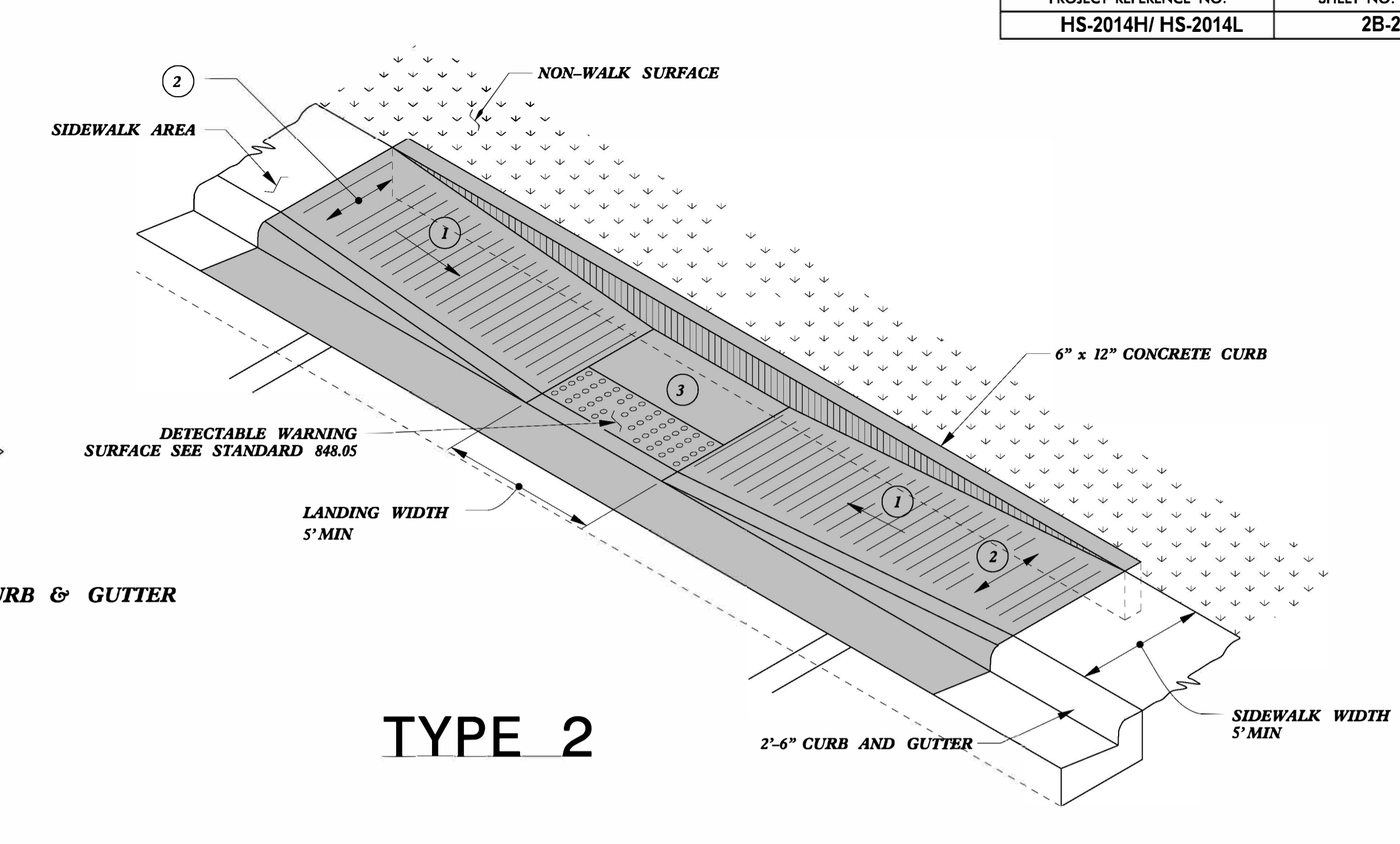
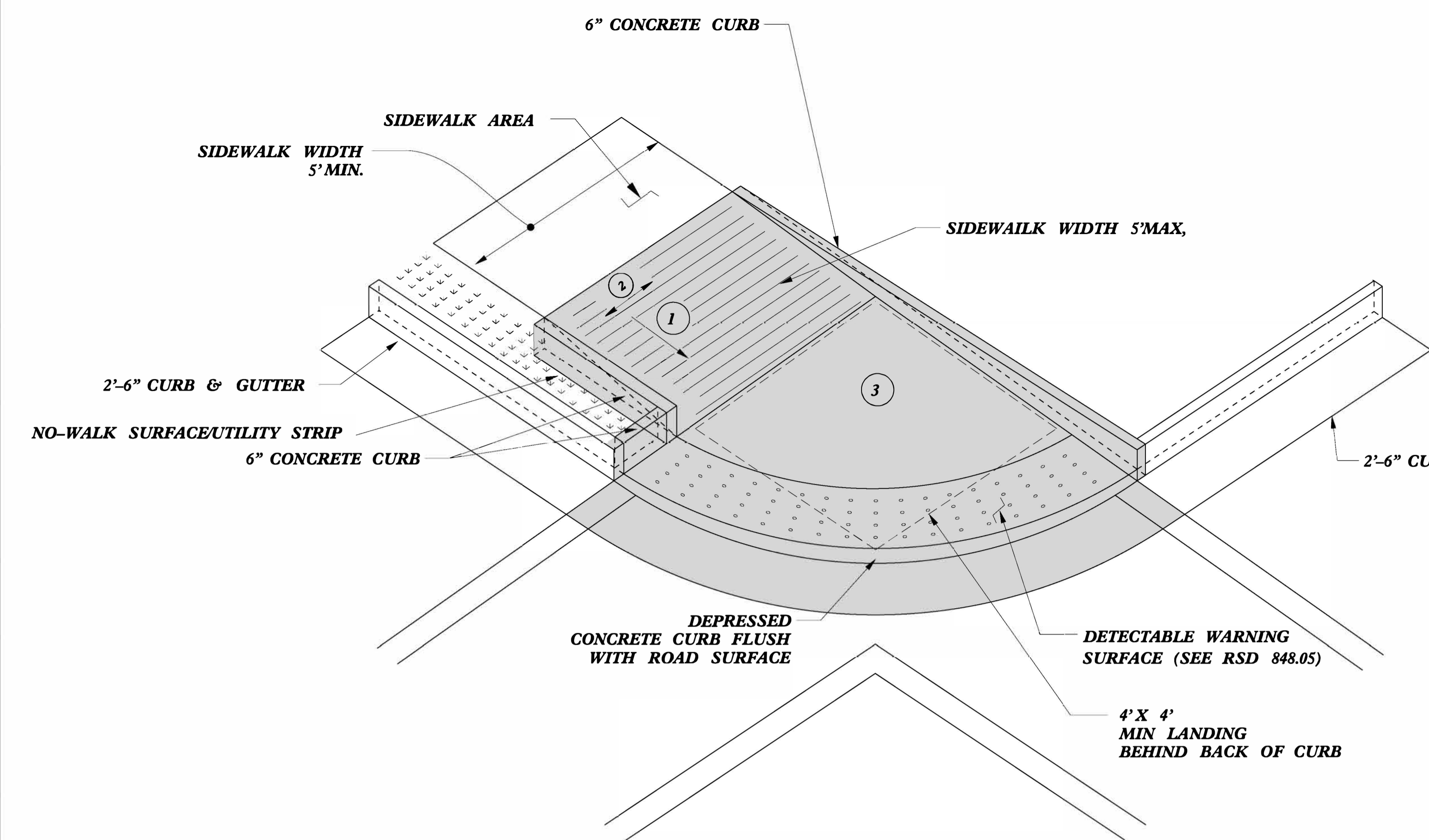
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CONTRACT STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

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

5/14/99



- 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.

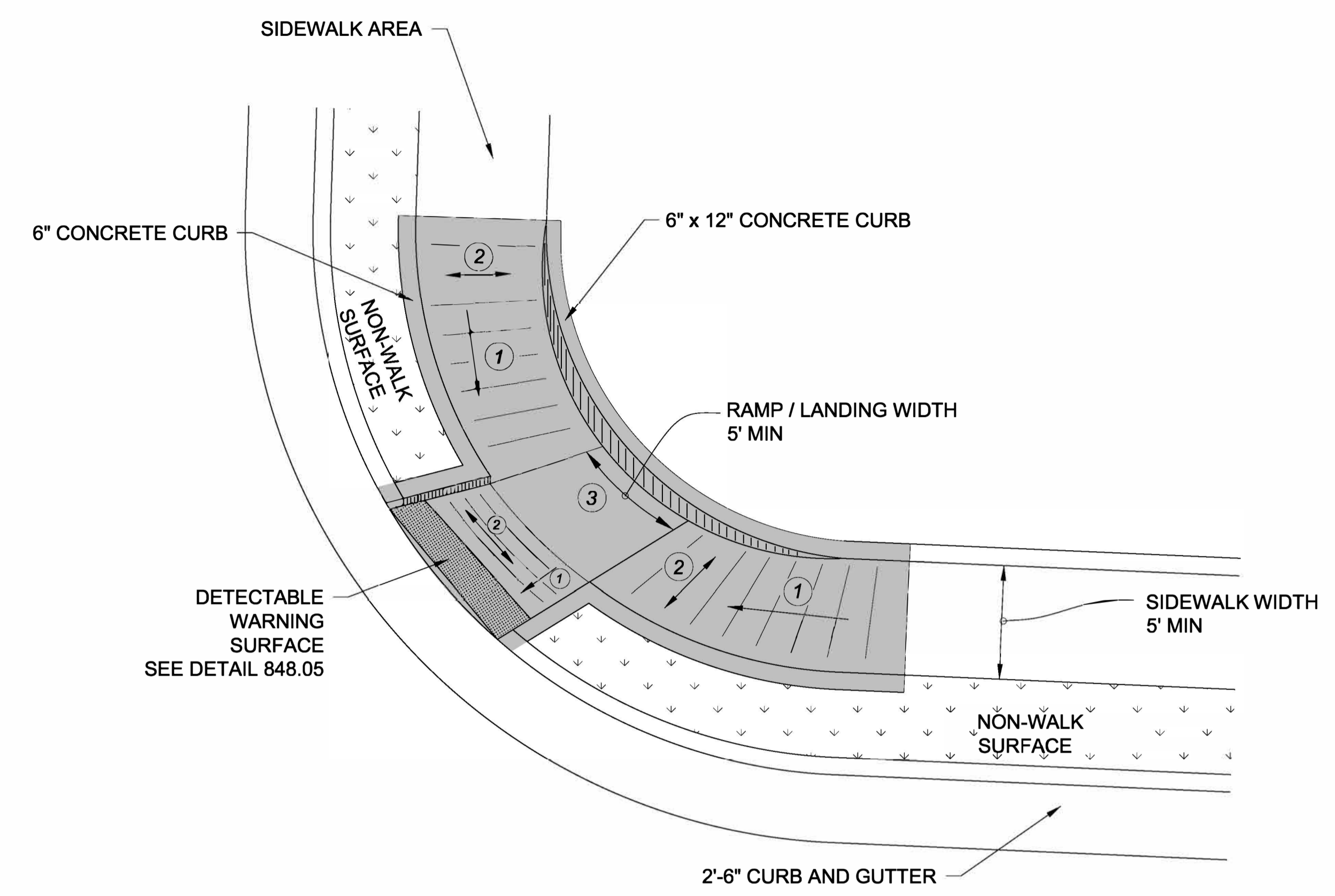
PAY LIMITS FOR 1 CURB RAMP



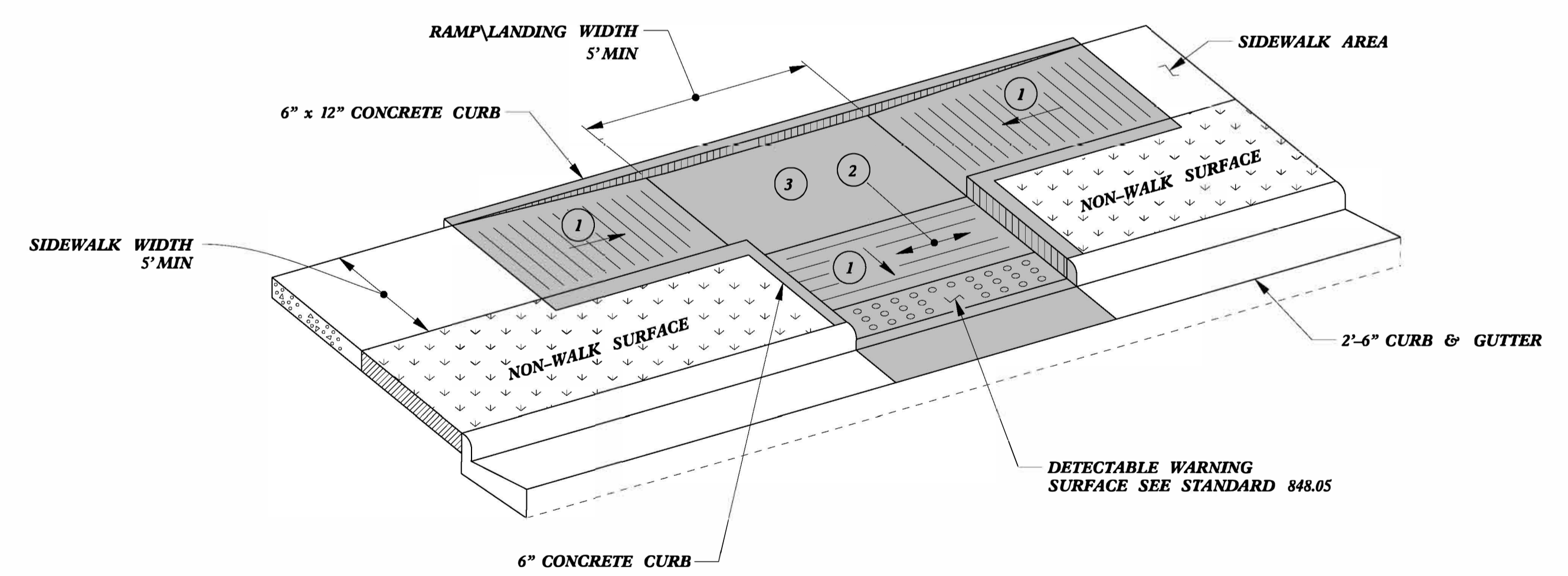
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

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

PAY LIMITS FOR 1 CURB RAMP



TYPE 3 MODIFIED
INSTALLATION IN A RADIUS



TYPE 3

- 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.

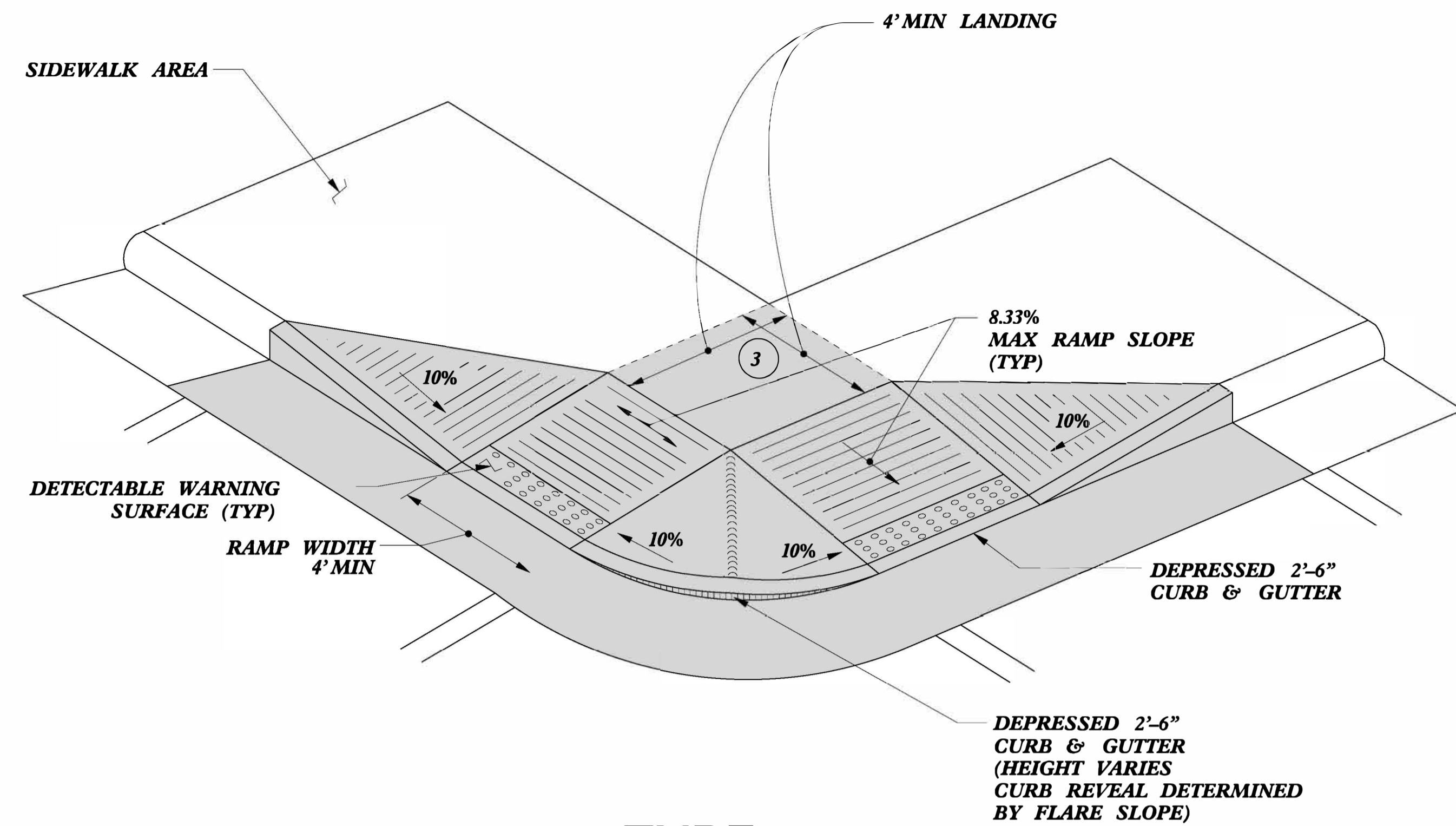


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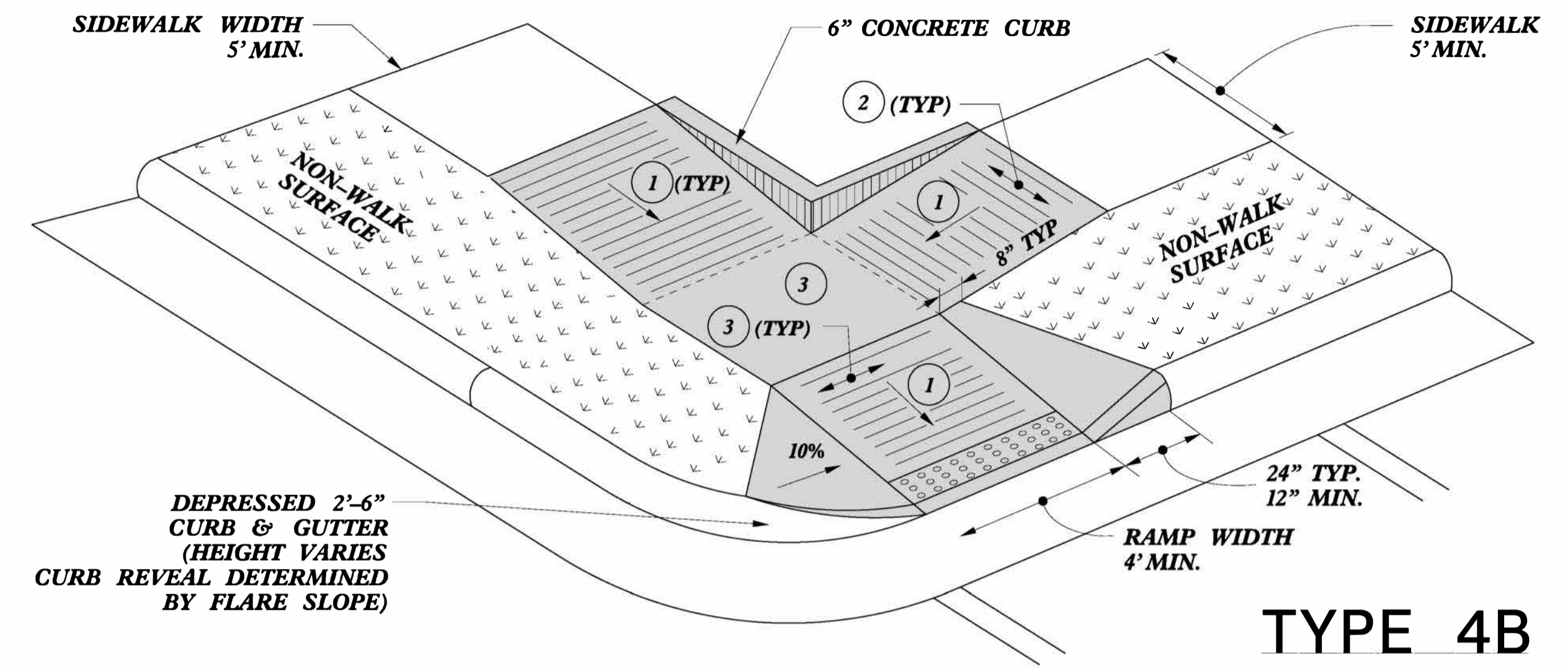
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Office 919-707-6950	FAX 919-250-4119
CURB RAMPS	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC. :stds/2012CurbRamp/CurbRampDetails.dgn	

5/14/99
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J.S. HOWERTON
PROFESSIONAL ENGINEER
SEAL NO. 33144
EXPIRES 12/31/11

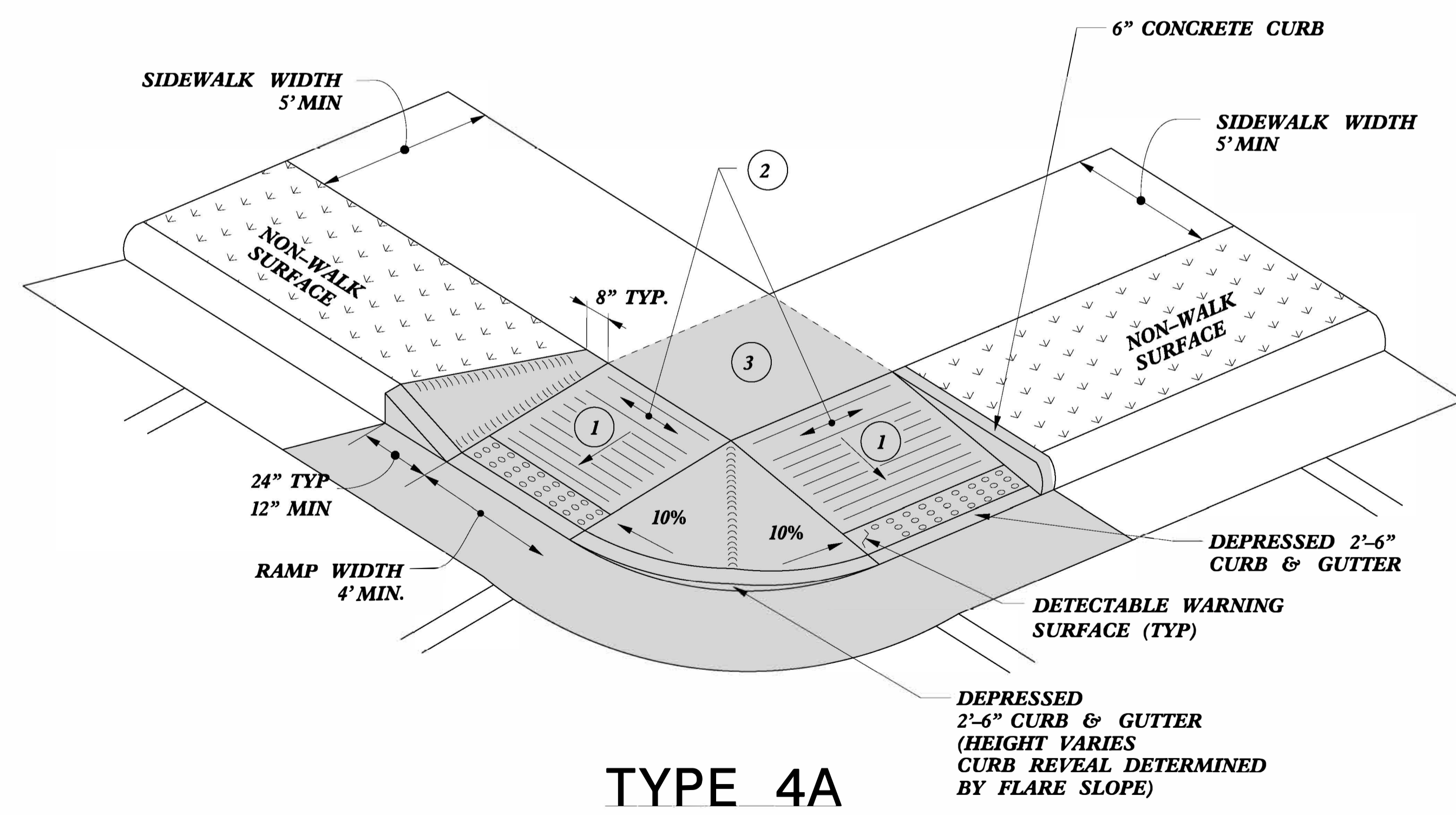
PAY LIMITS FOR 1 OR 2 CURB RAMPS
(CALCULATE BASED ON NUMBER OF SETS
OF TRUNCATED DOMES)



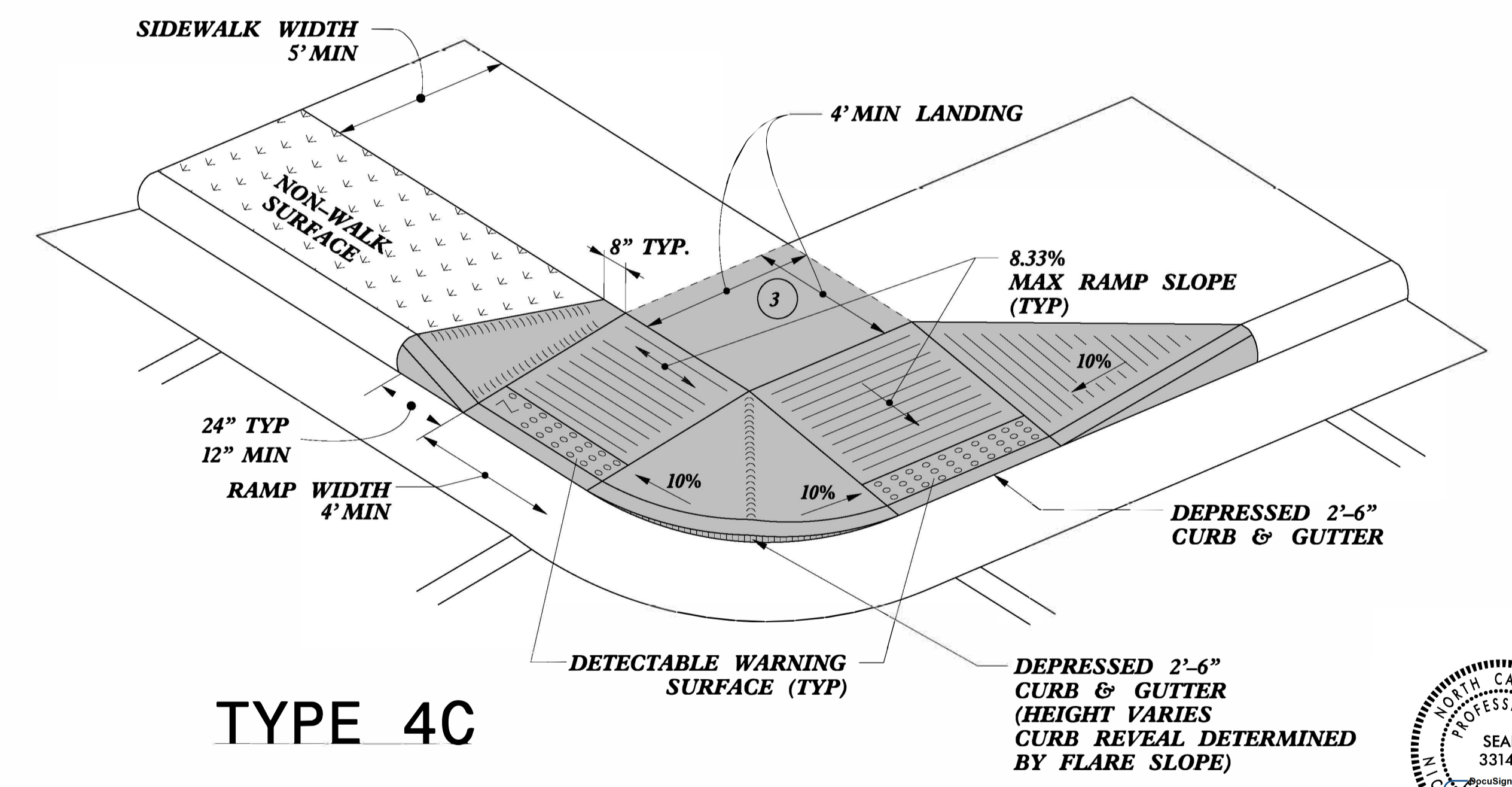
TYPE 4



TYPE 4B

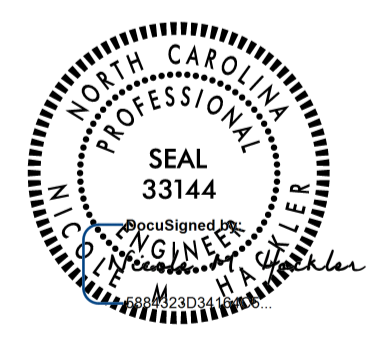


TYPE 4A



TYPE 4C

- 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.



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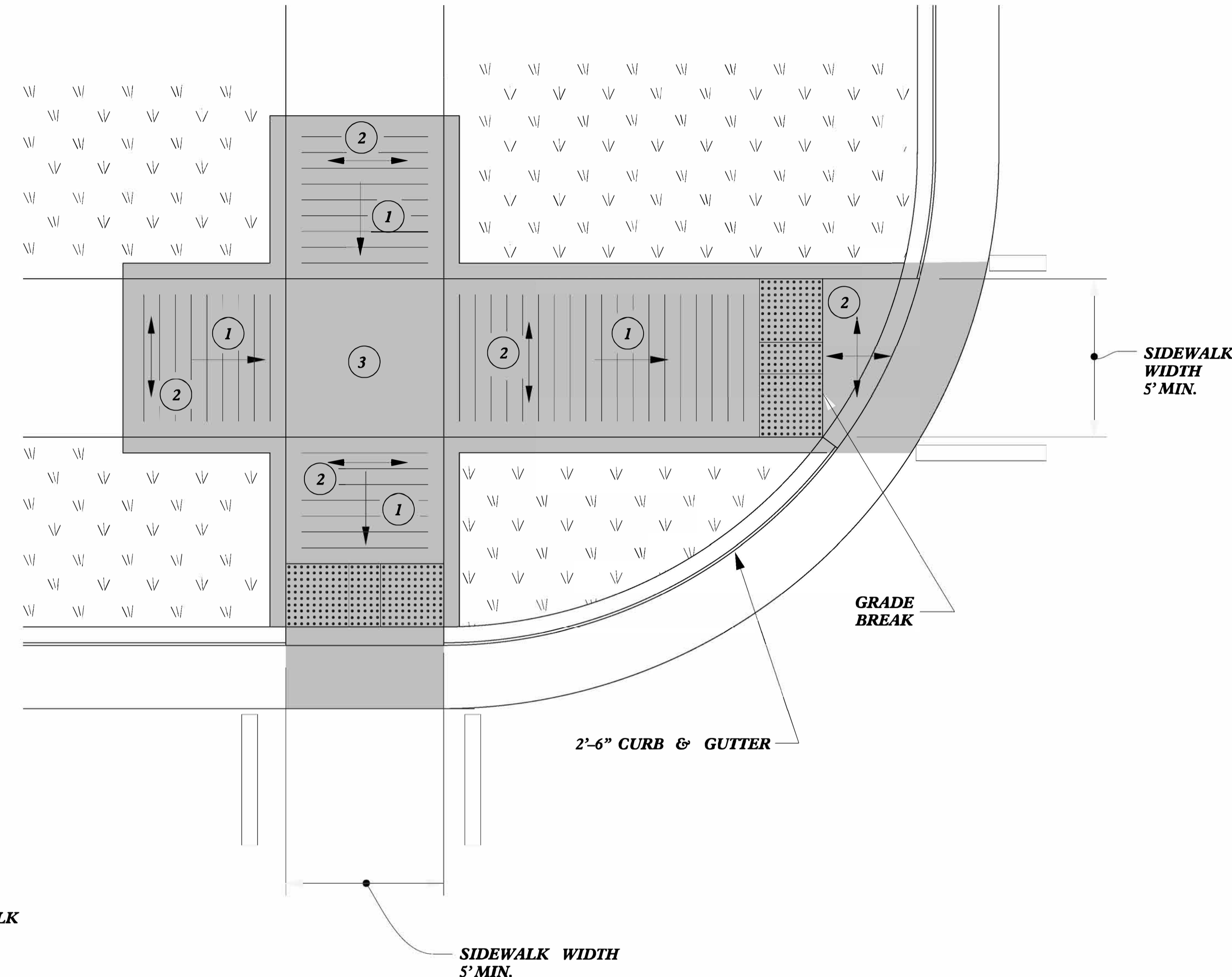
CURB RAMPS

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 CHECKED BY: _____ DATE: _____
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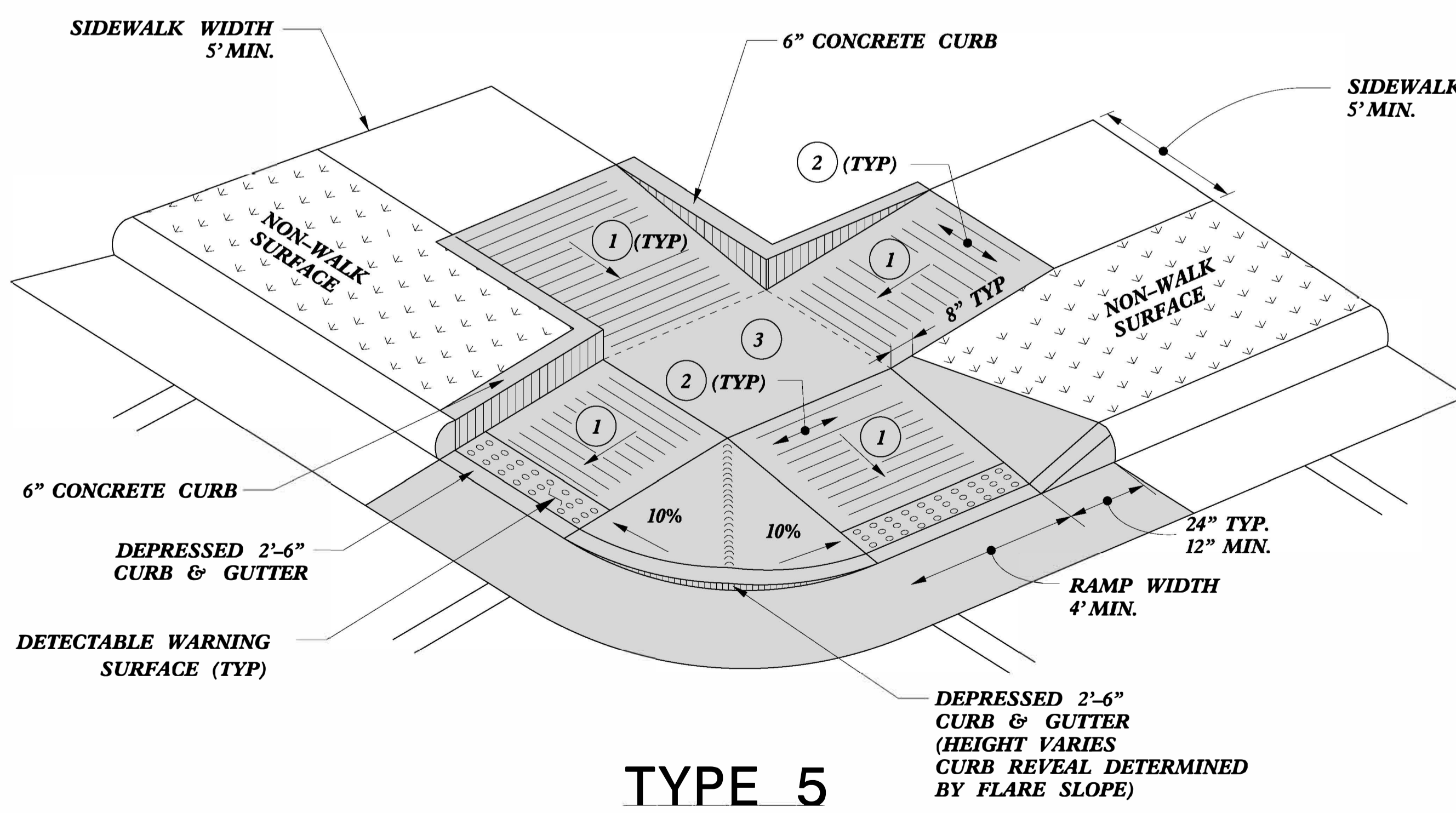
REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

5/14/99
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 J.S. HOWERTON
 33144
 7/7/11

PAY LIMITS FOR 1 OR 2 CURB RAMPS
(CALCULATE BASED ON NUMBER OF SETS
OF TRUNCATED DOMES)

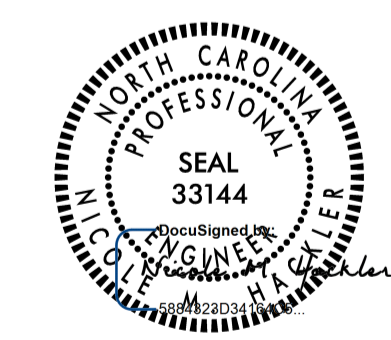


TYPE 5A



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.



CONTRACT STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

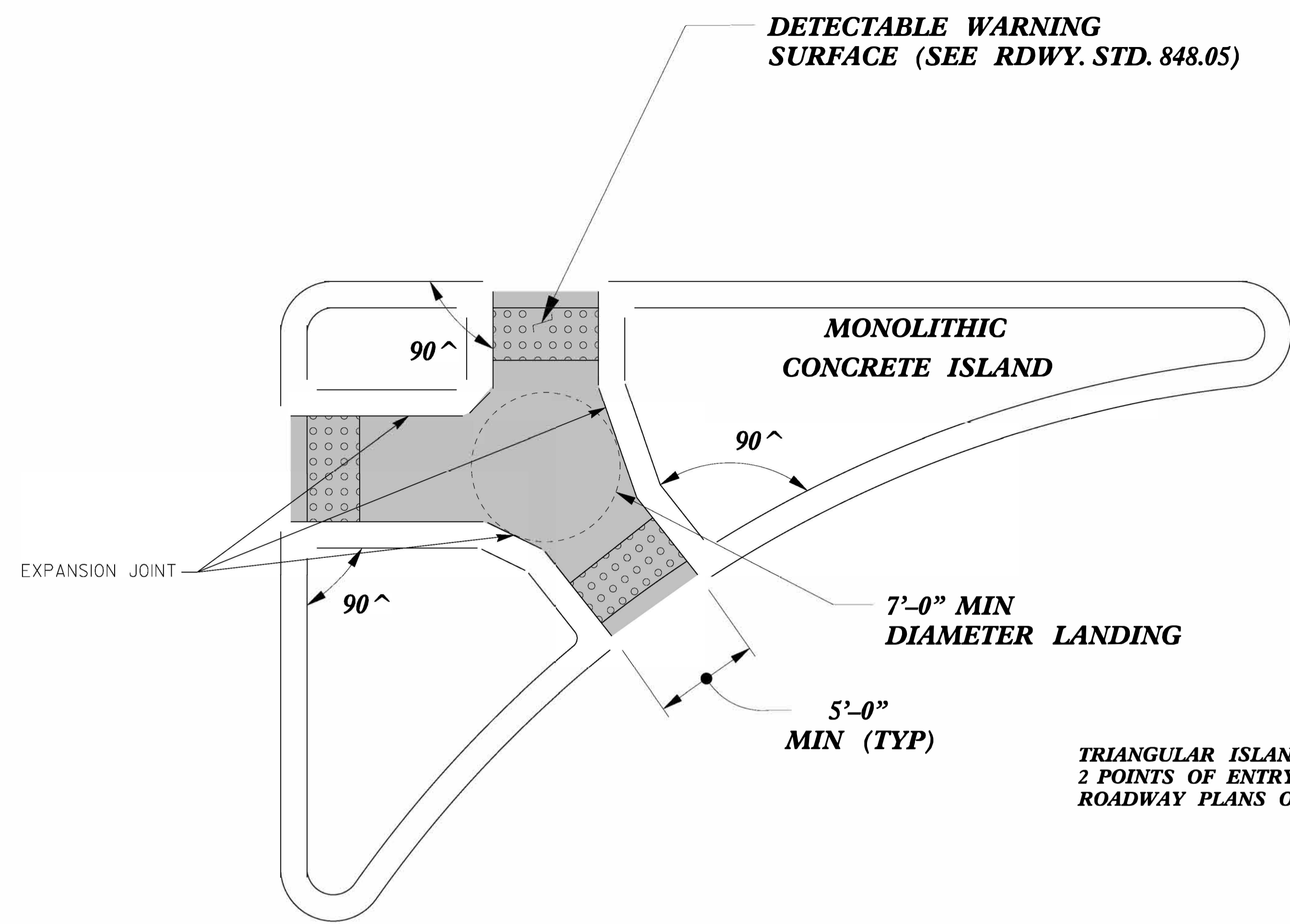
CURB RAMPS

ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11
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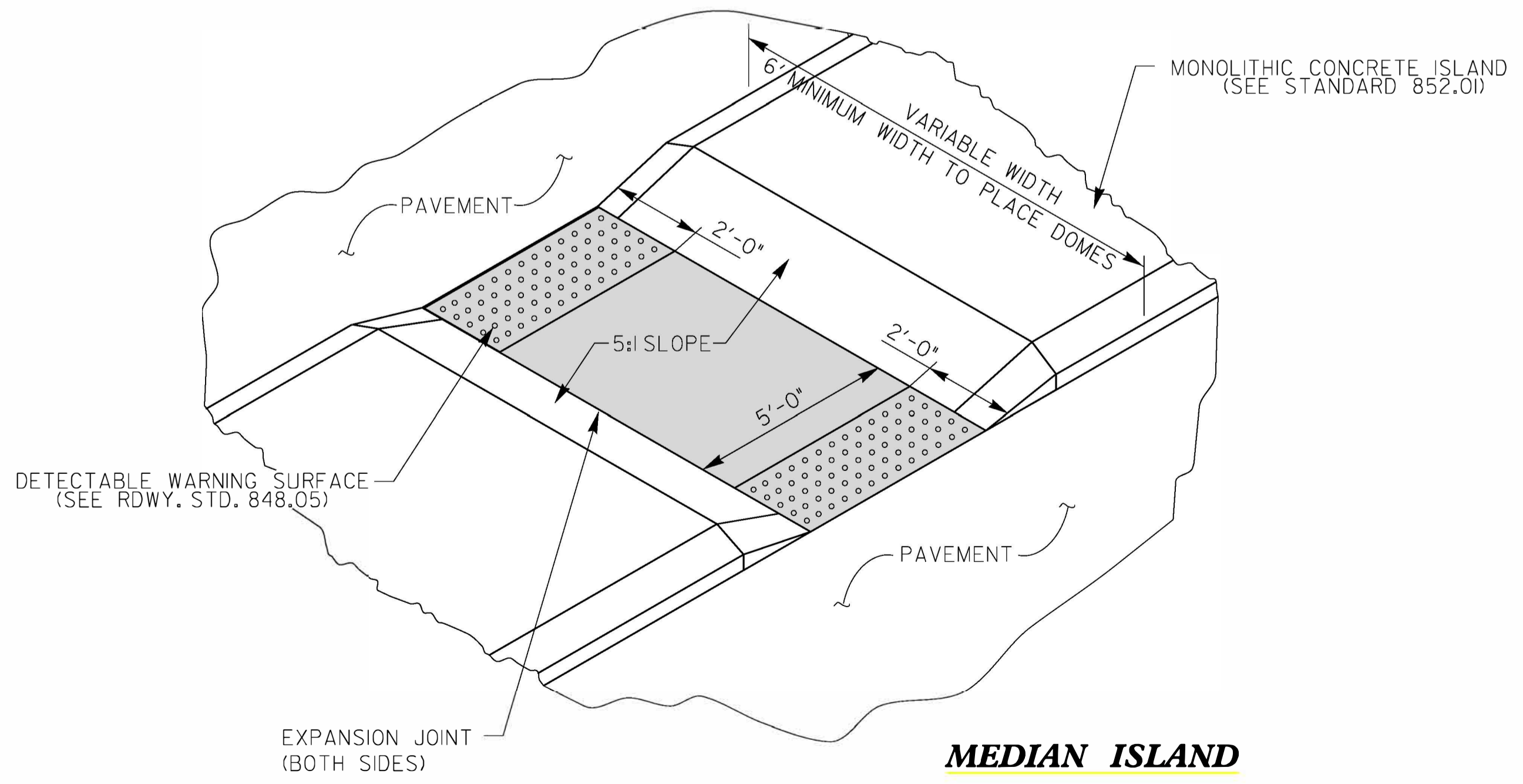
REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

5/14/99
 \$\$\$\$\$\$SYTIME\$\$\$\$\$\$
 \$\$\$\$\$\$DUCONS\$\$\$\$\$\$
 \$\$\$\$\$\$SUGERNAVE\$\$\$\$\$\$

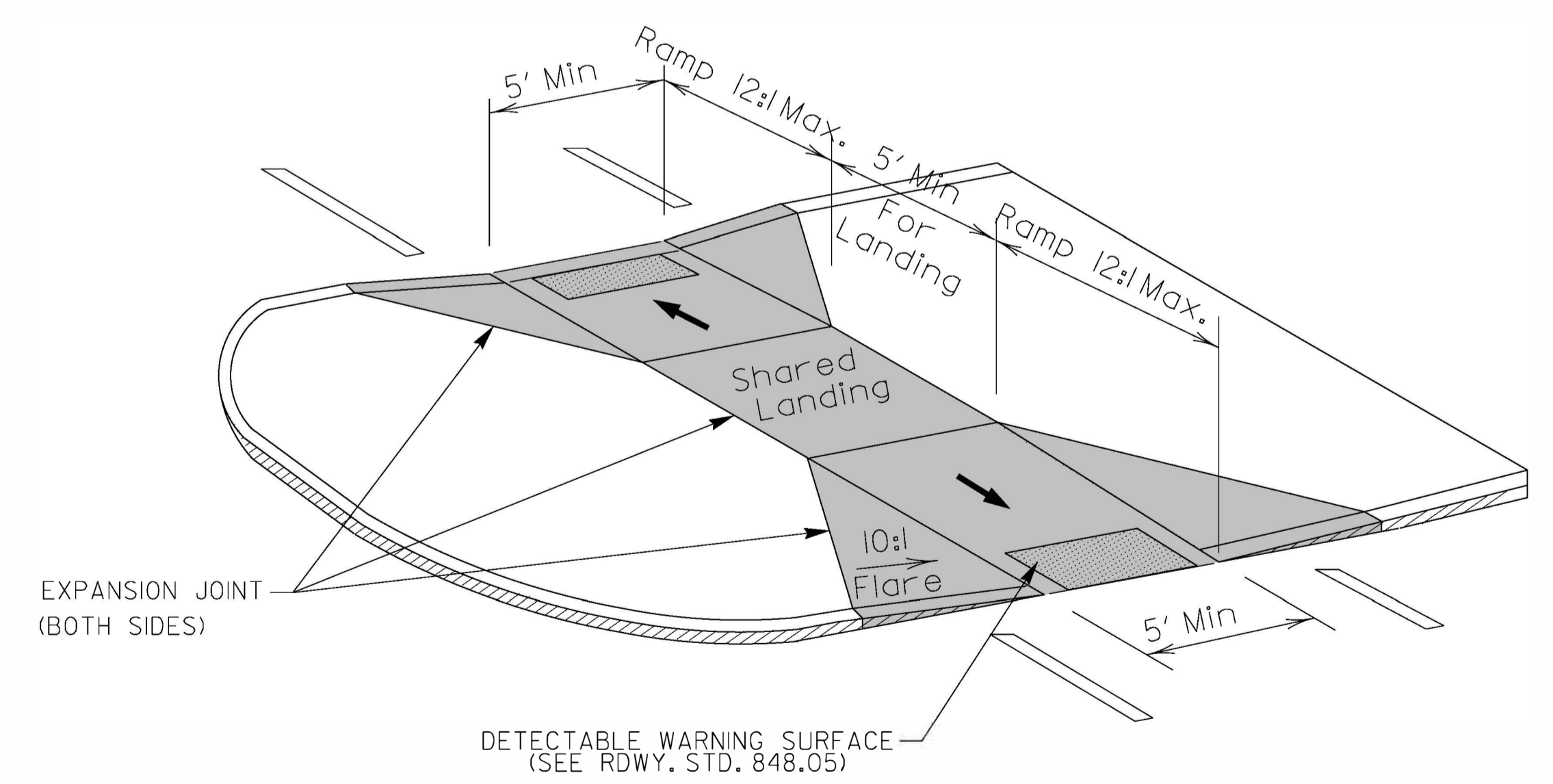
PAY LIMITS FOR 2 OR 3 CURB RAMPS
(CALCULATE BASED ON NUMBER OF
SETS OF TRUNCATED DOMES)



**TRIANGULAR ISLAND
WITH CUT THROUGH
TYPE 6**



**MEDIAN ISLAND
WITH CUT THROUGH
TYPE 7**



**MEDIAN ISLAND
CURB RAMPS
TYPE 8**

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**CONTRACT STANDARDS
AND DEVELOPMENT UNIT**
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CURB RAMPS
Median or Turn Lane Islands

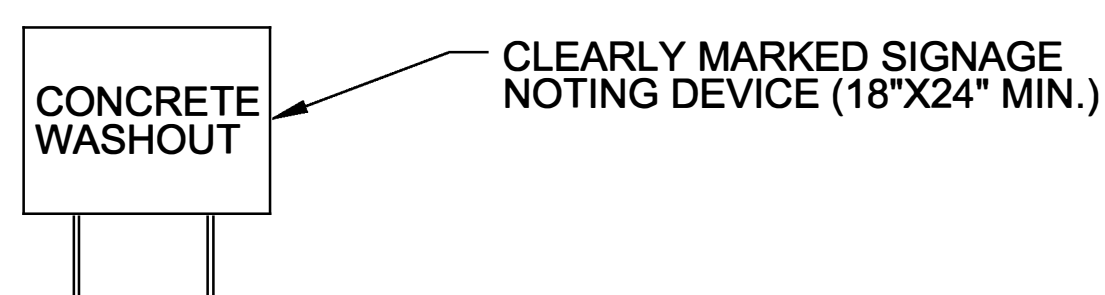
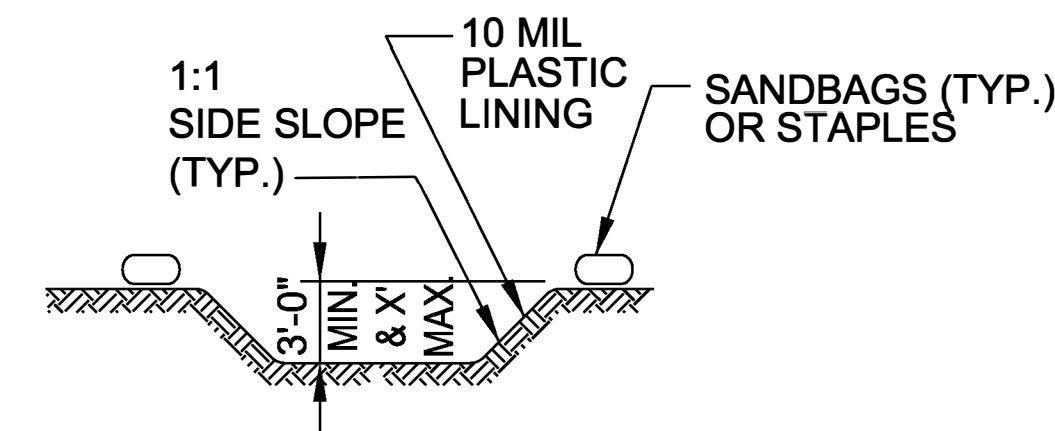
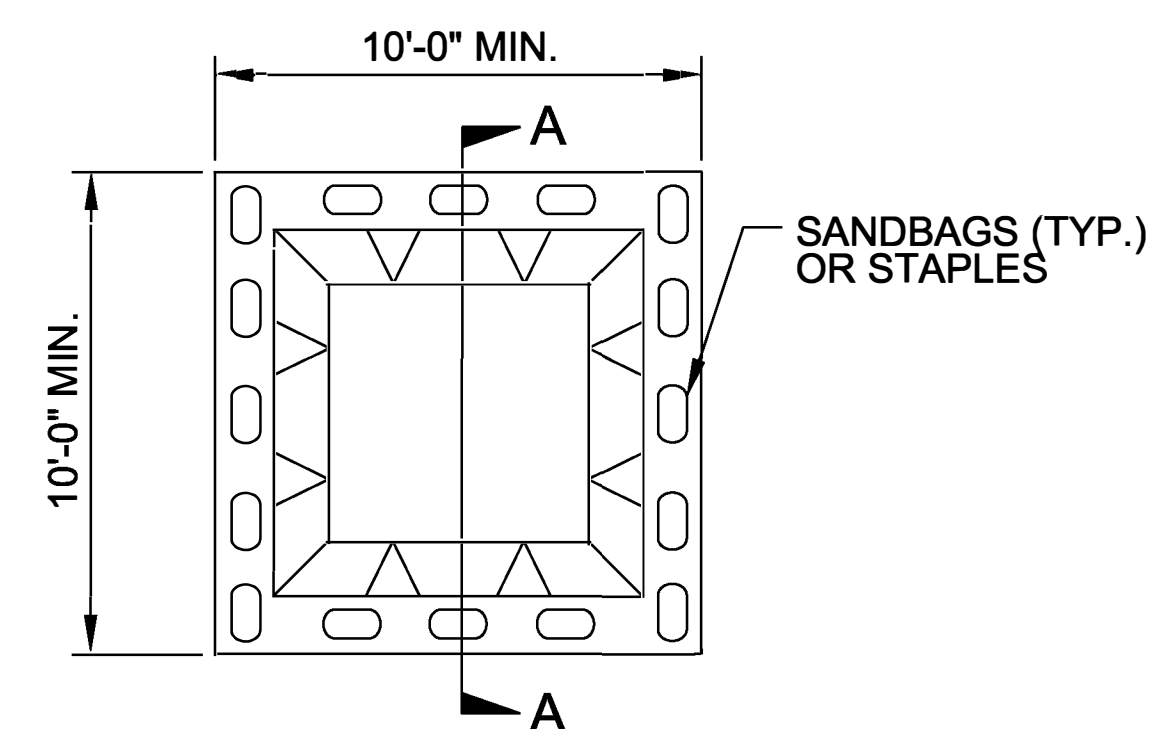
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CHECKED BY: DATE:
FILE SPEC: stds/2012CurbRamp/CurbRampDetails.dgn



5/14/99
SYTIME
SUGERNAVE

PROJECT REFERENCE NO.	SHEET NO.
HS-2014H/HS-2014L	10
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



SECTION A-A

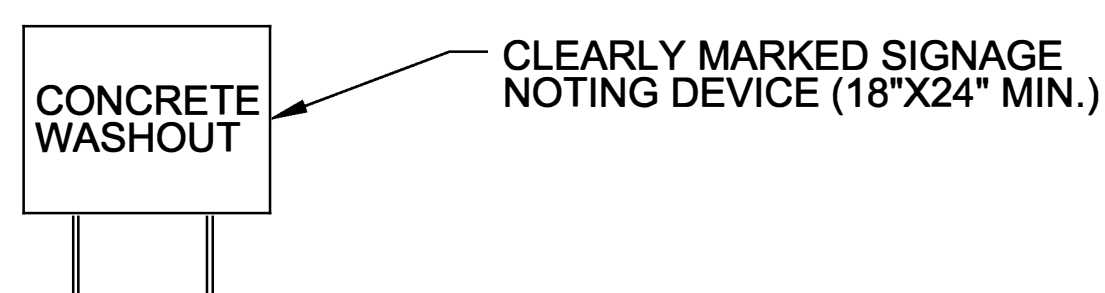
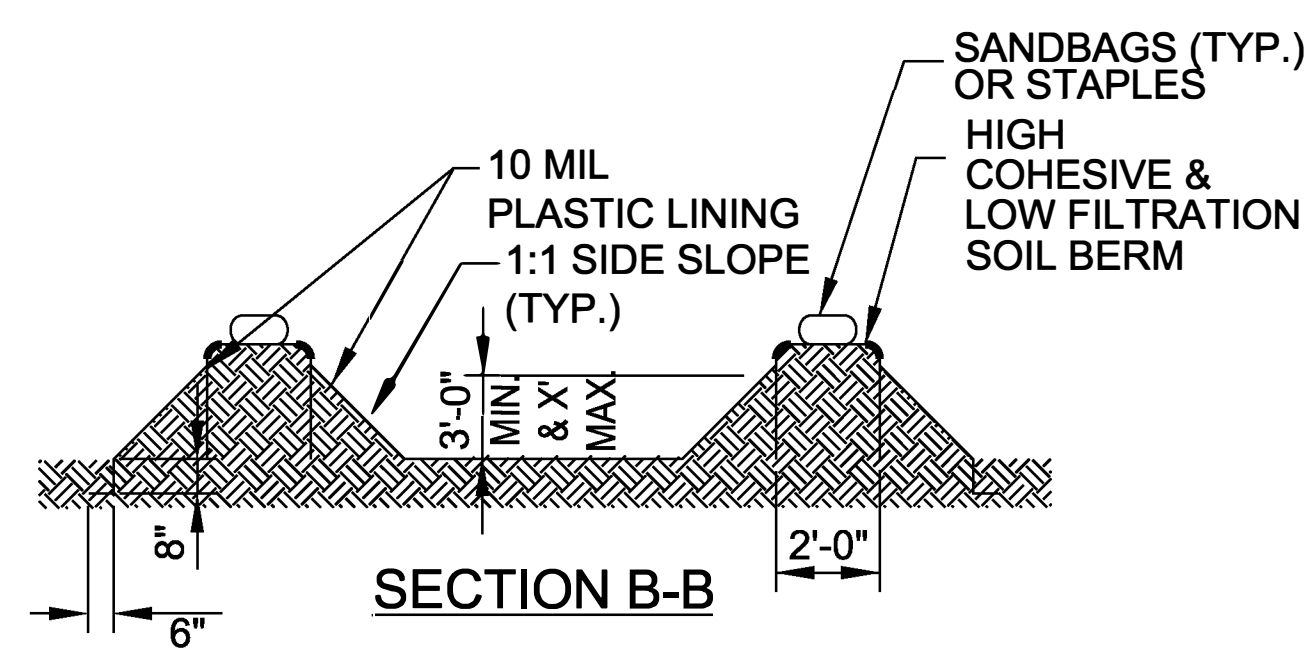
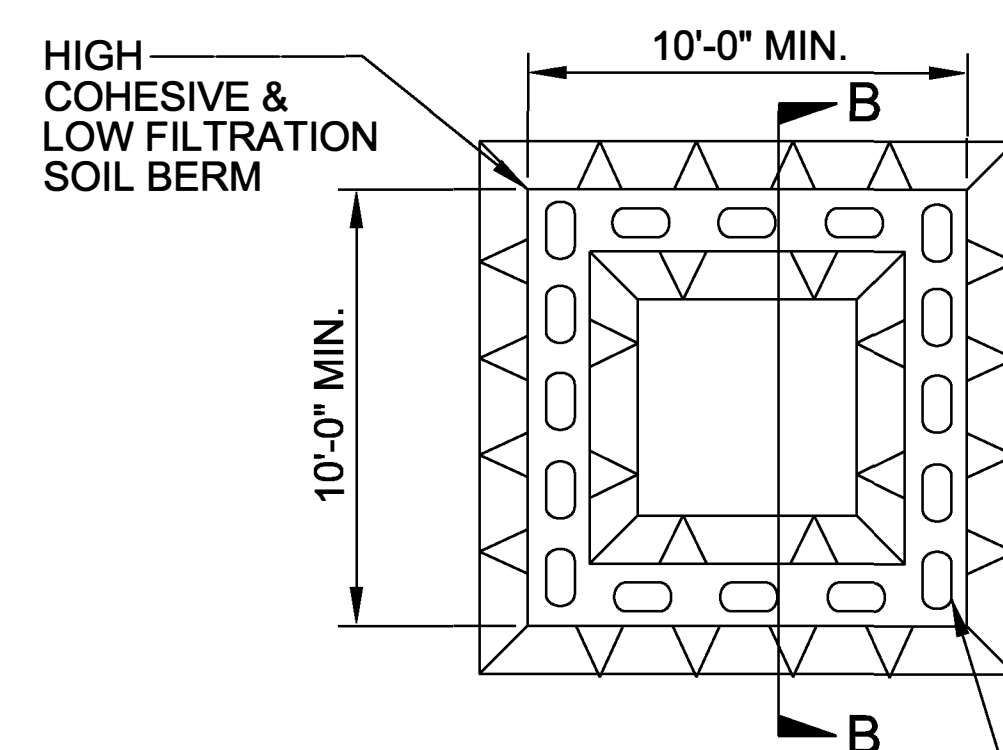
NOTES:

1. ACTUAL LOCATION DETERMINED IN FIELD
2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY.
3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

PLAN

BELOW GRADE WASHOUT STRUCTURE

NOT TO SCALE



NOTES:

1. ACTUAL LOCATION DETERMINED IN FIELD
2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

PLAN

ABOVE GRADE WASHOUT STRUCTURE

NOT TO SCALE









RESTRIPE CROSSWALK

TYPE 2A

RESTRIPE CROSSWALK

APPROX. 50 LF 4" CONCRETE SIDEWALK

APPROX. 15 LF 4" CONCRETE SIDEWALK

HOWARD GAP RD
SR 1006

US HWY 64



REMOVE CONCRETE DITCH

DRIVEWAY TURN OUT

APPROX. 250 LF 4" CONCRETE SIDEWALK

TYPE 7

REMOVE EXIST. STOP BAR

24" STOP BAR





APPROX. 15 LF 4" CONCRETE SIDEWALK

REMOVE EXISTING CROSSWALK

HAYWOOD RD
US 23

REMOVE CURB RAMP
REPLACE WITH SIDEWALK

DEPOT ST
SR 1558

TYPE 2

APPROX. 75 LF 4" CONCRETE SIDEWALK

CHURCH ST

REMOVE EXIST. CROSSWALK

FRONT ST
SR 1557

24" STOP BAR

REMOVE EXIST. STOP BAR

